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Adjunct Faculty Learning Community
Summer 2009

Teaching Students to Think Critically by Debating Controversial Issues

1. My Teaching Philosophy

Education must provide more than formal instruction or supervised practice in a trade, skill or profession; it should fulfill much broader purposes for the individual and the community at large. Education should assist and foster the growth of an individual's knowledge, general competence, sense of community, character, identity and ethical balance. To accomplish this, colleges and instructors must offer programs and curricula that prepare individuals for the workforce and economic development, but more importantly together they must promote intellectual and social growth, and global and community citizenship. Colleges and instructors ought to, through example, instill in students and the community that education is a lifelong learning process.

Colleges cannot achieve these goals alone. Colleges must foster collaboration among their instructors, students, and communities. Together, these entities need to envision and create an environment for success by reflecting the ideals of honesty, fairness, trust, and mutual respect. In addition, colleges have a responsibility to teach about and commit to ethical behavior. The curricula and approach to teaching should emphasize open communication and reflect a sense of community by celebrating diversity, and emphasizing the need for inclusiveness, collaboration, and service.

2. Metaphor for Teaching

As a member of the Adjunct Faculty Learning Community (AFLC), we were encouraged to develop a "metaphor for teaching," one that would reflect our teaching philosophy. After much consideration and looking at other examples of metaphors for teaching (*e.g.,* a gardener, a book in a library, etc…), I have come to believe that my role is that of a good old-fashioned **compass** (as opposed to a Global Positioning System or "GPS"). [On a personal note, as an Eagle Scout from long ago, this may have something to do with my choice of metaphor.]

Being somewhat old fashioned (having been born in the 50s), I am quite familiar with using such old technologies as slide rules, drafting tables, protractors, etc…, in high school. And after graduating from college, I even remember using punch cards (*i.e*., Holllerith or IBM 80 column cards) and teletype punch tape to program Computer Numerical Control (CNC) machines to make parts for jet engines. In other words, when it comes to technology, I am (most) familiar with some of the older ones.

To start with, I would like to explain what a compass is. Although not the most reliable reference source, I decided to use Wikipedia's definition because it does encompass an applicable definition:

> *A compass is a navigational instrument for determining direction relative to the earth's magnetic poles. It consists of a magnetized pointer (usually marked on the North end) free to align itself with earth's magnetic field. The compass greatly improved the safety and efficiency of travel, especially ocean travel.* ***A compass can be used to calculate heading, used with a sextant to calculate latitude, and with a marine chronometer to calculate longitude****. It thus provides a much improved navigational capability that has only been recently supplanted by modern devices such as the Global Positioning System (GPS).* ***(Emphasis mine).***

This is significantly different from a Global Position Positioning System. Again, according to Wikipedia:

> ***A GPS receiver calculates*** *its position by precisely timing the signals sent by the GPS satellites high above the Earth.* ***Each satellite continually transmits*** *messages containing the time the message was sent, precise orbital information (the ephemeris), and the general system health and rough orbits of all GPS satellites (the almanac).* ***The receiver measures*** *the transit time of each message and computes the distance to each satellite. Geometric trilateration is used to combine these distances with the location of the satellites to determine the receiver's location.* ***The position is displayed****, perhaps with a moving map display or latitude and longitude; elevation information may be included. Many GPS units also* ***show derived information*** *such as direction and speed, calculated from position changes.* ***(Emphasis mine).***

Although their function is similar (*i.e.*, finding position and direction), and albeit the modern GPS is likely to be more accurate, these two tools go about doing it in two VERY different ways. As for the compass, it "can be used to calculate…"; whereas, the GPS (receiver) does the actual calculations for you. With a compass, an individual can find his or her way by setting a course, taking measurement, re-analyzing or reassessing, making adjustments, and heading off in a new direction. As for the GPS, ***it tells you*** to go left, right, or straight ahead. I see my job as the former, that is, to help an individual decide where they want to go, set a course, teaching them how to make any necessary adjustments, and to continue on their journey. In other words, I can help point you in a direction, but it is not my job as a teacher to tell them explicitly where to go, what to do, or how to get there.

