

Guided Writing in Content-Rich Disciplinary Electives
Blended Learning in the Liberal Arts Conference
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Students mastering the analytical tools of a discipline should be able to write a short essay for a lay audience drawing on that analysis. Few are able to do so. We need to find ways to address that deficit without neglecting the other learning goals of our courses.

For example, few students emerge from introductory economics with any experience integrating quantitative or diagrammatic analysis into a persuasive essay; and many enter subsequent field electives with little confidence in their ability to handle the basics of college-level writing. Any improvement in student writing is a welcome addition to the a major curriculum. But, I've grown convinced that targeting an audience of non-economists for student essays is particularly beneficial in helping students move from mimicry to mastery of the economic way of thinking.

Novice writers in economics need substantial support in identifying an appropriate topic, applying the appropriate analytical tools, developing a coherent argument, adapting that argument to persuade a target audience and revising a draft in response to critical assessment. Providing that support burdens instructors with losing time for topical coverage and the demands of evaluating student writing with care.

My strategy is to build into student writing assignments a series of interventions at stages in the process where students easily can go astray:

- Choosing the paper topic: Grading a paper whose topic fails to address the assignment or is beyond the scope of the analytical tools covered in the course serves little purpose.
- Underlying analytics: Does the student understand the analysis explaining the observed outcome?
- Drafting: Is the student thinking through all elements needed to persuade the target audience?
- Revision: Students struggle to articulate strengths and weaknesses in what they read (especially their own drafts), find it challenging to separate wheat from chaff in the critical assessment of others, but need both skills to move from first to final draft.
- Final draft: Students tend to internalize the grade and ignore the comments. We need to find ways to collaborate with our students in celebrating successes and identifying growth areas to target in future writing.

As much as possible, I codify steps of the writing process into rubrics and checklists that students can use with one another to allow me to make the most effective use of my engagement in the process.

I've implemented this strategy in two lower level electives -- Environmental Economics and Taming the Modern Corporation (an introduction to industrial organization) -- with writing assignments due at the end of the first and final thirds of the semester; and a mastering the logic of peer reviews task in the middle. My classes typically have 15-25 students; but the strategy could be implemented in larger classes with TA support or by staggering deadlines. The goal of the handouts appended below is to guide participants through each step in the process and make clear how I use rubrics and peer reviews to limit the amount of time I need to spend with each student's work product.

Consider a 14-week semester course, with two 75-minute classes per week. By the start of the third week I will have reviewed and reinforced the theory learned in introductory economics to the point of understanding the market failures typically responsible for the undesirable outcomes that are the focus of the course. Students are ready to tackle a first paper (due at the end of the Week 6) in which they pick an undesirable economic outcome relevant to the course and explain why it is occurring or has occurred using the theories of market failures we have discussed. They start with

...identifying a **paper topic** (see *First Paper: First Steps*) due Week 3, Day 6 or 7; I glance through the submissions and email my approval, concerns and comments the next day.

Students bring with them to the first class of Week 4 a sheet

...summarizing the **analytics** of the market failure behind the outcome.

I devote half of class to peer-peer discussion of the analytics and check the results by glancing at their revised sheets to return at the end of the next class.

Now that students have a sense of the nature of the problem and its cause, I turn them to thinking about how to explain this to a lay audience. The purpose is to move them beyond simple mimicry of what they have studied in class to demonstrating an ability to think through the tools they are using. After years of dissatisfaction with disorganized, unfocused first drafts, I hit upon the strategy of having students answer a series of questions about what needs to be included in an effective draft. Hence, my *First Paper: Drafting* assignment requires students to produce a set of

...**pre-draft notes** they submit during Week 5 (revised after spending half of the first class that week discussing their notes with peers).

Given the structured nature of the assignment, it does not take me long to assess each set of notes, providing feedback to the drafting process.

The first draft is due at the end of Week 5. I've concluded that closely reading these drafts is worth the largest single investment of the time I allocate each semester to facilitating student writing. I allow myself three days to provide a careful review, trying to make my approach to commenting be a model for peer reviews later in the course. Students have the remainder of Week 6 to revise the draft. I give much less attention to this final draft, focusing on

- the degree to which students incorporated my comments on the first draft;
- affirming strengths and
- identifying the one or two areas of weakness students should address in subsequent papers.

