

Environmental Policy Field Exam
August 1-3, 2017

Exam Administration

The exam may be taken in the venue of your choice. Kelli Jacobs will e-mail the exam to you Tuesday, August 1 at 9:00 am. Your answers must be returned via an email attachment to Kelli Jacobs by 5:00 PM on Thursday, August 3. **Please submit your answers to each question in a separate document.**

Instructions

- Your exam and responses should remain anonymous, identified only by a student number that Kelli will provide.
- Answer each of the first two questions below, and then **either** the Environmental Finance Question or the Energy Policy question. Your answers must be your own work. Show all calculations.
- Each question will be equally weighted in the evaluation.
- Answers should be carefully composed for clarity and brevity. Please refer to the word counts specified with each question.
- You can compose your answers on a laptop or computer of your choice. You can refer to books, articles, and reports during the course of the exam (electronic or hardcopy).
- You may also refer to electronic note files/or a composed annotated bibliography.
- Do not cross-reference your answers (i.e., do not explicitly reference your answer in one question in an answer to another question).
- Do not copy and paste text from previously composed answers.
- Within your answers, you may include parenthetical citations (e.g., Coase 1960), and then turn in a complete list of citations (e.g., Coase, R. 1960. The problem of social cost. *Journal of Law and Economics* 3: 1-44) by email to Kelli by Friday, August 4 by 5:00 PM.
- Be sure to provide citations for all major concepts and data. Where you are using other author's phrases or excerpts from their work, be sure to place the borrowed material in quotes with an appropriate citation.

Question 1.**Please answer Parts A and B.****Word limit for each Part of the Question: 2,500 words.**

Part A. One of the driving forces behind environmental policy is a recognition that markets do not always efficiently allocate resources, including investments in environmental quality. This would seem to fly in the face of the First Fundamental Theorem of Welfare Economics, which suggests that markets will allocate resources to their highest valued use.

- (1) Drawing on literature from your studies, briefly explain how we should understand this apparent conflict in conclusions?
- (2) How can your conclusions from (1) help us understand the role that different policy instruments play in practice?

Part B. The Clean Air Act Amendments of 1990 appeared to usher in a new era for incentive-based instruments (alternatively known as market-based instruments, economic instruments and price-based instruments). There was extensive discussion suggesting that this incentive-based approach could be beneficially employed to address a broad array of environmental applications. In practice, however, the extent to which the price-based approach has been used is more limited than the initial enthusiasm suggested. Drawing on both the literature and your own understanding of policy instrument choice, design, and implementation, discuss possible reasons for the somewhat limited deployment of incentive-based instruments. While climate policy has been a high profile environmental issue over the past 20 years, in developing your discussion, consider a broad range of applications. (You are welcome, though not required, to draw on examples from natural resource management as well as the familiar environmental applications.)

Question 2.

Please answer all parts of the question.

Word limit: 5,000 words.

Over the past six months, EPA Administrator Scott Pruitt has repeatedly emphasized the importance of “cooperative federalism,” which in practice means empowering state governments with more authority and responsibility for environmental protection. What guidance can social science offer Administrator Pruitt on whether this form of cooperative federalism is a good idea? In answering this question, be sure to discuss the merits of the arguments for and against decentralized control of environmental policy.

A complete answer must 1) analyze both the most prominent theoretical arguments and available empirical evidence on each side of the “decentralization” debate and 2) consider the arguments in terms of economic efficiency, social equity (i.e., environmental justice), and environmental effectiveness.

Your answer should be deeply grounded in the scholarly literatures (e.g., economics, political science), and **not** simply rely upon your intuition and inductive logic.

Environmental Finance Question

Please answer all parts of the question.

Word limit: 5,000 words.

One of the critical questions in environmental taxation (and particularly carbon taxation) is what to do with the revenue. Suppose a government has decided to address a specific environmental issue with an environmental tax.

- 1) Based on your reading of both the recent press and the academic literature, what are the primary options (name at least three) for use of the revenues from environmental taxes?
- 2) What are the implications of revenue use for efficiency and efficacy? What option(s) would a social welfare maximizing decision-maker recommend?
- 3) What factors are likely to influence the government's decision on how to use the revenue?

Energy Policy Question

Please answer all parts of the question.

Word limit: 5,000 words.

Over the last several decades, U.S. energy markets have experienced significant transformation. 1) What are some of the major indicators of this transformation? 2) What are the most significant factors or drivers of change—policies and other factors—that have led to the developments that mark this transformation? And, 3) what are some of the major challenges that will be necessary to confront as this transformation continues to evolve?

You may answer these questions in any order that you see fit.

In your answer, aim for a balance between being detailed and more comprehensive. Make sure to support and justify your arguments. Provide plenty of evidence, with appropriate citations to the academic literature. Please do not, as an example, simply list policies that are in place but, rather, it is important that you think critically about the trends that may have led to such policies or other developments, and explain them in sufficient detail.