

ECON 331: Environmental Economics

Final Project Guidelines

Overview

The goal of this final project is both to help your understanding of environmental economics but also to help your classmates' understanding of environmental economics through the use of a game your group will come up with based on an article documenting a real-world environmental policy. For this project you will work with 2-3 other students of your choosing to create a game we can play in class to mimic the context and policy intervention described in either i)an article or 2)an environmental issue you care about a solution you propose to that environmental problem. If you choose 2) you must find a main article that pertains to your issue and submit it to me for approval. Only 1 group may choose a particular article or topic. **All submissions should be submitted as a .pdf or .doc/.docx through Brightspace!** The parts of the project are as follows:

1. Choosing the article for your group. **Due: 9/8**
2. A 10-minute max presentation about your article and the game you plan to use. **Due: 11/24**
3. A written paper to be handed in on the last day of class. The written paper should include the following sections:
 - Abstract. **Due 12/5**
 - Article Summary. **Due 9/29**
 - Game Description/Instructions. **Due 10/20**
 - Theoretical Predictions. **Due 11/7**
 - Reflection. **Due 12/5**
 - References. **Due 12/5**
4. Running the game for your classmates (if chosen)! **The 2 groups chosen will receive up to an extra 10% on their lowest exam grade based on how well the games go on the final exam day!**

Not all due dates are hard deadlines. The hard deadlines are as follows:

- Choosing the article/environmental issue – So I can assign groups an article in a timely manner.
- Presentation – So no group gains an advantage by going on Day 2 vs Day 1.
- Written Paper – So I have enough time to grade them before my grades are due.
 - Game Description/Instructions.
 - Theoretical Predictions.
 - Reflection.

For the other deadlines if you are not ready to hand-in a particular item on the due-date you may hand them until I sit down to grade the particular part (about 2-3 days after the deadline). These deadlines are mainly to help make sure you make steady progress on the project throughout the semester. For completeness, here are the parts of the assignment with looser deadlines.

- Abstract.
- Article Summary.
- Game Description/Instructions.

Choosing Your Group/Article/Issue (Due: 9/8)

You can choose your own group. There must not be more than 4 students in a single group. I will post several articles that lend themselves to creating a game and are about environmental economics on Brightspace for groups to choose from. You may also find and select a different issue if there is a particular topic of interest to your group, I just need to take a look and approve the main article you plan to use before you move forward.

On the due date, 1 person from each group should submit on Brightspace a Word Doc or PDF with the following:

1. The names of the group members in the group (including the person submitting).
2. At least 3 articles the group would be interested in using ranked in order of preference. For example:
 - 1. This is our most preferred article.

- 2. This is our second most preferred article.
- 3. This is our third most preferred article.

I will open each submission in a random order, and use this preference list to assign articles if multiple groups want to use the same article.

The Written Paper (Due: 12/5)

This paper should be a collaborative effort between group members. Most of the grade will be on good-faith effort, and so there is no need to make 1 person do the majority of the work! Parts of this paper will be graded collectively, while other portions will be graded based on individual submissions. **Each group member will have to submit their own written paper.** In these next few sections I will specify which portions of the paper each group member is allowed to copy/paste across submissions.

Abstract (1 Per Group Member)

You should describe the article, the game, and the concept from class you will illustrate in roughly a paragraph.

Summary of the Article (1 Per Group Member, Due: 9/29)

Each group member should be deeply familiar with the material in the article since you are using the article to create your game. While the information in the article is the same, each group member in their own words should summarize the information in the article. The summary should be approximately 2-pages (double-spaced, 12pt font) and contain the following subsections:

1. A brief (paragraph) description about the author including their background.
2. What is the central problem being discussed in the article/your chosen issue?
3. What solution does the article discuss in relation to this problem?
4. How effective was the solution/would this solution be? Why or why not was it/would be effective?
5. Do you think this solution would also work in other contexts? Why or why not?
6. This section should be about 2 pages.

Game Instructions(1 Per Group, Due: 10/20)

The instructions for the game should be easy to understand by your classmates and include the following parts. **You should try to limit these instructions to 2 pages or less!:**

1. An overview of the game and motivation: What type of game is this?
2. What are the different roles players can take within the game? What is the setup of each round within the game? Are there multiple rounds for the pre-treatment and post-treatment rounds?
3. What are the rules of the game? What are the player's goals in the game?
4. How does each round work? What is the procedure for the game between the start and each of the round?
5. A summary of the information in the instructions for ease of reference for your classmates.
6. This section should be about 2 pages in length.

Theoretical Predictions(1 Per Group, Due: 11/7)

The goal of this section is for you as a group to demonstrate deep understanding of the economic concepts from your article and how it applies to your game! This section should include the following:

1. The expected results if you were to play this game with theoretical purely rational economic agents.
2. At least 2 concepts from economic theory that support your predictions (Cite papers that discuss this theory).
3. How do you expect your results to differ if you were to play this game with classmates rather than that pure theoretical results?
4. At least 2 concepts from behavioral economics that support your expectations (Cite papers).
5. This section should be about 2 pages in length.

Reflection(1 Per Group Member)

The goal of this section is to both reflect on the project overall and how it affected your learning of environmental economics. This section should include the following information:

1. Describe your overall feelings about this project-based and group-based assignment. Did it help your understanding? Would you rather have done this individually?
2. How did this project affect your learning versus having everyone read each article and potentially give a verbal presentation of the information I asked for in the summary section of the written paper?
3. How did you feel the group work went for your particular group?
4. What was your contribution to the group?
5. Is there anything you think I could change about the project to make it better for future classes?
6. This section should be 2-3 pages in length, but feel free to write more!

References(1 Per Group)

This section should include all references used for the summary, including how you found information on the author, and any references for your theoretical predictions! You may use any consistent citation style you would like!

The 10-Minute Pitch Presentation (1 Per Group, Due: 11/24)

Each group will pitch their game to the class during the last 4 class-periods. I will determine the presentation slot for each group randomly, and the presentations are due **before** the first group presents so that one group does not have an advantage by presenting later than another. The presentations will be posted on Brightspace for all students to see. The presentation can be on Powerpoint or any other slide deck, but should be submitted as a .pdf file. The presentation should include:

- The article your group picked/issue your group picked.
- A brief summary of the environmental issue.
- The solution discussed in the article.
- A brief overview of the game you plan to use to simulate this article.
- Your theoretical predictions if the game were to be played with pure economic agents.

After all groups have presented, we as a class will vote anonymously. The top 2 groups will be chosen and during the final exam period the 2 chosen groups will run their games for the class!