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# PPD 503

## *Economics for Public Policy*

Spring 2024

24/7 technical Support  
Phone: (213) 740-5555 (Option 2)  
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### COURSE DESCRIPTION

**Course Catalogue:** Economic theory as applied to public policy. Concepts of efficiency, and analysis of market failure, and policy interventions.

Welcome to Economics for Public Policy. This course provides the analytical toolkit needed for practical public policy analysis, public administration, and socioeconomic topics. Students will learn foundational concepts in public policy analysis, decision analysis, and public management by applying modeling techniques.

### COURSE OVERVIEW AND OBJECTIVES

Policymakers, planners, and public leaders face complex and challenging problems ranging from the housing crisis to environmental management—our course surveys topics from across an extensive analytical literature body.

- We dedicate our first week (Module 1) to a review of relevant mathematical and modeling issues. There is no math prerequisite for this class. However, it is helpful to review some algebra needed to understand our economic models.
- The next six weeks focus on introducing core microeconomic concepts (Module 2) including, supply and demand, utility theory, production theory, and market structures. Microeconomics helps model how consumers make decisions, welfare changes, and how new goods enter the market.
- In Week 7 (Module 3), We then explore the cost-benefit tradeoff and how the cost-benefit model (CBA) helps us understand policy challenges around regulation, land use, and capital projects.
- In Week 9 (Module 4), macroeconomics offers a framework for policy problems at a national or international scale. We include a discussion of macroeconomic concepts such as inflation, growth, interest rates, and why they are essential to those that work (or interact with) the public sector.
- In our last four weeks (Module 5), we apply the economic concepts and theories to emerging topics in Public Economics, Behavioral Economics, Environmental Economics, and International Political Economy.

We conclude by submitting a semester-long “economic analysis,” which requires students to apply one of three economic models to a policy problem. This course offers the opportunity to learn about, use, and develop public policy analysis models, decision analysis, and public management. By the end of the semester, students will:

- **Become Good Consumers of Quantitative Information:** In economics, it is essential to command economic terms and definitions. By the end of the course, students should understand economic terminology, graphs, and models useful for analyzing policy problems

- **Obtain a Conceptual Understanding of Economics:** We often use economic terms to describe concepts and ideas. By the end of the course, a student should define and apply their ideas with economic theories.
- **Apply a Systematic Process to Policy Research:** Economic models are a “set” of variables that describe a policy or decision. At the end of the course, students should be able to use economic theories to define a model and provide alternatives to resolve a policy problem.

## COURSE REQUIREMENTS

No previous background in economics is necessary for the successful completion of this class. Some exposure to Microsoft Excel, Algebra I/II, and linear functions can be helpful. We use the first week to review math, Excel, and modeling concepts.

## STRUCTURE OF THE COURSE

PPD 503: Economics for Public Policy has five parts. Each part or module is relatively self-contained and associated with a subfield of economics. Please see a short description of each module below:

**Table 1: Section Module Overview**

Module Name	Module Description and Objectives
<b>Module 1 - Math and Excel Review (1 Week)</b>	In this course, algebra, functions, and geometry can model the interaction between variables. We use these operations as a way of manipulating these variables to explain economic actions.
<b>Module 2 - Foundations of Microeconomics (6 Weeks)</b>	The study of microeconomics started in 1776 with the release of Adams Smith’s “A Wealth of Nations.” Microeconomics is the study of “transactions under scarcity” or “how to make optimal decisions when you face constraints.” In this module, we learn how about how economics is more than just supply and demand.
<b>Module 3 - Fundamentals of Cost-Benefit Analysis (2 Weeks)</b>	In this module, we explore the cost-benefit model for evaluating decisions under uncertainty.
<b>Module 4 - Foundations of Macroeconomics (3 Weeks)</b>	Macroeconomics is the study of the national economy.
<b>Module 5 - Applied Economic Analysis (3 Weeks)</b>	In the last weeks, we are looking at contextual factors that shape economic decisions by applying our three economic models to issues such as health, environment, and bounded rationality.

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## TEXTBOOKS & MATERIALS

*Microeconomics* (fifth Edition) by Paul Krugman and Robin Wells is an advanced undergraduate text and a useful reference for future economic studies. We use Krugman and Wells' book for most of the modeling elements of the course. We also use excerpts from *A Concise Guide to Macroeconomics: What Managers, Executives, and Students Need to Know (5th edition)* by David A. Moss. Moss's book lays out a macroeconomic framework for managers. Other readings are from *Misbehaving: The Making of Behavioral Economics* by Richard Thaler, *Risk Analysis* by Charles Yoe, *Public Finance for Public Policy* by Jonathan Gruber, and *The Cost-Benefit Revolution* by Cass R. Sunstein.

### PRIMARY READINGS

- [BUY] *Microeconomics* (Fifth Edition) by Paul Krugman and Robin Wells. ISBN:9781319198305: [https://www.amazon.com/Microeconomics-Paul-Krugman/dp/1319098789\\_098789](https://www.amazon.com/Microeconomics-Paul-Krugman/dp/1319098789_098789)

### SUPPLEMENTAL TEXTBOOKS

- [Don't BUY] *A Concise Guide to Macroeconomics: What Managers, Executives, and Students Need to Know (5th edition)* by David A. Moss: Required Reading Posted on Blackboard.
- [Don't BUY] *The Cost-Benefit Revolution (1st edition)* by Cass R. Sunstein: Required Reading Posted on Blackboard.
- [Don't BUY] *Misbehaving: The Making of Behavioral Economics (1st edition)* by Richard Thaler: Required Reading Posted on Blackboard.
- [Don't BUY] Gruber, Jonathan. *Public finance and public policy*. Macmillan, 2005.
- [Don't BUY] Yoe, Charles. *Principles of risk analysis: decision making under uncertainty*. CRC press, 2011.

All other readings are on Blackboard with identified weekly reading lists. We supplement course readings with academic articles associated with each week's topic. Each week, optional supplemental reading offers a "deeper dive" into that week's materials.

### MATHEMATICAL REVIEW MATERIALS

- Paul's Notes on Algebra by Paul Dawkins. Lamar University. <http://tutorial.math.lamar.edu/Classes/Alg/Alg.aspx>

### ADDITIONAL "OPTIONAL" TEXTBOOKS (NOT REQUIRED)

- Hill, R., & Myatt, T. (2010). *The economics anti-textbook: a critical thinker's guide to microeconomics*. Zed Books Ltd. <https://www.amazon.com/Economics-Anti-Textbook-Critical-Thinkers-Microeconomics/dp/1842779397>

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## COMPUTER SOFTWARE AND DATA SOURCES

### PRIMARY SOFTWARE (REQUIRED)

- **Microsoft Excel with the Solver Add-on** Installed (you can access MS Excel through the USC Office 360 MyUSC Portal). To download the Solver Add-on, please follow the link below: <https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel-612926fc-d53b-46b4-872c-e24772f078ca>
- **Tableau Public Data Visualization Tool.** The student version of Tableau is free. The student version can be found: <https://www.tableau.com/academic/students#form>

### DATA SET WEBSITES

As part of your economic analysis project, you will need to find a public data set for your policy issue. Below is a non-exhaustive list of data source locations:

- The Humanitarian Data Exchange: <https://data.humdata.org/>
- California Open Data Portal: <https://data.ca.gov/dataset>
- Data.gov (US Data Repository): <https://www.data.gov/>
- USC Library Data Sets: <https://libguides.usc.edu/data/datasets>
- US Spending.gov (US Gov Spending): <https://www.usaspending.gov/#/>
- Global Open Data Index (International Data): <https://index.okfn.org/dataset/>
- World Bank Data: <https://data.worldbank.org/>
- HealthData.gov: <https://healthdata.gov/>
- Knoema (Data Aggregator some paid data sets) <https://knoema.com/>
- Correlates of War (Major IR War Database): <https://correlatesofwar.org/data-sets>
- The Supreme Court Database: <http://scdb.wustl.edu/>
- Harvard Dataverse (Harvard University): <https://dataverse.harvard.edu/>

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## GRADING

In this course, grades are simply a way of measuring progress. We have a lot of material, and this course is challenging. Performance on one module is not a predictor of overall performance. We have two rubrics of grading in this course: “assessments” and “evaluations.” Assignments are organized into different categories, for each category represents a set number of points to be earned over the course of the class.