For students to benefit from these comments, I need to assign at least one subsequent paper in the course. The drafting process for that paper follows the same structure as that for the first (Week 11-Week 14), except that I ask students to review one another's first draft. With that in mind, I run a peer review exercise (taking half of the first class of Week 9) and require students to

...submit a **peer review** of a sample paper on the last day of Week 9.

I return my assessment three days later.

At this point, most of the packet of tasks and assessments for Paper 2 should seem familiar to those who have read this far:

- Paper topic (due after the first class of Week 11)
- Paper Analytics and pre-draft notes (peer discussion takes up half of the first class of Week 12; I review both the next day)
- First Draft (due last day of Week 12)
- Final draft (due middle of Week 14, the last week of the semester)

The longer gap between first and final drafts accounts for the key difference from the Paper 1 assignment. At the first draft deadline, I allocate each paper to two peer reviewers (see *Second Paper: The Peer Reviews*). Students have three days to produce their two reviews; and a bit over a week to incorporate those reviews into the process of producing a final draft.

Since I am not providing detailed comments on the first draft and my assessments of the final draft and peer reviews are more summative than formative, the most time-consuming element of this assignment involves managing the logistics of the exchange of drafts and reviews among students. This has gotten easier each year as I ride the learning curve of mastering Moodle's (our course management system) Workshop activity.

I'd welcome suggestions for improving the strategy. Over the years, I've tried and rejected a number of different pedagogical approaches. This one has proved a keeper: I see distinct improvement in the quality of student writing from Paper 1 to Paper 2. The writing process appears to enhance student understanding of the analytical tools used to craft paper conclusions. I sacrifice no more than the equivalent to two full class meetings (out of 28). And I've shifted my focus to the components of writing assignments where my intervention can prove most effective.

Assignment Elements

Paper 1

- First Steps/Paper Topic
- Paper Topic Assessment
- Analytics Assignment
- Analytics Exercise
- Drafting
- Pre-Draft Guidelines
- Pre-Draft Feedback Exercise
- Pre-Draft Assessment
- First Draft Rubric & Assessment
- Final Draft Rubric & Assessment

Peer Review

- Assignment
- Assessment

Paper 2

- Overview
- Paper Topic
- Drafting
- First Draft Rubric
- Peer Review Rubric
- Final Draft Rubric

Econ 234: Environmental Economics

First Paper: First Steps

For the first paper, pick an instance of environmental degradation and explain why it is occurring or has occurred using the theories of market failures we have discussed. The paper will be a success if the reader is convinced that a problem exists, can explain the reason for the problem, and has a sense of why the problem has not been corrected. Your economic analysis (likely based on a diagram or two) will be the foundation of your explanation. But, the reader should not have to master that analysis to understand the source of the problem.

You are best off choosing a case where the harm can be attributed to the actions of a firm, industry, or specific individuals and where the facts of the situation are available in a newspaper article or other verifiable account.

We'll break down the process of producing the final essay into the following components.

- Paper topic -- a specific example of environmental harm
- Analytics – characterizing the market failure -- in class, February 13
- Pre-Draft – how to connect with your audience -- after class, February 20
- First Draft -- February 25
- Reflecting on comments
- Paper Revision -- March 4

I will provide more detail about each as we near its deadline, starting here with the paper topic.

Before you retire Sunday night, February 11, submit through Moodle a single page docx or pdf file. Centered at the top is a title suggesting your topic; underneath that is your name.

Then provide a citation (using APA style--see library citation links) to the primary newspaper article or other source from which you will extract the facts for your first paper.

Follow the citation with a sentence or two explaining why the case you have chosen nicely fits the assignment -- in the sense that your source(s) provides enough information to infer the nature of the harm and the nature of any past or planned efforts to address it.

If you draw on more than one source to fill in the facts you need for your paper, just repeat the pattern of citation and explanation.

It's fine with me for you to discuss your hunt for a topic with other members of the class; but if you do so you should make sure that each of you is choosing a different case for your paper.