3. Overview of My Project

My AFLC project is for my class on Environmental Policy for the Science, Technology, & Society (STS)/Public Policy Department. According to the course description,

> *This course introduces students to the environmental policy-making process. Students identify the consequences of major environmental legislation and regulations and examine the actions of both citizens and the corporate sector as they comply with these laws. They also focus on the economic and social implications and value of environmental regulation and enforcement and identify current developments in the area.*

This will be the first time in three years that I will be teaching this course. I am currently reviewing my old notes (which become quickly out-dated with every new presidential administration), reading the most current version of the textbook, preparing material (*i.e.*, case law, administrative regulations, etc…), and most importantly for the AFLC project, contemplating, (hopefully) designing, and implementing a means of introducing a series of formal debates on controversial issues involving environmental policy.

The overall design of the course will involve (1) some lecturing by the professor, and (2) a significant portion of the class will entail debating a series of issues as presented in Thomas Easton's, Taking Sides: Clashing Views on Controversial Environmental Issues (13^{th} expanded ed., 2010). [See Course Syllabus, attachment]. I believe there is great value in teaching with a dialectic approach, coupled with the recognition that controversies do exist, and that a clearer understanding of environmental issues can best be accomplished by the study of opposing viewpoints. It is very important for today's students to understand that experts can disagree and that for some questions there are no clear-cut answers.

With this in mind, my project will focus on means by which I can integrate, organize, manage, and evaluate a series of debates on controversial issues into my class of 40 students. I should note that I have

used debates in several of my classes in the past but have not done so for at least three years because I have had some problems regarding participation and evaluation. I am hoping to use this opportunity to redesign this course to address some of these problems. The following is general information about my project:

a) Project Title

Teaching Students to Think Critically by Debating Controversial Issues

b) Course Title and Number

Environmental Policy, 0508-484-70 and 0508-484-71 (Fall 2009)

c) Target Students

This course is a 400's rated class (*i.e.*, primarily for juniors, seniors, and graduate students) and is part of the environmental studies concentration and minor; the legal studies minor; the public policy and American politics concentrations and minor; the political science minor; the sustainable product development minor; and may also be taken as an elective. If my experience teaching this class is any indication of the students, and because there are no pre-requisites for the class, there will be a wide variety of students (*e.g.*, graduate and undergraduates) and majors in the class.

d) Problem or Challenge To Be Addressed

As noted above, my biggest challenges involve schedule and time management, and finding means by which I can get all the students to participate in the debate discussions. A secondary issue is trying to make sure that students, when working in teams, do their fair share of the work. And when they fail to do so, trying to figure out how to handle the situation in a fair/equitable manner.

e) Proposed Solution

Some possible solutions would include better classroom time management on my part. But also setting a "realistic" goal as to how much material I can cover in a ten-week class. In the past, I have tried to pack as much as possible in each and every class, week after week. However, after reading Wilbert J. McKeachie and Marilla Svinicki's McKeachie's Teaching Tip: Strategies, Research, and Theory for College and University Teachers, (Boston MA: Houghton Mifflin, 2006), I have come to realize that the students can do much of the work on their own (*i.e.*, "While professors like to think that students learn from professors, it seems likely that students often learn more efficiently from reading than from listening" (p. 30)). So rather than trying to cover everything in the textbook during the limited time in the classroom, I would like to focus more on their debates (*i.e.*, preparation, organization, resources, etc…) by re-organizing my classes/debates so they have more time to do the debates and the follow-up discussions, and then to integrate those issues into the overall materials and objectives of the course.

f) Debate Structure

The debate structure includes both procedural and substantive aspects. With regards to the debating process, it is bound by a set of parliamentary rules. These rules govern the sequence and time frame of the debate. This will be described in greater detail during the first week of classes. In addition,

the debate will include three groups: (1) the affirmative team; (2) the opposing or negative team; and (3) the judge(s). For this classroom exercise, it is not the success at winning the debate but rather the evidence of preparation and quality of delivery that is important. The following information will be provided in the class syllabus:

A. DEBATE: You and a partner will be selected at random. A topic will then be selected at random for you and your partner for the debate – it may be either "YES" or "NO." You will be required to synthesize everything that you have learned and present ***a coherent, well-researched, well-supported position*** before your classmates and instructor. The topics themselves will come from Thomas Easton's *Taking Sides: Clashing Views on Environmental Issues* (13th expanded ed.), McGraw-Hill Dushkin (2010). Your partner and topic will be assigned the first class of second week. The debates are scheduled throughout the quarter. (*See* Tentative Schedule below). The debate(s) will count for **approximately 15% of your grade.** Debate rules will be handed out at a later date. ***NOTE:*** Each team member will receive the same grade **UNLESS** the instructor finds that the debate and/or outline preparation/presentation was NOT done as a team. In that/those case(s), the instructor – at his discretion – will adjust the debate and/or outline grade(s) accordingly.

B. PRELIMINARY BIBLIOGRAPHY/LIST OF REFERENCES FOR DEBATE: Each team will hand-in a list of 3 references in *proper citation form* based upon your research on your specific debate topic on **September 21st, 2009.** The bibliography page shall include one paragraph for each reference briefly summarizing the reference. This preliminary reference list will count for **approx. 5% of your final grade**. ***NOTE:*** Late or incomplete bibliography/paragraph summaries will NOT be accepted (*i.e.*, this is a "zero-sum: assignment).

C. DEBATE OUTLINE/REFERENCE PAGE: One week before YOUR scheduled debate (see schedule) you and your partner must exchange: (1) a **one-page annotated outline** of the main points of your argument (*i.e.*, a "mini-brief"); and (2) a **one-page list of references** you and your partner used in preparation for your argument with your opponents. The outline-reference page will count for **approximately 10% of your final grade**. ***NOTE:*** (1) that late or incomplete bibliography/paragraph summaries will NOT be accepted (*i.e.*, this is a "zero-sum" assignment); and (2) you will NOT be allowed to do a rebuttal during your debate which accounts for 15% of your debate grade (thus, the highest possible debate grade will be a 85).

D. DEBATE QUESTIONERS: You, along with your team-mate and opposing debate team, will be assigned to one debate (other than your own) whereby each member of the questioners will be required to prepare and ask at least one "coherent and well organized" question for the debate teams based upon the corresponding readings from Easton's *Taking Sides* material. (Keep in mind (1) this is NOT a "stump the debaters" type of assignment – thus, you must put some thought into your question(s) before coming to class; and (2) prepare more than one question because someone else may ask the same question before you.) Your question (*i.e.*, organization, quality, preparedness, etc..) will account for **approximately 5% of your final grade**.

With regards to the substantive aspects of the debate, the students will be assigned teams (at random during the second week of classes), the topic for the debate, and the position that they will support. As noted above, all debate topics will come from Thomas Easton's *Taking Sides: Clashing Views on Environmental Issues* (13th ed., 2010). It will be explained and emphasized that the debate teams may be arguing positions that they do not support, but that it is a learning opportunity for them.

Finally, as for the debate structure, each team will be allowed a main argument (8-10 min.), rebuttal (5 min.), answer questions from debate questioners and if time permitting questions from the class as a whole (10 min.), and a closing statement (2 min.).

g) Assessment Method

I am not sure how to assess or what type of assessment would be appropriate. I believe that there are long-term, intermediary, and short-term assessments of the effectiveness of the debate approach. Clearly, it would need to entail both my own reaction(s) and the students' evaluation to this approach.

As for an assessment of the effectiveness of the debate approach in the long term, I would have to look at issues concerning: time management, integration of the debates format and topics into the overall goals and materials presented in the course, grading/evaluation, etc… A custom designed and detailed "evaluation" for the students may be more valuable than the ones currently used by the STS/Public Policy Department.