## ASSIGNMENT CATEGORIES

This course has five categories of assignments. Each assignment type has an acronym for use in the course schedule. Each category is weighted in the grade book—the table below breakdown each assignment category by weight and rubric type.

**Table 2: Assignment Categories**

Name	#	Pts	Total	Weight	Type	Description
<b>Quantitative Assignments (40%)</b>						
<b>Math Assignments</b>	4	10	40	5%	Assessment	These are assignments in Blackboard designed to review the mathematical skills needed for success in this course.
<b>Homework</b>	11	10	110	15%	Assessment	Homework is a set of 10 practice problems with both Essay and Multiple-Choice Question types.
<b>Quizzes</b>	3	300	900	20%	Evaluation	Quizzes are evaluations of the material in each module.
<b>Qualitative Assignments (30%)</b>						
<b>Topic Reflection</b>	7	10	70	15%	Assessment	Topic Reflections ask students to respond to an article and then write an op-ed style response with a thesis, argumentation, and conclusion.
<b>Quant Briefs</b>	7	10	70	15%	Assessment	Develop a chart or graph and then present your analysis/findings in a Voice Thread.
<b>Economic Analysis Project (30%)</b>						
<b>EA Workplan</b>	1	10	10	2.5%	Assessment	A summary of your case, including a set of research questions, a thesis statement, and why you are interested in the topic.
<b>EA Midterm Memo</b>	1	100	300	10%	Evaluation	A literature review, Draft hypotheses, and revised research questions.
<b>EA Model Selection</b>	1	100	100	2.5%	Evaluation	A one-page document summarizing your model and variable selection.
<b>EA Penultimate Draft</b>	1	100	100	5%	Evaluation	A completed draft of your EA with your introduction, literature review, methods section, findings, discussion section, and conclusion.
<b>EA Final Draft</b>	1	300	300	10%	Evaluation	The final version of your EA.
<b>Total:</b>			<b>2000</b>	<b>100%</b>	<b>37 Assignments</b>	

## GRADE RANGES

This course follows the standard grading range, where “A” is representative of excellence in the quality of work. Grades are not curved, but some of the grades are adjusted based upon overall classroom performance. A historical average for this course is a “B+.” As you will recall from your statistics course, the B+ is a mean score representing a normal distribution.

**Table 3: Grade Ranges**

Grade	Range	Description
<b>A</b>	93.0% or higher	Work of excellent quality
<b>A-</b>	90.0% - 92.9%	“
<b>B+</b>	87.0% - 89.9%	Work of good quality
<b>B</b>	83.0% - 86.9%	“
<b>B-</b>	80.0% - 82.9%	“
<b>C+</b>	77.0% - 79.9%	Need Improvement
<b>C</b>	75.0% - 76.9%	“
<b>Failing</b>	59.9% or lower	Failed in course for graduate credit

## ASSESSMENTS AND EVALUATIONS

An assessment is a measure of completion and engagement with the material. An assessment is scored on a range from 0 to 10. Failing to complete an assessment on time will result in a 0. Otherwise, a score of 1 to 10 will be assigned based upon three criteria: relevance, analysis, and evidence. Evaluation assignments look at the student’s demonstration of course material. We use evaluations to gauge the student’s command of computational and conceptual knowledge. If you received below 50, then you must work with your professor to retake the assignment.

**Table 4: Grading Rubric**

Criteria	Insufficient	Partially Proficient	Proficient	Superior
<i>Assessment</i>	<i>0 pts</i>	<i>5 – 7 pts</i>	<i>8 – 9 pts</i>	<i>10 pts</i>
<i>Evaluation</i>	<i>0 pts</i>	<i>50 – 70 pts</i>	<i>80 – 90 pts</i>	<i>91 – 100 pts</i>
<b>Relevance (20%)</b>	Submission does not meet minimal grading criteria.	Identifies issues of concern but could go further in conceptual framing of tasks, work product, basic level understanding.	Organized but may have minor lapses, transitions evident, usually has a clear focus.	Excellent in integrating and applying high-quality project-oriented research.
<b>Analysis (40%)</b>	Submission does not meet minimal grading criteria.	Submission does not make clear the analysis of the materials and lacking argumentation.	Analysis address purpose, but some depth of analysis or logical gaps are evident.	A very high-quality analysis that uses skills and frameworks learned in the program to address the purpose of the assignment.
<b>Evidence (30%)</b>	Submission does not meet minimal grading criteria.	Multiple errors or patterns of error; too rhetorical or conversational a style.	Some errors are present, or style or syntax is faulty; professional style needs polish.	Organized within paragraphs and across sections to support argument. An excellent executive summary.

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## ASSIGNMENT TYPES

### Economics Analysis Project (EA)

One of the most essential skill sets obtained in PPD 503 is reading, understanding, and writing about economic forces shaping our society, policy, and communities. In policy analysis, we use economics and apply these concepts to social, bureaucratic, and political problems. The Economics Analysis involves applying one of the “three general economic models” to a policy topic or issue.

### Economic Analysis Model Selection

Throughout the first two-thirds of the course, we explore three general economic models. Each of these models has pros and cons when analyzing a social problem. For the Economic Analysis assignment, you will need to select one of the following three models and apply it to a policy issue of your choice.

**Table 5: Economic Analysis Models**

Model I: Microeconomics	Model II: Cost-Benefit Analysis	Model III: Macroeconomics
A Supply and Demand Model is used to measure the change in equilibrium due to a policy change. This type of model is often used to measure the “loss of market efficiency” in society due to a new or change in policy.	A Cost-Benefit Analysis (CBA) is used to assess the net benefits of a policy. Often, we see this when there is a comparison of alternative policy or large capital projects. Usually, this is the tool of assessing if a policy is “worth it.”	An Output model is often used to measure the “national effect” of a policy. We often see this when we consider trade or security concerns. Use this model for monetary policy changes.
<b>Suggested decision rule:</b> Pareto efficiency	<b>Suggested decision rule:</b> Kaldor-Hick Criterion	<b>Suggested decision rule:</b> Taylor Rule

## ECONOMIC ANALYSIS

**EA Check-in:** A overview of your project. Please select your case and have it approved by the assigned faculty before preparing your first check-in.

**Midterm Memo:** The midterm memo should include a high-level summary and a set of recommendations and alternatives. The memo is intended to give the reader to get an overview of your thinking process, selection of variables, and the proposed outcome of your selected model. It is essential to include all relevant tables, charts, and graphs.

**Penultimate and Final Analysis:** The penultimate and final EA report should present a case for one of the midterm memo’s proposed recommendations. The goal is to make an economic argument by setting up and running a model. Identify your simplifying assumptions and assume the reader has no knowledge of economics. The analysis should connect the dots between a theoretical concept, the analyst thinking process, key assumptions, data sets, tables, charts,



graphs, and supplemental information—all the “real” information needed to address the questions in the EA. Please include all modeling and concepts cited in the midterm memo.

### COMPLETING THE ECONOMIC ANALYSIS

The EA is a complex and challenging project. However, this takes time, and there are many stages. We have broken up the course with feedback “check-points.” Please note that these are tentative and may be subject to change based upon the instructor.