Paper Topic Assessment

Assignment elements:

Topic Title		
Citation		
Context		
Overall		

5 - Exceeds Expectations

4 - Proficient

3 - Developing

2 - Weak

0 - Failed to complete

Econ 234: Environmental Economics

First Paper: Analytics

Bring with you to class on February 13, a single sheet of paper with an appropriately labeled graph illustrating the market failure that has resulted in the environmental harm that is the focus of your first paper. The graph should show the deviation between the market and economically efficient level of output in the relevant market and the resulting deadweight loss. This analytics sheet should also contain just enough information about the case to put the graph in context (the “what has happened/is happening” to go along with the “why” that is illustrated by the graph).

We will devote the first half of class to having each student share the analysis within a small group and receive suggestions for how to improve or clarify the analysis. I’ll allow a few minutes for you to make changes after that discussion and ask you to submit the sheet to me before you leave class.

I assume that the graph and accompanying text will be hand drawn (although I’m not forbidding the use of computer software) and recognize that what you produce likely will not be a work of art. Your goal should be to make the document neat enough (even with corrections) to convey the core of your analysis. Recognize that in addition to my reading your document, it must be legible to the members of your group as you share it with them.

Your first concern should be to get the analytics right: That is, the graph should be internally consistent and accurately reflect the market failure you are describing. The graph should be consistent with the facts of the case as you understand them. But, I recognize that you may have to infer or assume some of those facts from the sketchy information available to you from the sources you have consulted.

I will return your submission on the 15th. To meet the remaining paper 1, deadlines **it is essential that you meet this February 13 deadline and that you be available to participate actively in the group discussion.**

Class 7
Paper 1 Analytics Exercise
Working in Pairs

1) Take a moment to collect your thoughts (you might want to review your paper topic submission) and jot down the main points you want to make in summarizing your topic for your partner.

2) Each of you summarizes the topic for your partner.

3) Now exchange the analytics sheet you plan to turn in (with suitable revisions) at the end of class. Each of you will silently work through the following checklist

Is the subject (market, industry, company) of the analysis clear?

Are axes clearly labeled?

Are curves clearly labeled?

Market equilibrium? Economically efficient outcome?

Is deadweight loss clear and correct?

Is any explanatory text clear, helpful and necessary to the goal of the assignment?

In short, would another economist be able to decipher the analysis without help?

What other suggestions do you have for improving the analysis as a resource for when your partner drafts the paper?

4) After each of you has completed the check list, take turns working through it with your partner.

5) Make whatever changes you wish to the sheet, ready to submit for my review (be sure your name is on it). I'll return it with possible comments on Thursday.

Econ 234: Environmental Economics

First Paper: Drafting

For the first paper, pick an instance of environmental degradation and explain why it is occurring or has occurred using the theories of market failures we have discussed. The paper will be a success if the reader is convinced that a problem exists, can explain the reason for the problem, and has a sense of why the problem has not been corrected. Your economic analysis (likely a graph or two) will be the foundation of your explanation. But, the reader should not have to master that analysis to understand the source of the problem.

The paper itself will be directed at a seminar of senior political science majors at another elite liberal arts college. Students in the seminar ultimately will be evaluating whether significant revisions in environmental regulations are needed. As a first step, they have read a non-technical article summarizing the positive features of perfectly competitive markets, stressing the result that incremental social costs are brought into balance with incremental social benefits. Their next step is to choose several of the industries/markets we suggest as examples of cases that differ from the competitive ideal – cases in which that balance fails to hold resulting in environmental harm. You are hoping that they will choose your industry/case for further consideration in the seminar (which might include an evaluation of potential policy responses).

You can assume that some 80% of political science majors will have taken at least one economics class. But, even their recollection of details is likely to be much hazier than yours was at the start of this course. Your readers certainly will have little patience with unexplained economic jargon. They are looking to you to persuade them that environmental harm is occurring in the case you describe and that this harm is the result of violation of one or more of the conditions defining a perfectly competitive market.