Regarding the effectiveness of the debate approach over the duration of the course (*i.e.*, an intermediary assessment), I would be interested in using a pre-debate and post-debate questionnaire about the actual debate topics. For example, during the first week of class a questionnaire with all the issues presented would be taken by the students; then an identical questionnaire would be given (a) immediately after the debate, and/or (b) at the end of the quarter after hearing all the debates. The overall issue would then be whether there was a (statistically significant) change in the students thinking and value/belief system? This may serve as an indicator of the effectiveness of the debate approach.

Finally, in terms of evaluating the actual debate (*i.e.*, a short term assessment), I believe that an evaluation by the teacher and the students in combination would provide the best means of keeping everyone active in the debate (and provide a more accurate assessment than the instructor alone). As such, the debate teams will receive two grades, one from the class as a whole, and one from the teacher. The teacher's score, and the combined students' score will each account for 50% of the debate team's final debate grade.

In order to do this, I will use a 7-part rubric to assess each debate team's performance based on the following criteria:

(1) Opening statement was clear and addressed the central issue of the debate;
(2) Overall impression of the presentation (*e.g.*, eye contact, use of voice, etc…);
(3) Claims show evidence of research;
(4) Rebuttal statement(s) effectively addressed the statements of the opposing team;
(5) Presentation demonstrated organization and forethought;
(6) Final statements effectively summarized salient points and improved the team's position; and
(7) Participants adhered to rules and procedures.

The overall grading scales for each would be on a scale of 1 to 5 (*i.e.*, weak, developing, adequate, above average, and strong).

On the students' debate evaluation form, they will also be required to make two comments: (1) what did the debate team do well; and (2) what could the team have done better. After each debate is scored, I will collect all the score sheets, calculate the students' debate evaluations, and calculate our

combined grade. I will then return the grading sheets with the comments to the debate teams for their assessment. (The students' evaluations will be done anonymously to protect everyone's identity). I will then meet with the debate teams (at their option) to discuss their final grade and comments.

h) Technology Needed/Availability

I think the use of technology would really be up to the students. I would make available those things available in the "smart classroom." However, the students would have to be responsible for providing their own laptop computers. (On a personal note, I cannot believe a "school of technology" does NOT provide a computer in the classroom.) But if the students choose to use internet access, MS PowerPoint, video streaming, etc… as part of their presentation/debate, then they can use whatever is available in the classroom. For other aspects of the class, such as lecturing, I readily use MS PowerPoint, and videos/dvds, etc.., which I provide myself.

i) Timeline

I need to have the material(s) prepared before the beginning of the Fall Quarter 2009. My goal would be to have the course schedule, syllabus, student handouts (*i.e*., info about questions to ask when examining a position, info for preparing for a formal debate, guidelines/format for the debate, debate evaluation forms for the students and instructor, etc…) prepared prior to the first day of class. And if I decide to do a pre-debate/post-debate evaluation of the effectiveness of the debates, then the pre-debate questionnaire must be prepare for the first week of classes.

j) Possible Obstacles

Again, I believe my greatest obstacle is time management. I need to take a step back and let the students do "more of" the work with regards to the actual material in the textbook. Rather than try to cover/cram everything in the textbook(s) into my class time, I need to make them more responsible for learning the material outside the classroom. If I can do that, then we will have more time to do the debates and have discussions about some of these controversial issues.

4. Conclusion

At this point, much of the above is purely theoretical because the course has not yet been taught. Having used a debate approach in several of my classes in the past (although not recently), I have found that this approach encourages students to see that there is often more than one point-of-view on controversial issues. Moreover, I do believe that it is important for students to see that even "experts" disagree, but even more importantly, that through discussion (debate) that one can weigh the pros and cons of these differences and make up their own mind. Finally, I have found that, despite some nervousness and anxiety about getting in front of their classmates, they really like to explore many of these controversial topics on their own and present their findings to the others. It is here that I find my role as a "compass" in their exploration most fulfilling.