**Table 6: EA Timeline**

Week	Name	Page Limit
Week 04	Check-In: EA Work Plan	1-Page
Week 09	Midterm Memo	10 – 15 Page
Week 12	Method and Variable	1-Page, Excel File
Week 14	Penultimate Draft	20 – 25 Pages
Week 15	Final Economic Analysis	N/A

### Selecting a Case to Analyze

You may choose any case from the Blackboard site. However, to get you started, I have a selection of cases on Blackboard which are well suited to the course's methods and topics.

### Economic Analysis Writing Guidelines

Each submission should be written for clarity. Begin your EA with an introduction, setting the stage for your analysis. Next, define your concepts and policy problem. Then, specify your model and define your variables. Make a recommendation and use your model to justify its selection. Conclude with a summary of the paper and its claims. Provide insightful analysis and support all claims with research and evidence. Use an appropriate academic citation format (e.g., APA Publication Manual) in a consistent manner to document your sources. Citation expectations are very high, so make sure to include footnotes, endnotes, or a general bibliography depending upon the format of the assignment submission. These criteria will all be considered in determining your grade.

In economic modeling, we use data and tables to communicate core concepts. When presenting data, it's helpful to make sure the data is in the proper format. An excellent resource for helping craft your tables and charts is Purdue Online Writing Lab's webpage on charts and tables: [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/apa\\_tables\\_and\\_figures\\_1.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/apa_tables_and_figures_1.html). Please make sure that all tables and charts are correctly cited. If you have intermediary steps when analyzing your data, it's important to include that information in an appendix.

All papers should be single-spaced in 12-point font with one-inch margins and submitted in a Word document format and NOT as a .pdf file format to allow for feedback and faculty annotations unless otherwise noted in the assignment instructions. Appropriate use of white space is encouraged: graphics, figures, and extensive organizational titling and subtitling should be incorporated into your analytic writing to give the reader a greater understanding of your argumentation. Papers will also be evaluated for the format and for supporting the use of



graphic and textual elements and data visualizations. These criteria will all be considered in determining your grade.

## Form and Style

All memorandum assignments must be single-spaced, in 12-point font, with 1-inch margins and a single space between paragraphs. Write in plain, concise prose, as described in Strunk and White's Elements of Style.

Referencing should use APA format. Do not forget to include page numbers in written assignments. Err on the side of being too inclusive in your citations of facts and ideas contained in your work. It is an excellent professional practice to guide your readers to your source materials by using citations to avoid plagiarism allegations.

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## Quant Brief Assignment

The quant brief assignment is a tool to evaluate your graphing and charting skills as well as focus on assessing your analytical skills when reviewing visual material. As with all things in this course, our primary objective is evaluating your ability to analyze and draw conclusions from data. In the quant brief assignments, you will be given a set of data that you will use to then formulate a chart. You will then analyze the chart and then draw a conclusion and a recommendation from the data that you observed. This is not a summary exercise; we are interested in your critical thinking ability to evaluate complex problems and provide innovative solutions, two principles that need your expertise.

## Tools of the Trade

**Link:** (<https://www.tableau.com/academic/students#form>)

One of the most important tools in an economist toolkit is Tableau. Tableau is visualization software that can be downloaded from tableau's website for free for students for up to a year. It is a requirement of this course that tableau is installed on your computer prior to the start of the semester. Part of this course is learning outcomes is familiarity with using tableau as visualization software. One of the core outcomes of this class is a better understanding of how to use visualization and data to improve public decision-making. We have found that tableau is a very marketable skill for our students in the workforce.

## Quant Brief Assignment Grading

Quant brief assignments will be graded as assessments meaning that they will be graded out of 10 points. They will be based upon the same criteria as the topic reflections. As with the topic reflections, we are looking for successful argumentation, analysis, and the ability to understand visual data and present a case for or a recommendation for a specific outcome. The prompt for each quantitative briefing assignment will identify a chart type and response requirements. It's important to note that there is not a single right answer to this assignment. It is important to come up with your visualization ideas on your own, but you may work with classmates to troubleshoot tableau.

**Table 7: Quant Brief Assignments Learning Objectives**

Week, Module, and Name	Learning Objectives and Assignment
<b>Week 02 (M2):</b> Bar Chart	<ul style="list-style-type: none"> <li>• Create and analyze a bar chart from the given data set.</li> <li>• This includes learning how to load data sets into tableau.</li> </ul>
<b>Week 03 (M2):</b> Histogram	<ul style="list-style-type: none"> <li>• Use data to create a histogram. Paying special attention to its distribution and the possible insights that its distribution can provide.</li> <li>• This includes the use and creation of calipers to organize data into a distribution.</li> </ul>
<b>Week 05 (M2):</b> Scatter Plot with Trend Lines and clusters	<ul style="list-style-type: none"> <li>• Create and organize a scatter plot from data.</li> <li>• Use a trendline to evaluate the data in a scatterplot</li> <li>• This includes developing filters for tableau.</li> </ul>
<b>Week 07 (M3):</b> Waterfall Chart	<ul style="list-style-type: none"> <li>• Reorganizes data into cash flows by analyzing the cash flow analysis with a waterfall chart.</li> <li>• This will require the students to use a custom calculation for both the present value of the chart and the net present value column.</li> </ul>
<b>Week 10 (M4):</b> Bubble Chat, Line Charts, and Area Charts	<ul style="list-style-type: none"> <li>• We will use a combination of two datasets to create several charts to evaluate a single policy problem.</li> <li>• This will require the students to match across two different datasets.</li> <li>• Utilizing bubble charts, line charts, or area charts to address and analyze the problem stem.</li> </ul>
<b>Week 12 (M5):</b> Maps and Parameters	<ul style="list-style-type: none"> <li>• This week we will draw on a combination of combining three datasets a map and parameters to assess an ongoing policy issue.</li> <li>• A map data set well includes geographic information and how to use geographic information in decision making.</li> <li>• We introduce parameters as a new way of evaluating data.</li> </ul>
<b>Week 14 (M5):</b> TreeMap andBox Plot	<ul style="list-style-type: none"> <li>• In our final quant brief assignment, we ask students to use a treemap and boxplot to evaluate uncertainty and risk in data. We briefly introduced the idea of a confidence interval as a way of assessing how accurate data is.</li> <li>• This will require students to use both calculations and parameters and combine two data sets to ascertain the appropriate level of risk and uncertainty in a given project.</li> <li>• We also introduced the notion of a boxplot for economics which provides a level of association with risk and uncertainty</li> </ul>

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## POLICIES

### WEEKLY STRUCTURE

Each day of the week is numbered (please see below). Day 1 is Wednesday, the first day of the beginning of each weekly session.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday

**Due dates for all assignments are stated in Day numbers. Assignment are due no later than 11:55 p.m. (Pacific Time Zone) on the day stated within the syllabus, the assignment page, and the weekly overview pages, unless otherwise communicated in class.**

### Submission Protocol

All file submissions will be handled electronically. The class instructors will return documents using the Turnitin function on the class portal. NO material submitted via e-mail or in hard copy to faculty will be accepted for grading; however, in the case of electronic submission problems via the LMS, you may provide duplication submissions in a timely fashion to faculty via direct e-mail as a matter of record for your timely submission. All grading will be done from submissions via the electronic course portal.

### Labeling Protocol

Please label all files submitted via the LMS by your last name and name of the assignment (e.g., Vertenten\_memo1.doc). For example, if I submit Vertenten\_memo1.doc or name it Vertenten\_memo1.xlsx, make sure the naming is consistent.