Deadlines: Upload your pre-draft notes after class on **Tuesday, February 20**. I will email comments to you the following day. Upload your complete draft to Moodle before you retire on **Sunday, February 25**. I will email comments to you by February 28. Your revised draft is due via Moodle before you retire on **Sunday, March 4**.

Organize your draft as an essay headed by title, author and submission date. No need to footnote your facts, but I will expect to see your source(s) listed at the end using APA style. The rubric I will use to evaluate your essay appears below.

Your next step should be to **bring with you to class on Tuesday, February 20**, a set of pre-draft notes to share with others in the class. Revise those notes and upload to Moodle before you retire that night.

Pre-draft guidelines:

Think of this as a set of notes to yourself focusing on what should be in your paper. It can be in outline form, stream of consciousness, a combination of draft excerpts and points you need to make – anything that will help you pull the first draft together. Flag any aspects of the essay that are causing you problems; points you need help to resolve. Your notes shall address each of the following elements

Context

- Why should/would the reader care about the topic?
- What's your thesis, the key result you want your reader to accept?
- What will you want the reader to do?
- Why should the reader do so?

Organization

- What's the opening? How will you grab your reader's attention?
- What should your title accomplish? Take a first crack at one.
- What tasks do you need to complete to support your thesis?
- How to conclude or otherwise reinforce your core message?

Economics

Summarize the economic argument implied by the analytics sheet you produced. How can you convey the essence of this analysis without just describing the diagram?

Supporting Argument

- What key facts support each of the tasks identified above?
- Do you expect your reader to be predisposed to accept your argument or resistant? If the latter, how will you anticipate and address this?
- Will you address potential counter arguments head-on or rely on the compelling nature of the positives supporting your position?

Exposition

- Are there any phrases or examples you've identified that you definitely want in the paper?
- What tempting economic jargon do you need to avoid.
- Are there any traps or weaknesses from past papers you want to keep in mind as you begin drafting? That is, what have been the major criticisms of previous papers? What has prevented you from achieving excellence on previous papers?

Econ 234: Pre-Draft Feedback Exercise

Pass your pre-draft notes to the student on your left. Read the notes you received, jotting down any points you did not understand and preparing to complete the tasks listed below. At the end of the review period each person in turn will present the pre-draft they read to the full group. During each reader's commentary, the author should make notes about elements needing revision and respond with questions and answers. Other group members chime in to clarify their understanding of the author's intentions and to offer suggestions.

1) As you go through your partner's pre-draft notes, use the guidelines (back of this sheet) as a checklist. Is there any element from the pre-draft guidelines that the author has failed to address? Are there any points in the pre-draft that left you confused?

2) Summarize in your own words the author's thesis – the core takeaway.

3) Has the author given a clear ranking of the most important bits of evidence demonstrating the existence of substantial environmental harm? What do you see as the most important evidence?

4) Can you explain, **based on the author's notes**, the market failure that is the proximate cause of the environmental harm described?

Pre-Draft Assessment

Thesis:

Analytics:

Missing elements:

Evidence:

Assignment elements:

Appropriate thesis statement		
Accurate summary of underlying analytics		
Clearly addresses all pre-draft elements		
Spotlights key supporting evidence		
Overall -- positioned as effective aid to drafting		

5 - Exceeds Expectations

4 - Proficient

3 - Developing

2 - Weak

0 - Failed to complete

Econ 234: Environmental Economics

First Paper: Rubric

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Clear thesis	Easy to identify author's bottom line	Possible to identify main conclusion	Essay on point but thesis ambiguous	Does not fully address assignment
Audience	Establishes direct rapport with target audience	Easy to infer the target audience	Avoids jargon and arguments unlikely to connect with reader	Target audience would struggle to follow argument
Quality of underlying economic analysis	Draws on a compelling economic argument	An appropriate approach is used correctly	Correct but inappropriate analysis; or minor glitches in application	Inappropriate or substantially flawed analysis
Supporting Argument	Seamlessly promotes thesis	No missing steps	Missing or extraneous steps; or faulty organization	Holes or detours in text distract from thesis
Attention to Presentation	A pleasure to read	No more than 1-2 places that tripped up a reader	A modest number of errors in organization, flow, grammar, spelling or citations	Needs substantial attention to organization, flow, grammar, spelling or citations

Paper 1 First Draft Assessment

In my comments here and on the text that follows, I've tried to flag the areas most needing attention. The assessment codes link to the rubric I've repeated on the next page.