Environmental Policy **Course No. 0508-484-70 & -71** **TR 6:00-7:50 p.m.**
Fall 2009 (20091) **Rm. 86-1150**

Instructor: Richard A. Monikowski, J.D., Ph.D. email: ramgsm@rit.edu
Telephone: (585) 292-1894 (emergencies only) Office hrs: By appointment only

TEXTS: Zachary A. Smith, The Environmental Policy Paradox (5th ed.), Prentice Hall (2009) (*EPP*)
Thomas Easton, Taking Sides: Clashing Views of Controversial Environmental Issues (13th expanded ed.), McGraw-Hill Dushkin (2010) (*TS*)

COURSE OVERVIEW: The main purpose of this course is to get you to think critically about environmental politics and policy, and society's relationship to the natural environment. The course is designed to provide you with an introduction to some of the different issues and policies in the environmental politics arena. We will explore these issues through an analysis of the policy paradox and the different discourses (ways of thinking) that exist on environmental policy. You will have the opportunity throughout the term to identify your own views through class discussions and debates on environmental issues. The classroom is a learning experience on both our parts. The most important thing is to get you to understand and question concepts and not necessarily spoon-feed you information. This requires interaction on your part – ask questions and offer your opinion. Although there will be some lectures and videos --- student participation will be required on your part through discussions, debates, questions, & opinions.

GRADING: **YOUR FINAL GRADE** will be based upon (1) four tests (and possible surprise quizzes); (2) a debate, outline, and debate question(s); and (3) attendance and class participation.

(1) TESTS/QUIZZES. At present, four tests are scheduled. The tests may be either "in-class" or "take-home" depending on the material (and quality of class discussions). You will be given prior notice of format.

A. If the test is "*in-class*," it may include: true-false questions, multiple choice, identifications (matching), and/or short answers. Like all professional fields (*e.g.*, law, business, computers, etc...), you need to be familiar and able to use the proper terminology. It is YOUR responsibility to come up with a vocabulary list.

B. If the test is "*take-home*," you will either be asked a specific question(s) and/or given a hypothetical situation you will be required to evaluate, analyze and respond based upon the readings, lectures, videos, and class discussions. The answers must be typed (double-spaced). A page limit will be provided. Your responses will be graded on: (1) organization of your paper, (2) content of your response, and (3) grammar and punctuation.

C. Quizzes: You may also receive surprise quizzes if I find that students are not keeping up with their readings, missing classes or arriving late for class, and/or not participating in classroom activities or discussions. The combined average from the surprise quizzes will equal one test. A missed quiz will equal a "zero" unless you have an "*excused*" absence. (An "*excused*" absence = by prior notice with my approval or at instructor's determination/discretion, or a note from a physician).

D. Tests will count for **approximately 60% of your grade.** The tests will be based on the readings from: Smith's *The Environmental Policy Paradox* (5th ed., 2009), Easton's *Taking Sides: Clashing Views of Controversial Environmental Issues* (13th expanded ed., 2010), any other assigned articles or readings, class lectures, and/or videos.

(2) DEBATE/OUTLINE-REFERENCE PAGE/QUESTIONERS:

A. DEBATE: You and a partner will be selected at random. A topic will then be selected at random for you and your partner for the debate – it may be either "YES" or "NO." You will be required to synthesize everything that you have learned and present ***a coherent, well-researched, well-supported position*** before your classmates and instructor. The topics themselves will come from Thomas Easton's *Taking Sides: Clashing Views on Environmental Issues* (13th expanded ed.), McGraw-Hill Dushkin (2010). Your partner and topic will be assigned the first class of second week. The debates are scheduled throughout the quarter. (*See* Tentative Schedule below). The debate(s) will count for **approximately 15% of your grade.** Debate rules will be handed out at a later date. ***NOTE:*** Each team member will receive the same grade **UNLESS** the instructor finds that the debate and/or outline preparation/presentation was NOT done as a team. In that/those case(s), the instructor – at his discretion – will adjust the debate and/or outline grade(s) accordingly.