### Grade of Incomplete

Only when work is not completed because of documented illness or other "emergency" occurring after the 12th week of the semester (or 12th week equivalent for any course scheduled for fewer than 15 weeks) may the professor assign a grade of Incomplete (INC). An "emergency" constitutes a situation or event that could not be foreseen, and which is beyond the student's control and which prevents the student from taking any final paper or completing other work during the last weeks of class. A student may not request an Incomplete (INC) before the end of the 12th week (or 12th-week equivalent for any course scheduled for fewer than 15 weeks). Course work that is not completed on time does not meet the eligibility requirements for being considered "incomplete work" and will instead receive zero credits in the grade book. Please review the assignment late policy if you have questions about new versus incomplete coursework.

### Late or Missing Assignment Policy

This course will not accept late or missing work. If you have an emergency, please contact the instructor as soon as possible.

### Syllabus Revisions

The faculty will assess progress and elicit student feedback regarding the course. If necessary, the course director will revise the syllabus during the course run to make it more suitable.

## Library Access

As a USC student, you have access to all the USC library resources. Please find out more at the [USC Libraries](#).

## In-class Recording

**Recording a university class without the express permission of the instructor and announcement to the class is strictly prohibited. Recording can inhibit future free discussion and thus infringe on the academic freedom of other students as well as the instructor.**

*Per SCampus, Part B: Student Code of Conduct, Part 10: General Disciplinary Principles, Pg. 9.*

## Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

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## Live Session Schedule and Information

This course has weekly Live Sessions on Tuesdays (Day 7) from 6-7PM (Trojan Time).

Live sessions for this course take place in Zoom. Please check Blackboard for the most up-to-date information and to obtain specific meeting information.

Each live session may entail:

- A brief review of the previous week's material, including last week's problems.
- Course lecture or faculty presentation of core instructional materials
- A Q&A session during which the professor will provide expanded directions on upcoming (major) analytic exercises and respond to student questions about future assignments

## Live Session Policy

Students are required to attend all live sessions throughout the semester and to participate verbally with faculty acknowledgment. **No exceptions are permitted**; however, if medical or other previously excused absences are granted, an additional written assignment will be required for submission and counted toward the course participation grade. As noted above, live sessions are an opportunity to discuss concepts found in the readings and problem sets. Please bring your questions about class content. However, if you have a problem set question, please bring this to the weekly Quant lab. The Quant Lab is held each week to go over issues like the ones in the assignment. The focus of the Quant Lab is to work on improving modeling. Quant Lab participation is not required and will be held any time after the weekly live session.

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## Weekly Activities

The course is broken into five modules. Each week has a set of deliverables the student is responsible for. Please make sure you have an up-to-date version of the syllabus. If you have any questions or concerns, please ask your instructor. Please note the topics listed are to help guide your planning for what is coming each week. The page estimates per week are estimates, and depending on your book edition, you may have different page numbers or counts. If you do have a different edition, please match the topics to the pages as best you can. If you need assistance with determining the readings based on your edition, please contact the instructor.

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## Module One: Math Review

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In this course, math is one way of manipulating economic concepts and explaining complex interactions among variables. An understanding of algebra geometry is helpful for explaining economic operations.

## Week 01 | Mathematical Foundations for Economics

In Week 01, we unpack mathematics for economics with a quick review of arithmetic and algebraic concepts.

### Learning Objectives

By the end of this week, students will be able to:

- Demonstrate proficiency with the mathematics and graphing needed to consume economic models.
- Develop the computational skills needed in a true economics course.
- Explain how to manipulate algebraic expressions needed for understanding economic models.

### Required Reading

- Read the following from Paul's Notes on Algebra by Paul Dawkins. Lamar University. <http://tutorial.math.lamar.edu/Classes/Alg/Alg.aspx>
  - Section 2-1: Solutions and Solution Sets
  - Section 2-2: Linear Equations
  - Section 3-1: Graphing
  - Section 3-2: Lines (please pay close attention to the notes on inverse lines)
  - Section 7-1: Linear Systems with Two Variables
- Estrada, M. A. R. (2011). Policy modeling: Definition, classification, and evaluation. *Journal of Policy Modeling*, 33(4), 523-536. ([Blackboard](#)). Section 1 and Section 2, we will return to the other sections later (3 Pages).
- Supplemental Math Notes in Blackboard

LEARNING ACTIVITY	DUE
<b>Week 01</b> Discussion	<b>Day 4, 5, 7</b>
<b>Week 01</b> Quant Lab ( <b>Optional</b> )	<b>Day 4</b> at <u>TBD</u>
<b>Week 01</b> Math Assignment #1	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 01</b> Math Assignment #2	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 01</b> Math Assignment #3	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 01</b> Math Assignment #4	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 01</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Module Two: Foundation of Microeconomics

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From Week 02 to Week 07, we delve into the world of microeconomics. The study of microeconomics started in 1776 with the release of Adams Smith, “A Wealth of Nations.” Microeconomics is the study of “transactions under scarcity” or how to make optimal decisions when you face constraints. In this module, we learn how economics is more than just supply and demand.

**Trigger Warning:** Some of the Material in this class may be unsettling to some students. Please proceed with caution.

## Week 02| Thinking Critically About the Costs and Benefit Tradeoff

We start Module 2 by exploring rational choice theory and how to think about the economic opportunity costs and cost-benefit tradeoff. This week's objectives are to get the students familiar with economic and policy analysis concepts that we can apply later in the module. Policy and economic analysis rely upon models to evaluate ideas. This week, we consider what is in a model and how we can use modeling to improve decision-making. In a traditional economic course, this week would be solely dedicated to a discussion of rational choice models. Our curriculum is focused on how public leaders can make better decisions using economic models.

### EA Groups Assigned by the end of the week

### Learning Objectives

By the end of this week, students will be able to:

- Explain the role of accurately defining costs and benefits in good decision-making.
- Explore conceptual differences between explicit and implicit costs, as well as accounting profit and economic profit.
- Identify the three types of economic decisions.
- Explore how and why people behave in irrational yet predictable ways.
- Identify the potential for irrational behavior on the part of firms.

### Required Reading

- Krugman and Wells – Chapter 01: First Principles
- Krugman and Wells – Chapter 02: Economic Models: Trade-off and Trade.
- Krugman and Wells – Chapter 02: Appendix
- Lynn Jr, L. E. (1994). Public management research: The triumph of art over science. Journal of Policy Analysis and Management, 13(2), 231-259.

### Supplemental Reading

- Patton, C. V., & Sawicki, D. S. (1993). Basic methods of policy analysis and planning.
- Estrada, M. A., R. (2011). Policy modeling: Definition, classification, and evaluation. Journal of Policy Modeling, 33(4), 523-536.
- Friedman, Lee S. The microeconomics of public policy analysis. Princeton University Press, 2002. (Chapter 1)

LEARNING ACTIVITY	DUE
<b>Week 02</b> Quant Lab (Optional)	<b>Day 4</b> at TBD
<b>Week 02</b> Quant Brief	<b>Day 5</b> at <u>11:55 PM TT</u>
<b>Week 02</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 02</b> Topic Reflection	<b>Day 7</b> at <u>11:55 PM TT</u>
<b>Week 02</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Week 03 | Microeconomics: Consumer Choice

This week we explore how consumers make decisions. Consumer decisions are faced with limitations such as time, money, and satisfaction. Policy analysts think about consumer utility as citizen satisfaction, whereas economists think of it as consumer satisfaction. In both cases, this means consumers and citizens will need to make decisions. As you will note, decision-making is a central theme of the course. This week, we spend a good deal of time on the concept of utility (units of utility) as satisfaction. We explore the idea of an "indifference curve" as a way of representing consumers' indifference for consuming different bundles of goods. We then consider a budget constant as a limit on the amount of consumer consumption. Consumer satisfaction, as discussed in economics, is based on rational choices between a suite of goods. However, there are alternative conceptions of satisfaction and fairness that must be considered.