Clear thesis		
Audience		
Quality of underlying economic analysis		
Supporting Argument		
Attention to Presentation		
Overall		

Econ 234: Environmental Economics

First Paper: Final Draft

Deadline: Your revised draft is due via Moodle before you retire on **Sunday, March 4**

Review the Paper 1 Drafting assignment and my comments on your first draft.

Your revision strategy will depend on whether the first draft needs minor modifications or a complete rethinking of your expositional strategy. If the latter, then you'll need to get an early start so you can craft at least a first and final draft of the revision in the time available to you.

Reminder of the main goal:

The paper seeks to persuade the senior seminar of political science majors to choose your case for seminar evaluation of instances where deviation from the competitive ideal has led to significant environmental harm. Your reader needs to be able to recognize that a problem exists, explain the reason for the problem and recognize that immediate solutions to the problem are not forthcoming.

Organize your draft as an essay headed by title, author and submission date. No need to footnote your facts, but I will expect to see your source(s) listed at the end using APA style. The rubric I will use to evaluate your final draft appears on the next page.

Econ 234: Environmental Economics

First Paper: Final Draft Rubric

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Clear thesis	Easy to identify author's bottom line	Possible to identify main conclusion	Essay on point but thesis ambiguous	Does not fully address assignment
Audience	Establishes direct rapport with target audience	Easy to infer the target audience	Avoids jargon and arguments unlikely to connect with reader	Target audience would struggle to follow argument
Quality of underlying economic analysis	Draws on a compelling economic argument	An appropriate approach is used correctly	Correct but inappropriate analysis; or minor glitches in application	Inappropriate or substantially flawed analysis
Supporting Argument	Seamlessly promotes thesis	No missing steps	Missing or extraneous steps; or faulty organization	Holes or detours in text distract from thesis
Responsiveness to draft comments	Inspired use of comments to improve paper	Incorporates the most helpful comments	Addresses some comments	Little evidence of attention to comments
Extent of improvement over first draft	Dramatic	Solid	Modest	On balance, a step backward
Attention to Presentation	A pleasure to read	No more than 1-2 places that tripped up a reader	A modest number of errors in organization, flow, grammar, spelling or citations	Needs substantial attention to organization, flow, grammar, spelling or citations

Paper 1 Final Assessment

Since you won't be revising this paper, I focused primarily on evaluating the final product and the nature of your revisions and only secondarily on what additional improvement you might have made.

My assessment of this draft, based on the rubric which follows, is

Clear thesis	
Audience	
Quality of underlying economic analysis	
Supporting Argument	
Responsiveness to draft comments	
Extent of improvement over first draft	
Attention to Presentation	
Overall	

Econ 234: Environmental Economics Peer Review Assignment

Read the anonymous student paper, written in response to the following assignment from an earlier Econ 234:

For the second paper, shift your focus from the source of an environmental harm to a discussion of the obstacles to correcting it. Describe the economically efficient outcome and discuss the major ways existing policies have fallen short in achieving it. (You'll need some discussion of the market failure causing the problem, but this should be less central to your paper.) What next steps do you believe would be most effective in improving the existing outcome? Please choose a different industry than the one you analyzed in your first paper. Your audience consists of students who have completed Econ 234.

Authors had the following assessment rubric in mind:

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Clear thesis	Easy to identify author's bottom line	Possible to identify main conclusion	Essay on point but thesis ambiguous	Does not fully address assignment
Audience	Establishes direct rapport with target audience	Easy to infer the target audience	Argument presented in accessible manner	Target audience would struggle to follow argument
Quality of underlying economic analysis	Draws on a compelling economic argument	An appropriate approach is used correctly	Correct but inappropriate analysis; or minor glitches in application	Inappropriate or substantially flawed analysis
Supporting evidence	Especially effective graph, data, other evidence	Appropriate graph, data or other evidence used correctly	Only a few glitches in evidence presented	Inappropriate or incorrect use of graph, data or other evidence
Supporting Argument	Seamlessly promotes thesis	No missing steps	Missing or extraneous steps; or faulty organization	Holes or detours in text distract from thesis
Attention to Presentation	A pleasure to read	No more than 1-2 places that tripped up a reader	A modest number of errors in organization, flow, grammar, spelling or citations	Needs substantial attention to organization, flow, grammar, spelling or citations

