PROBLEM SET #2 (12 points possible; max you can earn for all 3 PS = 30 points)
DUE: via gradescope, 11:59.00 p.m. on Friday March 12

- PS submitted between the due date/time & 11:59.00 pm on Monday March 15 incur 5 point penalty
- No submission after Monday March 15 at 11:59 pm
- Your submitted work must be your own.
- Problem sets that are identical (in whole or in part) to another student's problem set will receive a zero.
- Problem sets with no honor pledge (item #1) will receive a zero.
- Problem sets with a copy/paste rather than handwritten honor pledge (item #1) will receive a zero.
- For each question, read the *directions*. They will tell you whether you are entering information directly into gradescope, uploading, or a combination.
- For the uploads, you can hand write or type (exception: #1 must be handwritten).

Question 1 (If not completed, then you get a 0 on the PS)
Write out and sign the honor pledge. Photo or PDF it. Upload the file to question #1 in gradescope. You shouldn't need more than about ½ page for this answer.

In your own handwriting, write the words in the pledge below. Using a pen-enabled tablet or writing on a piece of paper is fine. But the entire pledge must be <u>hand-written</u> and not typed.

Directly under the pledge, provide the names of the people in your study group. If you didn't study with anyone, write "none."

Sign at the bottom.

> Pledge: Studying with others in the class is ok but turning in answers or essays that someone else wrote is not ok. On my honor, the answers & essays I provide in this PS were written by me with my words. I am not copying anyone else's answer, copying from any printed or internet source, nor providing materials for others to copy. The consequence of violating this pledge is a 0 on this assignment and referral to the Office of Student Conduct.
>
> The members of my study group are: _____
>
> Signed (your signature):

Question 2 (2 points)
Type your answer into the box in gradescope. If this were on paper, we would give you about ½ page for this answer.

Suppose the marginal propensity to consume (mpc) depends upon the source of the change in disposable income. Let's use subscripts to indicate which mpc is which.

- The mpc if the change in Y^D is due to a change in Y is mpc_Y
- The mpc if the change in Y^D is due to a change in TR is mpc_{TR}
- The mpc if the change in Y^D is due to a change in TA is mpc_{TA}

Suppose $mpc_{TR} > mpc_Y > mpc_{TA}$.

If the goal of policy is to increase consumption by as much as possible, how should the government prioritize spending on installing proper ventilation in government buildings versus cutting personal income taxes versus providing additional grants to college students? Discuss.

Department of Economics
University of California, Berkeley
Problem Set #2

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Professor Olney
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Question 3 (1 point)

Type your answer into the box in gradescope. If this were on paper, we would give you about 1/3 page for this answer.

Suppose the investment function is $I = I_0 + I_Y Y - I_r r$.

Suppose businesses interpret a rise in real GDP as indicating their sales will rise in future years. If real GDP rises, will the resulting increase in expected revenue cause I_0 to increase? Explain.

Question 4 (2 points)

Type your answers into the box in gradescope. If this were on paper, we would give you about ½ page for each part.

A.   Why is the real exchange rate part of the equation for GX but not part of the equation for IM?

B.   When things become uncertain in the world (such as when Covid began), many wealth holders around the globe move their wealth into U.S. financial assets, believing U.S. companies and U.S. government agencies that borrow to be a safer financial bet than companies and government agencies in other countries. What would be the effect on the real exchange rate of this fear-driven move? What would be the effect on gross exports? Explain.

Question 5 (4 points)

For this question, you'll type some equations and numeric answers into the boxes in gradescope. Your work for parts A and B should be written or typed on a separate sheet/in a separate file and then uploaded. On your work, clearly indicate which is part (a) and which is part (b). We think you only need 1 page for your work, but if it rolls to a second page that's ok..

Suppose the economy can be defined by the following (all units are billions of $ per year)

$C = 1,000 + 0.8Y^D$	TR = 500 + 0.1Y	GX = 4,000 - 20,000r
TA = 500 + 0.3Y	I = 2,000 - 10,000r	IM = 1,000 + 0.24Y
	G = 3,000	potential output Y* = 14,000

A.   Using the Y=AD approach, solve for the equilibrium value of the real interest rate in the economy. In gradescope, you'll type in your starting equation, and your result. On your uploaded work, you'll show all the steps.

B.   Now, use those same equations to derive equations for saving and for investment. Use those saving and investment equations to solve for the equilibrium value of the real interest rate. In gradescope, you'll type in the equations for household saving, government saving, and foreign saving, and your result. On your uploaded work, you'll show all the steps.

C.   Draw and upload two graphs that show the determination of the equilibrium real interest rate. In one graph, use the AD and Y equations. In the second graph, use the S and I equations.

Question 6: The Essay (3 points total)

Consider this argument: "An increase in the government's budget deficit will cause interest rates to rise, lowering investment spending."

Follow steps 1, 2*, 3, and 4 of "The Olney Method" (the 5-step method Prof. Olney presented on 1/21 for critiquing arguments) and write a 1-page essay in which you critique the argument above. Your essay should reflect your understanding of how to critique an argument and your understanding of the long-run flexible-price model (Chapter 7).

*You need not identify all assumptions in the argument, but do need to at a minimum identify the assumption that you change in step 3.

Remember that in economics (as in life), the conclusions you come to will depend in part on the assumptions you make. Don't invoke wildly unrealistic assumptions; the assumptions you make should be reasonable.

Your essay must be your own work that was developed for this course. To present anyone else's work as your own is theft of intellectual property: plagiarism. While it is unlikely that you will need to cite sources for your essay, if you do then you must use quote marks " " around any words you quote exactly from any source (and then provide the source for the quote). Also, if you get ideas from anyone else, or if you paraphrase someone else, you must again give them credit for their ideas. To do otherwise is plagiarism: the theft of intellectual property, a violation of the Code of Student Conduct and one of the worst offenses in academe. If you have questions about whether or not you've properly cited your sources, please talk with your GSI or Prof. Olney.

"Your own work" also means that essays crafted jointly on piazza or otherwise are not acceptable. That too is plagiarism.

And, self-plagiarism is plagiarism. You cannot submit a paper that you wrote for another class.

Specifications: 400 words maximum, one page maximum. ("Works Cited" list can be on a second page and does not count against the 400 word maximum.) Double space. 10-11-12 pt font. 1" margins on all sides. Your name, date, and the word count in the top right corner.

Submission: Essay must be submitted twice. [1] Submit the essay electronically via bCourses, assignments tab. Acceptable formats on bCourses: doc, docx, pdf. bCourses will check your paper using TurnItIn to ensure you have not plagiarized from published sources or previously submitted papers written by you or others. [2] Cut and paste the essay into question #6 in gradescope.

Grading: 0 - 1 - 2 - 3 points, taking into account content, following specifications, and writing quality. No submission on bCourses results in a 0 on the essay.