### Learning Objectives

By the end of this week, students will be able to:

- Identify the factors that determine how consumers spend their income.
- Explore the concept of utility to describe people's tastes.
- Explain the concept of diminishing marginal utility as it applies to consumer behavior.
- Explain the applicability of optimum consumption bundles and the impact of income and substitution effects.

### Required Reading

- Krugman and Wells – Chapter 10 The Rational Consumer (Est. Pages 275 to 290)
- Krugman and Wells – Chapter 10 Appendix: Consumer Preferences and Consumer Choice (Est. Pages 297 to 313)
- Krugman and Wells – Chapter 3: The Demand Curve (Est. Pages 63 to 67)
- Krugman and Wells – Chapter 4: Willingness to Pay and the Demand Curve (Pages 102 to 105) Pages Numbers are estimated from the instructor copy. It may be that they do not match based on your edition. The section headers should be correct.

### Supplemental Reading

- [Moscati, I. \(2016\). Retrospectives: how economists came to accept expected utility theory: the case of Samuelson and Savage. Journal of Economic Perspectives, 30\(2\), 219-36.](#)
- [Arrow, Kenneth J., 1950. "A Difficulty in the Concept of Social Welfare." Journal of Political Economy 58\(4\): 328-46 – Part 1 only. Read Section I only. Pages 328 to 331](#)
- [Friedman, Lee S. The microeconomics of public policy analysis. Princeton University Press, 2002. \(Chapter 3\)](#)

LEARNING ACTIVITY	DUE
Week 03 Quant Lab (Optional)	Day 4 at TBD
Week 03 Quant Brief	Day 5 at 11:55 PM TT
Week 03 Homework	Day 6 at 11:55 PM TT
Week 03 Live Session	Day 7 at 6:00 PM TT

###

## Week 04 | Microeconomics: Theory of the Firm

Like consumers who make decisions under constraints, firms face a similar problem with production. Consumer choice is about selecting the “optimal bundle” to maximize satisfaction. Firms are looking to minimize costs of production and maximize profit. These are relatable but not interchangeable topics. The “Theory of the Firm” seeks to explain company behavior when faced with constraints. From a computational standpoint, this is similar but not the same as consumer choice. This week, we will be spending some time on both isoquant and isocost curves for assuming a level of production between two projects. We are also going to spend some time on the production function. Last, we consider graphing the firm’s marginal cost, average total costs, and marginal revenue to profit.

### Learning Objectives

By the end of this week, students will be able to:

- Define a firm’s production function.
- Explain the law of diminishing returns to inputs.
- Identify the types of costs a firm faces and how firms generate their cost curves.
- Explain the difference between the short run and long run and how a firm’s costs and behavior differ in each case.
- Define perfect competition, its use as an important benchmark, and how it determines an industry’s profit-maximizing output level.
- Explain how the short-run industry supply curve differs from the long-run industry supply curve.

### Required Reading

- Krugman and Wells – Chapter 11: Behind the Supply Curve: Inputs and Costs (Pages 324 to 339)
- Krugman and Wells – Chapter 12: Perfect Competition and the Supply Curve (Pages 352 to 371)
- [Milward, H. B., & Provan, K. G. \(2000\). Governing the hollow state. Journal of public administration research and theory, 10\(2\), 359-380.](#)

### Supplemental Reading

- Cobb, C. W., & Douglas, P. H. (1928). A theory of production. The American Economic Review, 18(1), 139-165. (Blackboard).
- Kochevrin, I. (1988). The Neoclassical Theory of Production and Distribution. Problems in Economics, 30(11), 6-29. (Blackboard)
- Taylor, F. W. (1914). Scientific Management: Reply from Mr. FW Taylor. The Sociological Review, 7(3), 266-269. (Blackboard)
- Merrett, Frank. "Reflections on the Hawthorne effect." Educational Psychology 26, no. 1 (2006): 143-146.

LEARNING ACTIVITY	DUE
<b>Week 04</b> Quant Lab (Optional)	<b>Day 4</b> at TBD
<b>Week 04</b> EA Check-in: Workplan	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 04</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 04</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

###

## Week 05 | Microeconomics: Equilibrium Theory

Over the past two weeks, we have examined consumer demand elements by exploring consumers' choices when facing constants. We have also considered how sound production is defined by cost minimization and profit maximization. This week, we now combine these two concepts into the formation of Supply and Demand. Supply is the aggregated output of all the firms in the market, seeking to "capture" the market by reducing the price. Whereas demand is the aggregated set of consumer preferences determining how much consumers want a product. This gives us an express relationship between two variables, price (y-axis) and Quantity (x-axis). Supply and Demand lines are graphic representations between these two variables. The point where the supply line (or curve) and the demand line (or curve) meet is at the market equilibrium. This week, we put all the concepts we have learned in the last three weeks together into a "general" and "partial" equilibrium model. We also look at how policy choices affect and change producer and consumer surplus and deadweight loss.

### Learning Objectives

By the end of this week, students will be able to:

- Define the competitive market, including the principles of supply and demand and the concepts of equilibrium price and Quantity.
- Identify shortages and surpluses and how they can be eliminated.
- Explain Calculate consumer surplus, producer surplus, and total surplus.
- Calculate consumer surplus, producer surplus, and total surplus.
- Explain the concept of market failure and the conditions that can lead to market inefficiencies.
- Explain the different elasticity measures, the factors that influence the size of elasticities, and the impact of government intervention.

### Required Reading

- Krugman and Wells – Chapter 03: Supply and Demand (Page 66 to 92 in 5th Edition)
- Krugman and Wells – Chapter 05: Price Controls and Quotas: Meddling with the Free Market (Page 130 to 148 in 5th edition).
- Krugman and Wells – Chapter 06: Elasticity (page 158 to 177 5th edition).
- [Farmer, C. M., Hosek, S. D., & Adamson, D. M. \(2016\). Balancing demand and supply for veterans' health care: a summary of three RAND assessments conducted under the veteran's choice act. Rand health quarterly, 6\(1\).](#)

### Supplemental Reading

- [Cheshire, P., & Sheppard, S. \(2005\). The introduction of price signals into land-use planning decision-making: a proposal.](#)
- [Friedman, Lee S. The microeconomics of public policy analysis. Princeton University Press, 2002. \(Chapter 2\)](#)

LEARNING ACTIVITY	DUE
Week 05 Quant Lab (Optional)	Day 4 at TBD
Week 05 Quant Brief	Day 5 at 11:55 PM TT
Week 05 Homework	Day 6 at 11:55 PM TT
Week 05 Quiz Review (Optional)	Day TBD at TBD
Week 05 Live Session	Day 7 at 6:00 PM TT

###

## Week 06 | Microeconomics: Efficiency and Market Structures

Perfect market competition only holds when key assumptions are correct. This week, we explore what happens when the market is not able to be perfectly comparative. There are several forms of market structures, oligopoly, monopolistic competition, and monopolies. In these markets, there are a few firms that exhibit market power. This allows large firms to be price takers, setting the price of a good at the level that maximizes their profit. However, not all monopolies are lousy water, and power utilities are a form of natural monopoly. Natural monopolies are grated by governments and often have rules and regulations guiding their actions. Governments have many ways of intervening in markets. The most common way is by establishing a tax and, in doing so, raising revenue for the government. This week we examine when the market is not perfect but monopolistic!