Submit your review of the student paper to Moodle before you retire on Sunday, April 1 (or by 3am Monday). Use whatever technology or technique you prefer. Your review should reflect back to the author your sense of the main thesis and the essay's effectiveness in addressing the needs of its audience. It should identify important strengths and weaknesses and strategies the author might use to improve the paper. It should help the author distinguish between major needs and minor problems. If there are significant expositional issues, point these out, but avoid falling into the trap of editing the paper.

I will evaluate your review using the following peer review rubric:

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Has the reader identified important areas of strength and weakness in the first draft?	Excellent job of highlighting strengths and weaknesses in order of importance	Identified the major strengths and weaknesses	Failed to address flaws in the draft or misdiagnosed problems	Inadequate attention to contents of the first draft
Is reader clear in identifying strategies to help author fix problems	A clear roadmap to revising the paper	Pointed the author in the right direction	Falls short of giving author a sense of how to improve the draft	Lack of attention to how to improve the paper
Reflects thesis and attention to audience	Thoughtful commentary on how paper conveys thesis to the target audience		Reasonable interpretation of thesis and audience	Misses the point or unhelpful commentary on audience
Attention to presentation	Helped avoid distractions without becoming a copy editor	Flagged weaknesses in order of importance	Identified important flaws distract a reader from substance of paper	Failed to flag important flaws distract a reader

Peer Review Assessment

Identifies strengths and weaknesses in the first draft?		
Clearly identifies strategies		
Reflects thesis and attention to audience		
Attention to Presentation		
Overall		

Rubric

Econ 234: Environmental Economics

Second Paper Overview

For the 2nd paper you'll basically follow the same drafting process as for the first with the exception that you'll be receiving (and generating) critiques of your first draft from two students rather than from me. You'll have the following deadlines with more detail to follow:

Choose paper topic: submit by night of April 10

Pre-draft notes and analytics: Bring your notes with you to class on April 17; submit your revised notes before you retire that night.

Submit your first draft before you retire on Sunday, April 22. Log in Monday morning to download the two student papers for which you will write peer reviews.

Submit your two peer reviews before you retire on Wednesday, April 25. Log in Thursday morning to download the two reviews of your first draft.

Submit your final revised draft before you retire on Wednesday, May 2.

Econ 234: Environmental Economics

Second Paper Topic

I hope your experience with the first paper will make the process of drafting the second paper go more smoothly.

For the second paper, shift your focus from the source of an environmental harm to a discussion of the obstacles to correcting it. Describe the economically efficient outcome and discuss the major ways existing policies have fallen short in achieving it. (You'll need some discussion of the market failure causing the problem, but this should be less central to your paper.) What next steps do you believe would be most effective in improving the existing outcome? Please choose a different industry than the one you analyzed in your first paper.

Before you retire Tuesday night, April 10, submit through Moodle a single page docx or pdf file. Centered at the top is a title suggesting your topic; underneath that is your name.

Then provide a citation (using APA style) to the primary newspaper article or other source from which you will extract the facts for your first paper.

Follow the citation with a sentence or two explaining why the case you have chosen nicely fits the assignment -- in the sense that your source(s) provides enough information to infer the nature of the harm and the nature of any past or planned efforts to address it.

If you draw on more than one source to fill in the facts you need for your paper, just repeat the pattern of citation and explanation.

It's fine with me for you to discuss your hunt for a topic with other members of the class; but if you do so you should make sure that each of you is choosing a different case for your paper.

Econ 234: Environmental Economics

Second Paper: Drafting

To move from your topic to a first draft, consider the rubric I will use to evaluate your final draft (next page). Bring with you to class on April 17 (a) a sheet containing a diagram or other representation of the underlying market failure and (b) a draft of your responses to the following pre-draft questions.