B. PRELIMINARY BIBLIOGRAPHY/LIST OF REFERENCES FOR DEBATE: Each team will hand-in a list of 3 references in *proper citation form* based upon your research on your specific debate topic on **September 21st, 2009.** The bibliography page shall include one paragraph for each reference briefly summarizing the reference. This preliminary reference list will count for **approx. 5% of your final grade**. ***NOTE:*** Late or incomplete bibliography/paragraph summaries will NOT be accepted (*i.e.*, this is a "zero-sum: assignment).

C. DEBATE OUTLINE/REFERENCE PAGE: One week before YOUR scheduled debate (see schedule) you and your partner must exchange: (1) a **one-page annotated outline** of the main points of your argument (*i.e.*, a "mini-brief"); and (2) a **one-page list of references** you and your partner used in preparation for your argument with your opponents. The outline-reference page will count for **approximately 10% of your final grade**. ***NOTE:*** (1) that late or incomplete bibliography/paragraph summaries will NOT be accepted (*i.e.*, this is a "zero-sum" assignment); and (2) you will NOT be allowed to do a rebuttal during your debate which accounts for 15% of your debate grade (thus, the highest possible debate grade will be a 85).

D. DEBATE QUESTIONERS: You, along with three other students, will be assigned to one debate (other than your own) whereby each member of the questioners will be required to prepare and ask at least one "coherent and well organized" question for the debate teams based upon the corresponding readings from Easton's *Taking Sides* material. (Keep in mind (1) this is NOT a "stump the debaters" type of assignment – thus, you must put some thought into your question(s) before coming to class; and (2) prepare more than one question because someone else may ask the same question before you.) Your question (*i.e.*, organization, quality, preparedness, etc..) will account for **approximately 5% of your final grade**.

(3) CLASS PARTICIPATION and ATTENDANCE: Because this class will operate as a seminar with minimal lectures, your active participation will be evaluated (not just on the *quantity* of what you say, but also on the *quality* of your contribution to class discussions). If you just sit there and say nothing, it will have a ***negative*** effect on your final participation grade. In order to learn, it is imperative that you attend class and read the material assigned before class. Moreover, you must be there to participate. Thus, attendance will be taken daily. (Repeated or unexcused tardiness or early departure from class will also have a negative effect on your overall evaluation.) Class attendance and class participation for **approx. 5%** of your grade.

GRADING POLICY: Let me make some comments about grades in general. Grades are based on a number of things. ***First***, they take into account whether or not you have followed all the instructions given. ***Second***, they indicate whether or not you have completed everything that is required in an assignment using the material that you have learned in the course. ***Third***, I do ***NOT*** curve grades. I will consider such things as *consistent improvement* over the course of the quarter, or if there is an *inconsistent* grade mixed in with your other grades. ***Fourth***, I do ***NOT*** give "*extra credit*" or "*make-up*" work except for extraordinary circumstances (*i.e.*, a death in your immediate family, etc...). This is at my discretion. ***Finally***, it is important for you to

understand that final grades will be based on the percentages given above and the following:

Tests/Debate Grades:
A = 90-100%
B = 80-89.99%
C = 70-79.99%
D = 60-69.99%
F = below 60

If you fail to show up for your debate, you get an automatic "0". There is absolutely NO make-up for missing a debate.

Prelim. List of Ref.:
100 = timely list of 3 references with 1 paragraph for each reference summarizing the reference.

0 = Late or incomplete list of references

Debate Question:
100 = prepared
50 = last minute
0 = not prepared

Outline Grades:
100% = timely and fully annotated and referenced

0% = assignment late or incomplete

All outline & homework grades are based on timeliness and completeness; late papers will not be accepted (as noted above.)