### Learning Objectives

By the end of the week, students will be able to:

- Explain what a monopoly is, how it affects a firm's price and output decisions, why it typically reduces social welfare, and the tools policymakers use to respond.
- Define price discrimination and explain why it is so prevalent in specific industries.
- Explain oligopoly, why it occurs, how oligopolists benefit from collusion, and how it harms consumers.
- Apply game theory to understand strategic behavior observed by oligopolists.
- Explain how and why the government uses the antitrust policy to prevent collusion among oligopolists.

### Required Reading

- Krugman and Wells – Chapter 13: Monopoly (Pages 380 to 405)
- Krugman and Wells – Chapter 14: Oligopoly (Page 416 to 429)
- Krugman and Wells – Chapter 15: Monopolistic Competition and Product Differentiation (Page 442 to 454)
- Rand Corporation (2018) Firearms and Ammunition Taxes: <https://www.rand.org/research/gun-policy/analysis/essays/firearm-and-ammunition-taxes.html>.

### Supplemental Reading

- Shoven, J. B., & Whalley, J. (1984). Applied general-equilibrium models of taxation and international trade: an introduction and survey. Journal of Economic Literature, 22(3), 1007-1051
- Currie, J. M., Murphy, J. A., & Schmitz, A. (1971). The concept of economic surplus and its use in economic analysis. The Economic Journal, 81(324), 741-799.
- Deaton, A. (1986). Demand analysis. Handbook of econometrics, 3, 1767-1839.

LEARNING ACTIVITY	DUE
Week 06 Quant Lab (Optional)	Day 4 at TBD
Week 06 Homework	Day 6 at 11:55 PM TT
Week 06 Topic Reflection	Day 6 at 11:55 PM TT
Week 06 Live Session	Day 7 at 6:00 PM TT

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## Module Three: Fundamentals of Cost-Benefit Analysis

With a firm command of microeconomics, we turn to a way of modeling economic behavior that is aligned with microeconomics. When we look at policy documents, there is often a reference to a “cost-benefit analysis,” which somehow justifies the adoption of one or more policy options.

The justification is usually, the benefits have outweighed the costs. More to the point, we are often considering what the “net-benefits” are for a given policy alternative. In this module, we explore the cost-benefit model to provide a clear understanding of what a cost-benefit tradeoff really is.



## Week 07 | Cost and Benefit Analysis, Time Value of Money, and NPV

In this first section of cost-benefit analysis or CBA, we focus on the present value of money. Present value means that as money ages, it decreases in value. We often want to know how much money is worth in the future. This week, we focus on the Net-Present Value (NPV) of money. Our predetermined decision rule determines the meaning of the NPV. In the material this week, we discuss how decision rules and their relationship with the NPV. This week, we read from “The Cost-Benefit Revolution.” This book is written by Cass Sunstein, who is a Harvard Law Professor and former OIRA Administrator. In policy and administrative practice, the CBA is often used for regulatory analysis.

### Learning Objectives

By the end of this week, students will be able to:

- Understand the nature of cost as a function of time, interest, and occurrence.
- How to calculate benefits and see a marginal change in benefit. The difference between public and private benefits.
- Understand the time value of money and how that is associated with a discount rate.

### Required Reading

- [Sunstein – Chapter 2](#)
- [Sunstein – Chapter 3](#)
- [Trumbull, W. N. \(1990\). Who has standing in the cost-benefit analysis? Journal of Policy Analysis and Management, 9\(2\), 201-218.](#)
- **Extended Forms Games:** Please watch these videos for Extensive Form Games. [Subgame Perfect Equilibrium](#), [Backward Induction](#), [Problem with Backward Induction](#), [Multiple Subgame Perfect Equilibria](#), and [How NOT to write a Subgame Perfect Equilibria](#). (*Hint: This is helpful for the Excel Homework question on games*).
- *\*New\** [Gruber, Jonathan. Public finance and public policy. Macmillan, 2005. Chapter 8 \(Please see the attached link\) This is a helpful chapter that covers the Core topic\).](#)

### Supplemental Reading

- [Linn, M. \(2010\). Cost-benefit analysis: a primer. The Bottom Line.](#)
- [Ross, S. A. \(1995\). Uses, abuses, and alternatives to the net-present-value rule. Financial management, 24\(3\), 96-102](#)
- [Pearce, D. \(1998\). Cost-benefit analysis and environmental policy. Oxford review of economic policy, 14\(4\), 84-100](#)
- [OMB Circular A-4 Section A, B \(Cost-Benefit Definition\), and Section E \(General Issues Only\)](#)

LEARNING ACTIVITY	DUE
<b>Week 07</b> Quant Lab (Optional)	<b>Day 4</b> at TBD
<b>Week 07</b> Quant Brief	<b>Day 5</b> at <a href="#">11:55 PM TT</a>
<b>Week 07</b> Quiz 01: Microeconomics	<b>Open: Day 3</b> at 12:01 AM <b>Close: Day 6</b> at 11:55 PM
<b>Week 07</b> Live Session	<b>Day 7</b> at <a href="#">6:00 PM TT</a>

###

## Week 08 | Cost and Benefit Analysis, Discount Rates, and Incomplete Information

The Cost-Benefit model is the primary tool of a regulatory economist. Administrators and policy analysts use the CBA to make decisions or analyze a policy problem. The policy process often requires some decision rules with a set of cost and benefit data. This week, we wrap up our introduction to the CBA model with a discussion of the model’s limitations and how we can address these issues. We start with a discussion about information. As you have seen, data is the fuel for the CBA machine. When we began the CBA discussion, we assumed “perfect information.” We relax that assumption. What happens to the CBA when you do not have the right amount of information? We then examine what happens when you cannot quantify benefits or costs. How does this change the CBA calculation? We lastly consider how to apply cost-benefit analysis to regulatory policy.

### Learning Objectives

By the end of this week, students will be able to:

- Define how discount rates are generated and created.
- Understand how discount rates and net present value interact
- Understand how net present values are affected by changes in the discount rate and how we can use them to improve the analysis.

### Required Reading

- [Sunstein – Chapter 4](#)
- [Sunstein – Chapter 5](#)
- Krugman and Wells – Chapter 09: Decisions by Markets and Individuals
- Krugman and Wells – Chapter 09 Appendix: Net-present Value (some of you may have this in the back of the book)

### Supplemental Reading

- [Dudley, S. E., Pérez, D. R., Mannix, B. F., & Carrigan, C. \(2019\). Dynamic Benefit-Cost Analysis for Uncertain Futures. Journal of Benefit-Cost Analysis, 10\(2\), 206-225.](#)

LEARNING ACTIVITY	DUE
<b>Week 08</b> Quant Lab ( <b>Optional</b> )	<b>Day 4</b> at TBD
<b>Week 08</b> Homework and Excel Assignment	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 08</b> Topic Reflection	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 08</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Module Four: Foundations of Macroeconomics

Macroeconomics is the study of the national economy. In a sense, we move from the microscale to the macroscale. Macroeconomics came to prominence during the great depression of the 1930s. Microeconomic tools such as supply and demand seemed unable to overcome a “shortage of liquidity and confidence” (President Roosevelt, 1934). The great depression quickly becomes an economic conundrum. Public leaders turned to a new form of economics. Unlike microeconomics, macroeconomics considers the operation of the economy as a whole and not just an aggregation of firms and consumers. A national economy required new institutions. Thus, Congress initiated two new forms of policy, fiscal policy (budget and expense policy with the revised budget control act, and reformation of a United States Central bank known as the Federal Reserve. In this module, we explore the concept of the national economy.

## Week 09 | Macroeconomics: The National Economy

This week, we start our discussion of the national economy. A national economy is the sum of economic activity attributed to a national system. We refer to this as a Gross Domestic Product or GDP. In macroeconomics, GDP is directly associated with output. We can conceptualize production as a formula where we take the sum of each part of the economy minus exports out of the economy. This week our focus is understanding the flow of economic goods from the producer, households, and government. We can think of trade as bringing in and sending out total economic activity.