Think of this as a set of notes to yourself focusing on what should be in your paper. Flag any aspects of the essay that are causing you problems; points you need help to resolve. What you bring can be in outline form, stream of consciousness, a combination of draft excerpts and points you need to make – anything that will help you pull the first draft together. But, your notes shall address each of the following elements

Context

- Why should/would the reader care about the topic?
- What's your thesis, the key result you want your reader to accept?
- What would you want the reader to be amenable to doing?
- Why should the reader do so?

Organization

- What's the opening? How will you grab your reader's attention?
- What should your title accomplish? Take a first crack at one.
- What tasks do you need to complete to support your thesis?
- How to conclude or otherwise reinforce your core message?

Economics

Summarize the economic argument implied by the analytics sheet you produced. How can you convey the essence of this analysis without just describing the graph?

Supporting Argument

- What key facts support each of the tasks identified above?
- Do you expect your reader to be predisposed to accept your argument or resistant? If the latter, how will you anticipate and address this?
- Will you address potential counter arguments head-on or rely on the compelling nature of the positives supporting your position?

Exposition

- Are there any phrases or examples you've identified that you definitely want in the paper?
- What strengths and weaknesses from your first paper can inform your approach to this paper?

Submit a copy of your notes only (not your analytics sheet) before you retire Tuesday night, revised to reflect the feedback you received in class.

Econ 234: Environmental Economics

Second Paper: First Draft

Due before you retire Sunday, April 22 (missing the deadline would disrupt the peer reviewing process, unfairly burdening your class mates; so don't do it)

Organize your draft as an essay headed by title, author and submission date. No need to footnote your facts; but I will expect to see your sources listed at the end using APA style. In the unlikely event that a quote strengthens your argument, cite its source in the text. I'd prefer that you create your own graphs (either electronically or scanning in a drawing). If you use or adapt someone else's graph, be sure it is appropriate and cite its source in the text.

For the second paper, shift your focus from the source of an environmental harm to a discussion of the obstacles to correcting it. Describe the economically efficient outcome and discuss the major ways existing policies have fallen short in achieving it. (You'll need some discussion of the market failure causing the problem, but this should be less central to your paper.) What next steps do you believe would be most effective in improving the existing outcome? Your audience consists of students who have completed Econ 234.

The rubric your reviewers will use to evaluate your essay appears below.

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Clear thesis	Easy to identify author's bottom line	Possible to identify main conclusion	Essay on point but thesis ambiguous	Does not fully address assignment
Audience	Establishes direct rapport with target audience	Easy to infer the target audience	Avoids jargon and arguments unlikely to connect with reader	Target audience would struggle to follow argument
Quality of underlying economic analysis	Draws on a compelling economic argument	An appropriate approach is used correctly	Correct but inappropriate analysis; or minor glitches in application	Inappropriate or substantially flawed analysis
Supporting Argument	Seamlessly promotes thesis	No missing steps	Missing or extraneous steps; or faulty organization	Holes or detours in text distract from thesis
Attention to Presentation	A pleasure to read	No more than 1-2 places that tripped up a reader	A modest number of errors in organization, flow, grammar, spelling or citations	Needs substantial attention to organization, flow, grammar, spelling or citations

Econ 234: Environmental Economics

Second Paper: The Peer Reviews

Due before you retire Wednesday, April 25

Once the first drafts are posted, you will write critiques of two student papers. Use whatever technology or technique you prefer, but it must result in a single file you can submit to Moodle.

Your review should reflect back to the author your sense of the main thesis and the essay's effectiveness in addressing the needs of its audience. It should identify important strengths and weaknesses and strategies the author might use to improve the paper. It should help the author distinguish between major needs and minor problems. If there are significant expositional issues, point these out, but avoid falling into the trap of editing the paper.

