

Individual Assessment for ECON& 201 - Fall 2016 ★

Assessment name

Climate Change Economics and Discount Rates

Created by




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December 31, 2016

Outcome to assess

Each number of the class will be able to identify economic issues, look at evidence, evaluate it, and draw meaningful conclusions.


Briefly describe the teaching methods (e.g. lessons, activities, etc.) that you used to help students learn the course outcome.

 View 1 related teaching method

Students participated in a presentation date reverse auction to illustrate how effort further in the future is discounted more compared to near term or present effort. Following the reverse auction, students discussed the concept of discounting in a structured small-group exercise.

Students read an article about behavioral economics findings and how they relate to climate change policy debates, then participated in a structured small-group discussion about economic impacts of climate change based on a set of data tables and graphs.

Briefly describe the assessment method (e.g. quiz, test, paper, survey, practicum, etc.) you used to measure whether the student met the outcome, including your established level of student proficiency.

 View 3 related assessment methods

Students completed a 15-minute short answer assignment that asked them to do the following:
Write a thoughtful response to the following prompt that uses what we have been learning in class:

Public opinion surveys in the US show that some people support taking major steps to cut back on carbon emissions as a way to fight climate change, but others oppose taking those steps. If both sides agree that the additional costs to the US economy of reducing climate change 40-60 years from now will be about \$250 billion per year starting today, why could they disagree on whether it is worth it to take on those costs now?

Include the following elements in your response:

- Briefly explain at least two major difficulties, related to economics in some way, of determining how we should respond to climate change.
- Use some hypothetical numbers and the idea of discount rates as part of your answer to the question above.
- Refer to material from the text and from class discussions as appropriate.

The scoring rubric was set as

5- two major difficulties of determining how to respond to climate change related to economics, strong connection to prompt scenario, hypothetical numbers and discount rates correctly interpreted, includes some reference to class material

4- two major difficulties, hypothetical numbers and discount rates correctly interpreted, includes some reference to class material, acceptable connection to prompt scenario

3- one major difficulty and hypothetical numbers and discount rates correctly interpreted or two major difficulties with minor errors in discount rate interpretation, some reference to class material

2- two major difficulties and weak or no discount rate interpretation

1- one major difficulty and weak or no discount rate interpretation

0- answer does not address prompt

where students scoring 3 would be viewed as having met the learning objective as applied to this content area.

The results tally for this Fall 2016 morning section of Economics 201 – Microeconomics showed the need for additional instructional focus on this learning objective as it applies to climate change and discount rates:

score	count
0	1
1	3
2	13
3	6
4	2
5	0

How many students met the outcome? How many did not?

Sections to assess - section history

Outcome Met

Not Met

Percent Met


1206 DAILY 9:00a Face-to-Face

8

17

32

Reflect on the effectiveness of your teaching and/or assessment methods. What worked and what did not?



 View 2 past reflections

Fall 2016 was the first time that I have focused on discount rates as they apply to externalities and the economics of climate change. The economics of climate change is an important economic issue and it relates directly to the College's Core Theme 4 – Sustainability.

The scoring tally showed that 17/25 students did not end up demonstrating a clear understanding of discount rates and their application to the economics of climate change. 13 of those 17 had an adequate understanding of economic issues related to climate change, but often confused discount rates with rates of return or simply did not address discount rates in their responses. The structured exercises related to this assessment may have been too quickly discussed for many of the students who had not seen this material before.

Relatively few of the student responses emphasized the comparison of costs and benefits that underlies a lot of economic analysis. It may be that students need some more practice with that analytical framework as applied to different scenarios.

The assessment tool appears to be OK. I tried to give students a lot of structure to guide their responses. I expect to use it again, with possible minor edits to emphasize and clarify expectations. The 15-minute time limit may have been too short for some students. And some student responses were less developed than I had hoped.

Did you change or do you plan to change your teaching methods and/or assessment methods in response to the data you've collected? If yes, please describe these changes.   View 2 changes from past assessments

Yes No

I will be teaching Economics 201 in Winter 2017 and I plan to put additional instructional time into the activities related to the economics of climate change. The content of the structured small-group discussions appears to be sufficiently detailed to provide a foundation for some additional subsequent full-class discussion to draw out important points and explain elements of the economic analysis more fully.

The difference between discount rates and rates of return will be one of the items for discussion.

I also see the need to provide students with additional practice in identifying costs and benefits related to economic explanations or discussions.

Viewable by 

Campus community

Submitted for review

December 31, 2016

Reviewed

February 3, 2017 by kstanley



“This assessment will be featured as an example of best practices at Highline” — kstanley February 3, 2017