### Learning Objectives

By the end of this week, students will be able to:

- Explain key concepts including national indicators and the inputs of Gross Domestic Product (Consumption, Government Spending, Trade, Investment)
- Critically examine how we think about Macroeconomics policy problems.
- Understand how exchange rates operate within the context of the global trade order.
- Explain the Multiplier Effect and its role in “magnifying” the G in our output formula.
- Understand “Economic Expectations” as an indicator of anticipated economic output.
- Explain how we consider price inflation within the context of international trade.
- Understand the fundamental aspects of Keynesian Economic theory

### Required Reading

- [Moss – Introduction](#)
- [Moss – Chapter 1: Output](#)
- [Krugman Macroeconomics Excerpt 01](#)
- [Friedman, Milton. "The social responsibility of business is to increase its profits." \*In Corporate ethics and corporate governance\*, pp. 173-178. Springer, Berlin, Heidelberg, 2007.](#)

### Supplemental Reading

- [Moss – Chapter 5: GDP Accounting](#)

LEARNING ACTIVITY	DUE
<b>Week 09</b> Quant Lab ( <b>Optional</b> )	<b>Day 4</b> at TBD
<b>Week 09</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 09</b> EA Mid-term Memo	<b>Day 7</b> at <u>11:55 PM TT</u>
<b>Week 09</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

###

## Week 10 | Macroeconomics: Monetary Policy

Macroeconomics is about understanding the whole economy. Money is any asset that can easily be used to purchase goods and services. Currency in circulation and checkable bank deposits are both considered part of the money supply. Money plays three roles: it is a medium of exchange used for transactions, a store of value that holds purchasing power over time, and a unit of account in which prices are stated. The Federal Reserve and other central banks try to stabilize the economy, limiting fluctuations of actual output around potential output while also keeping inflation low but positive. Central Banks do this by evaluating the demand for money in the economy. The Central Banks use either Expansionary monetary policy to reduce the interest rate by increasing the money supply. This increases investment spending and consumer spending, which in turn increases aggregate demand and real GDP in the short run. The contractionary monetary policy raises the interest rate by reducing the money supply. This reduces investment spending and consumer spending, which in turn reduces aggregate demand and real GDP in the short run.

### Learning Objectives

By the end of this week, students will be able to:

- Understand how the Federal Reserve implements monetary policy and why it is used as the main tool for stabilizing the economy.
- Define inflation, disinflation, and deflation and Explain the short-run trade-off between inflation and unemployment.
- Establish why even moderate levels of inflation are so difficult to end.
- Explain the conditions that led to the emergence of macroeconomic policy activism.
- Explain the challenges that led to a revision in Keynesian economics and the emergence of new classical macroeconomics.

### Required Reading

- [Moss Chapter 2: Money](#)
- [Krugman Macroeconomics Excerpt 02](#)
- [Eichengreen, B., 2019. Capitalism in America: A History. By Alan Greenspan and Adrian Wooldridge. New York: Penguin Press, 2018. Pp. 496. a2.48, hardcover. - Keeping At It: The Quest for Sound Money and Good Government. By Paul Volcker with Christine Harper. New York: Public A. The Journal of Economic History 79, 571–574.. doi:10.1017/s0022050719000251](#)

### Supplemental Reading

- [FRBSF Weekly Letter: Federal Reserve Policy and the Predictability of Interest Rates](#)
- [Moss Chapter 4: A Short History of Money and Monetary Policy in the United States](#)
- Greenspan, Alan, and Adrian Wooldridge. Capitalism in America: An Economic History of the United States. Penguin Books, 2019.

LEARNING ACTIVITY	DUE
<b>Week 10</b> Quant Lab (Optional)	<b>Day 4</b> at TBD
<b>Week 10</b> Quant Brief	<b>Day 5</b> at <u>11:55 PM TT</u>
<b>Week 10</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 10</b> Quiz Review (Optional)	<b>Day TBD</b> at TBD
<b>Week 10</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Week 11 | Macroeconomics: Fiscal Policy

The government plays a significant role in the economy, collecting a large share of GDP in taxes and spending a large percentage to purchase goods and services and make transfer payments, mainly for social insurance. Fiscal policy is the use of taxes, government transfers, or government purchases of products and services to shift the aggregate demand curve. Fiscal policy has a multiplier effect on the economy, the size of which depends on the fiscal policy. Except in the case of lump-sum taxes, taxes reduce the size of the multiplier. Expansionary fiscal policy leads to an increase in real GDP, and contractionary fiscal policy reduces real GDP. The government can engage in two fiscal policy forms: (1) non-discretionary spending and (2) discretionary spending. Each of these can influence if the government runs a deficit or a surplus. Persistently large budget deficits have long-run consequences because they lead to an increase in public debt.

### Required Reading

- [Krugman Macroeconomics Excerpt 03](#)
- [Fiscal Policy: How to Select Fiscal Rules, A Primer; How-to Note No. 9; March 2018](#)
- [Gruber, Jonathan. \*Public finance and public policy\*. Macmillan, 2005. Chapter 10 \(Please see the attached link\) This is a helpful chapter that covers the Core topic\).](#)
- [Sargent, T.J., 1999. A primer on monetary and fiscal policy. \*Journal of Banking & Finance\* 23, 1463–1482.. doi:10.1016/s0378-4266\(99\)00026-6](#)

### Supplemental Reading

- [2020-2021 California's Governors Budget](#)
- [Congressional Budget Office's Economic Outlook for 2020 to 2030](#)
- [United States Presidents Budget 2020](#)
- [Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." \*Journal of Political Economy\* 64: 416-24.](#)
- [Legislative Analysts Office "Overview of the Governors 2020-2021 Budget"](#)
- [Young Stock Investing Society "Stock Investing 101" \(2010\)](#)

LEARNING ACTIVITY	DUE
<b>Week 11</b> Quant Lab ( <b>Optional</b> )	<b>Day 4</b> at TBD
<b>Week 11</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 11</b> Topic Reflection	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 11</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Module Five: Applied Economic Analysis

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The Applied Economic Module has two objectives: (1) to give students the tools needed to apply economic models to policy problems, and (2) to provide students a sense of the critical issues of economic and policy analysis. The structure of this module is a little different. Each week, we have a reflection on a current policy paper discussing an emerging topic in the analysis. The prompts for these reflections include new questions: including how would you use this type of analysis? Do you think a city government would need this information? Module Five reflections are designed to think about the application of the policy in addition to the analysis methodology.



## Week 12 | Applied Economics: Topic Week #1- Public Economics

This week, we jump into how the “general welfare” is considered within economics and policy. We start with public goods, which are nonexcludable and nonrival in consumption. In most cases, a public good must be supplied by the government. The marginal social benefit of a public good is equal to the individual marginal benefits to each consumer. The efficient quantity of a public good is the quantity at which marginal social benefit equals the marginal cost of providing the good. We then consider the equity-versus-efficiency debate arises from the fact that an extensive welfare state requires high taxes on the well-off, which can diminish society’s wealth by reducing their incentive to work and make risky investments. Means-testing of benefits can reduce the cost of the welfare state but must be carefully designed to avoid reducing the incentive to work by the poor. Lastly, we read a recent article highlighting how exposure to better neighborhoods improves economic mobility.