Use the rubric included in the First Draft handout posted to Moodle to give the author a sense of how an objective reader would assess the draft in its current state. The primary goal of your review is to help the author write a superb paper. I will evaluate your reviews at the time I read the final drafts using the peer review rubric from the sample peer review assignment:

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Has the reader identified important areas of strength and weakness in the first draft?	Excellent job of highlighting strengths and weaknesses in order of importance	Identified the major strengths and weaknesses	Failed to address flaws in the draft or misdiagnosed problems	Inadequate attention to contents of the first draft
Is reader clear in identifying strategies to help author fix problems	A clear roadmap to revising the paper	Pointed the author in the right direction	Falls short of giving author a sense of how to improve the draft	Lack of attention to how to improve the paper
Reflects thesis and attention to audience	Thoughtful commentary on how paper conveys thesis to the target audience		Reasonable interpretation of thesis and audience	Misses the point or unhelpful commentary on audience
Attention to presentation	Pointed author in right direction without becoming a copy editor	Flagged weaknesses in order of importance	Identified important expositional, spelling or grammatical weaknesses	Failed to flag important expositional, spelling or grammatical weaknesses

Econ 234: Environmental Economics

Second Paper: Final Draft

For the Final Draft (due Wednesday May 2), draw on the two peer reviews and your own reflections to ensure that your paper fully complies with the assignment and addresses my evaluation rubric: Organize your draft as an essay headed by title, author and submission date. No need to footnote your facts; but I will expect to see your sources listed at the end using APA style. In the unlikely event that a quote strengthens your argument, cite its source in the text. I'd prefer that you create your own graphs (either electronically or scanning in a drawing). If you use or adapt someone else's graph, be sure it is appropriate and cite its source in the text.

For the second paper, shift your focus from the source of an environmental harm to a discussion of the obstacles to correcting it. Describe the economically efficient outcome and discuss the major ways existing policies have fallen short in achieving it. (You'll need some discussion of the market failure causing the problem, but this should be less central to your paper.) What next steps do you believe would be most effective in improving the existing outcome? Please choose a different industry than the one you analyzed in your first paper. Your audience consists of students who have completed Econ 234.

	Exemplary 5	High Quality 4	Adequate 3	Needs Improvement 2
Clear thesis	Easy to identify author's bottom line	Possible to identify main conclusion	Essay on point but thesis ambiguous	Does not fully address assignment
Audience	Establishes direct rapport with target audience	Easy to infer the target audience	Avoids jargon and arguments unlikely to connect with reader	Target audience would struggle to follow argument
Quality of underlying economic analysis	Draws on a compelling economic argument	An appropriate approach is used correctly	Correct but inappropriate analysis; or minor glitches in application	Inappropriate or substantially flawed analysis
Supporting Argument	Seamlessly promotes thesis	No missing steps	Missing or extraneous steps; or faulty organization	Holes or detours in text distract from thesis
Responsiveness to draft comments	Inspired use of comments to improve paper	Incorporates helpful comments	Fails to take advantage of most helpful comments	Little Evidence
Extent of improvement over first draft	Dramatic	Solid	Modest	On balance, a step backward
Attention to Presentation	A pleasure to read	No more than 1-2 places that tripped up a reader	A modest number of errors in organization, flow, grammar, spelling or citations	Needs substantial attention to organization, flow, grammar, spelling or citations

Final Paper and Peer Critique Feedback

Since you won't be revising this paper, my goal is to get to you as quickly as possible any comments that might be useful in preparing for the final exam. I'd be happy to meet and discuss my rubric scores and your work at greater length if you wish.

My evaluation of your paper (see Paper 2 -- Final Draft for rubric)

Clear thesis		
Audience		
Quality of underlying economic analysis		
Supporting Argument		
Responsiveness to draft comments		
Extent of improvement over first draft		
Attention to Presentation		
Overall		

My evaluation of your critique of 's paper (see Paper 2--Peer Review for rubric):

Has the reader identified important areas of strength and weakness in the first draft?		
Is reader clear in identifying strategies to help author fix problems		
Reflects thesis and attention to audience		
Attention to presentation		
Overall		

My evaluation of your critique of 's paper (see Paper 2--Peer Review for rubric):

Has the reader identified important areas of strength and weakness in the first draft?		
Is reader clear in identifying strategies to help author fix problems		
Reflects thesis and attention to audience		
Attention to presentation		
Overall		