Class Attendance & Participation:
A = *actively* participated
B = *regularly* participated
C = *occasionally* participated
D = *rarely* participated
F = did *NOT* participate

Keep in mind, if you are not there, you cannot participate

ENVIRONMENTAL POLICY *TENTATIVE* SCHEDULE
FALL QUARTER 2009(-1)
Reading materials will be covered on the date indicated.

Week One:
Tues. 09/08 Introduction to Course
Thur. 09/10 Smith *EPP* - **Chapter 1: Ecosystem Interdependence**
Easton *TS* - *Introduction:* Environmental Issues: The Never-Ending Debate

Week Two:
Tues. 09/15 Smith *EPP* - **Chapter 2: Changing Cultural and Social Beliefs: From Conservation to Environmentalism**
Thurs. 09/17 Smith *EPP* - **Chapter 3: The Regulatory Environment**
Easton *TS* - *Issue 1:* Is the Precautionary Principle A Sound Approach to Risk Analysis?

Week Three:
Tues. 09/22 Smith *EPP* - **Chapter 4: The Political and Institutional Setting**
Thurs. 09/24 **Test #1** - Smith *EPP* - Chs. 1-4; (Possibly Easton *TS* - *Issue 1).*

Week Four:
Tues. 09/29 Smith *EPP* - **Chapter 5: Air**
Thurs. 10/01 Easton *TS* - *Issue 6:* Can Pollution Rights Trading Effectively Control Environmental Problems?
Easton *TS* - *Issue 20:* Is Carbon Capture Technology Ready to Limit Carbon Emissions?

Week Five:
Tues. 10/06 Smith *EPP* - **Chapter 6: Water**
Thurs. 10/08 Easton *TS* - *Issue 8:* Is Global Warming Skepticism Just Smoke and Mirrors?
Easton *TS* - *Issue 3:* Should a Price be Put on the Goods and Services Provided by the World's Ecosystems?

Week Six:
Tues. 10/13 **Test #2** - (Smith *EPP* - Chs. 5 and 6)
Thurs. 10/15 Smith *EPP* - **Chapter 7: Energy**

Week Seven:
Tues. 10/20 Easton *TS* - *Issue 11:* Do Biofuels Enhance Energy Security?
Easton *TS* - *Issue 12:* Is It Time to Revive Nuclear Power?
Thurs. 10/22 Smith *EPP* - **Chapter 8: Toxic and Hazardous Materials**

Week Eight:
Tues. 10/27 Easton *TS* - *Issue 18:* Is the Superfund Program Successfully Protecting Human Health from Hazardous Materials?
Easton *TS* - *Issue 5:* Should the EPA Be Doing More to Fight Environmental Injustice?
Thurs. 10/29 **Test #3** - (Smith *EPP* - Chs. 7 and 8)

Week Nine:

Tues. 11/03 Smith *EPP* - **Chapter 9: Land Management Issues**

Thurs. 11/05 Easton *TS* - *Issue 2:* Is Sustainable Development Compatible with Human Welfare?
Easton *TS* - *Issue 21:* Should North America's Landscape Be Restored to Its Pre-Human State?

Week Ten:

Tues. 11/10 Smith *EPP* - **Chapter 10: International Environmental Issues**
Easton *TS* - *Issue 13:* Do Falling Birthrates Pose a Threat to Human Welfare?
Easton *TS* - *Issue 15:* Is a Large-Scale Shift to Organic Farming the Best Way to Increase World Food Supply?

Thurs. 11/12 Smith EPP - **Chapter 11: International Environmental Management**
Easton TS - *Issue 16:* Should DDT Be Banned Worldwide?
Easton *TS* - *Issue 14*: Is Genetic Engineering the Answer to Hunger?

Week Eleven: **(Date/Time/Place TBA)**

Exam Week – **Test #4** - (Smith *EPP* - Chs. 9, 10, and 11)

THE FINAL EXAM WILL BE SCHEDULED FOR EXAM WEEK! ***NO EXCEPTIONS!***