### Required Reading

- [Bjorklund-Young, Alanna. “The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment, by R. Chetty, N. Hendren, and L. F. Katz: 2016, American Economic Review, 106\(4\), 855–902.” Journal of School Choice 10, no. 2 \(April 2, 2016\): 276–79.](#)
- Krugman and Wells – Chapter 17: Public Goods and Common-Pool Resources
- Krugman and Wells – Chapter 18: The Economics of the Welfare State
- [Varian, Hal R.. 2016. “How to Build an Economic Model in Your Spare Time”. \*The American Economist\* 61 \(1\). \*The American Economist\*: 81–90. doi:10.1177/0569434515627089.](#)
- [Gruber, Jonathan. \*Public finance and public policy\*. Macmillan, 2005. Chapter 7 \(Please see the attached link\) This is a helpful chapter that covers the Core topic\).](#)

### Supplemental Reading

- [Estrada, M. A., R. \(2011\). Policy modeling: Definition, classification, and evaluation. \*Journal of Policy Modeling\*, 33\(4\), 523-536.](#)
- [Akerlof, George A. "The market for "lemons": Quality uncertainty and the market mechanism." In \*Uncertainty in economics\*, pp. 235-251. Academic Press, 1978.](#)
- [Tiebout, Charles M. "A pure theory of local expenditures." \*Journal of political economy\* 64, no. 5 \(1956\): 416-424.](#)

LEARNING ACTIVITY	DUE
Week 12 Quant Lab (Optional)	Day 4 at TBD
Week 12 Quant Brief	Day 5 at <u>11:55 PM TT</u>
Week 12 Quiz 02: CBA and Macroeconomics	Open: Day 3 at 12:01 AM Close: Day 6 at 11:55 PM
Week 12 EA Model and Variable Selection	Day 7 at <u>11:55 PM TT</u>
Week 12 Live Session	Day 7 at <u>6:00 PM TT</u>

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## Week 13 | Applied Economics: Topic Week #2 – Behavioral Economics

Based on a concept called “nudge,” the behavioral economic field uses choice architecture to help improve rational decision-making. Behavioral economics is concerned with the limits of rationality. Behavioral models typically integrate insights from psychology, neuroscience, and microeconomic theory into games. The study of behavioral economics includes how market decisions are made and the mechanisms that drive public choice.

### Required Reading

- [“Rise of Behavioral Economics” \(2017\). Harvard Business Review](#)
- [Dudley, S. E., & Xie, Z. \(2020\). Designing a Choice Architecture for Regulators. Public Administration Review, 80\(1\), 151-156](#)
- Krugman and Wells - Chapter 20: Uncertainty, Risk, and Private Information.
- Yoe, Charles. Primer on risk analysis: decision making under uncertainty. CRC Press, 2019. Ch. 1, Ch. 2, and Ch. 7. (in the instructional materials)

### Supplemental Reading

- [Brown, Reva. “Consideration of the Origin of Herbert Simon’s Theory of ‘Satisficing’ \(1933-1947\).” Management Decision 42, no. 10 \(December 2004\): 1240–56.](#)
- [Jolls, C., Sunstein, C. R., & Thaler, R. \(1998\). A behavioral approach to law and economics. Stanford law review, 1471-1550.](#)
- [Nudge: A Concise Guide](#)

LEARNING ACTIVITY	DUE
<b>Week 13</b> Quant Lab ( <b>Optional</b> )	<b>Day 4</b> at TBD
<b>Week 13</b> Homework	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 13</b> Topic Reflection	<b>Day 6</b> at <u>11:55 PM TT</u>
<b>Week 13</b> Live Session	<b>Day 7</b> at <u>6:00 PM TT</u>

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## Week 14 | Applied Economics: Topic Week #3 – Environmental Economics

This week's applied focus is on Environmental Economics. Environmental and natural resource economics is applying the principles of economics to the study of how ecological and natural resources are developed and managed. Governments often deal with pollution by imposing environmental standards, a method, economists argue, that is usually an inefficient way to reduce pollution. Two efficient (cost-minimizing) methods for reducing pollution are emissions taxes, Pigouvian tax, and tradable emissions permits. The optimal Pigouvian tax on pollution is equal to its marginal social cost at the socially optimal pollution level. These methods also provide incentives for the creation and adoption of production technologies that cause less pollution. When a good or activity yields external benefits or positive externalities, such as technology spillovers, an optimal Pigouvian subsidy to producers moves the market to the socially optimal production quantity. This week, we focus on when the market gets it wrong and how to deal with environmental factors.

### Required Reading

- Krugman and Wells – Chapter 16: Externalities.
- Carley, Sanya, Nikolaos Zirogiannis, Saba Siddiki, Denvil Duncan, and John D. Graham. ["Overcoming the Shortcomings of U.S. Plug-in Electric Vehicle Policies." Renewable and Sustainable Energy Reviews 113 \(October 2019\): 109291.](#)
- Heal, G. ["Climate Economics: A Meta-Review and Some Suggestions for Future Research." Review of Environmental Economics and Policy 3, no. 1 \(September 24, 2008\): 4–21.](#)
- Gruber, Jonathan. *Public finance and public policy*. Macmillan, 2005. Chapter 5 (Please see the attached link) This is a helpful chapter that covers the Core topic).
- Gruber, Jonathan. *Public finance and public policy*. Macmillan, 2005. Chapter 6 (Please see the attached link) This is a helpful chapter that covers the Core topic).

### Supplemental Reading

- Coase, Ronald H. "The Problem of Social Cost." In *Classic Papers in Natural Resource Economics*, edited by Chennai Gopalakrishnan, 87–137. London: Palgrave Macmillan UK, 1960. Only the introduction.

LEARNING ACTIVITY	DUE
Week 14 EA Penultimate Draft	Day 3 at 11:55 PM TT
Week 14 Quant Lab (Optional)	Day 4 at TBD
Week 14 Quiz 03: Applied Economics	Open: Day 3 at 12:01 AM Close: Day 6 at 11:55 PM
Week 14 Quant Brief	Day 5 at 11:55 PM TT
Week 14 Live Session	Day 7 at 6:00 PM TT

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## Week 15 | Economics as a Global System – International Political Economy and Trade

The economy is a social system grounded in the idea of mutually beneficial trade. In this last week, we review the economy as a system. From a workload standpoint, this week should be focused on finalizing your economic analysis. We spend most of this week focused on addressing the underlying assumptions of trade, innovation, and the interconnectedness of the economy. We often refer to this as “globalization” which was a term first coined in the early 1990s. Some have argued that “trade” is “economic evolution.” We consider the effect of innovation on the economic system. We brought in the scope of our three economic models to include international actors, international monetary policy, and nonstate actors such as NGOs and multinational corporation’s influence economic activity across the globe. For example, what happens to American rice farmers when there’s a drought in Indonesia? How do European banks gain from American stimulus? How do cheap Chinese goods fuel consumption globally and transform the balance of power? This week, we consider how technology, trade, and innovation change the models.

### Required Reading

- [The Fourth Industrial Revolution: what it means, how to respond: Schwab \(2016\)](#)
- [Contractor, F.J., 2021. The world economy will need even more globalization in the post-pandemic 2021 decade. Journal of International Business Studies.. doi:10.1057/s41267-020-00394-y](#)
- [Gruber, Jonathan. \*Public finance and public policy\*. Macmillan, 2005. Chapter 9 \(Please see the attached link\) This is a helpful chapter that covers the Core topic\).](#)
- [INTERNATIONAL POLITICAL ECONOMY: THEORIES AND CASE STUDIES \(Read-only section 1: pages 15-26\)](#)

LEARNING ACTIVITY	DUE
Week 15 Quant Lab (Optional)	Day 4 at TBD
Week 15 EA Final Draft	Day 7 at 11:55 PM TT
Week 15 Live Session	Day 7 at 6:00 PM TT

## Statement on Academic Conduct and Support Systems

### Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, comprises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

### Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](https://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services

(though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call  
Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086  
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298  
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776  
OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411  
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101  
Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call  
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call  
Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)  
A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)  
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.