
Length of Course: Full Year (2 semesters; 3 trimesters; 4 quarters)

UC Honors designation: Honors

Subject Area – Discipline: History/Social Science ("a") - Government

CTE Sector: Energy, Environment, and Utilities

CTE Pathway: Environmental Resources

Grade/Level(s): 12

Course Overview:

This course will provide an understanding of the fundamental foundations of American Government and Environmental Engineering. Students will think critically about local and global environmental issues as they relate to political and logistical regulations. Students will also be exposed to some of the key issues that tie into national and international environmental policies and governmental protocols. Some of these include diverse perspectives on climate change, air quality, land use and land rights, water use and water rights, alternative energy resources, and national and global policies and how they impact the environment and sustainability. In the culminating unit, students utilize the skills and concepts they have harnessed from the previous units through a mock United Nations debate in which they role play diplomats proposing international/national environmental policy changes, incorporating contemporary issues and reinforcing their understanding of the principles of American Democracy. Within these units, core aspects of the government framework will be interwoven with the environmental resources pathway. Besides learning the content of the course students will have opportunities to integrate a wide variety of social media and/or Web 2.0 technologies (like blogs, facebook, google, cloud, etc.) for reflection, presentation and articulation of their own learning processes of the principles and institutions of American Government and how they shape environmental policy.

Course Content:

Unit 1 - Energy Resources and Intersystems
This unit will set the foundation for the upcoming units within this course. Students will be exposed to fundamental principles of American democracy, such as the rights and responsibilities of citizens and the principles of a civil society. Students will analyze how these concepts pertain to environmental issues of climate change and energy resources and how the framing of environmental issues are affected by governmental policies and civil participation. This unit will then focus on identifying different types of energy resources (depletable, non-depletable, renewable and nonrenewable) and their impact on the environment through the socio-cultural lens of different governmental systems. The unit will help students understand various perspectives on climate change and the impact of humans on the environment, including perspectives previously or currently being debated in Congress. This unit will also provide opportunities for students to begin to understand the complex interdependence of civil society, religion, culture, political systems and individuals in shaping environmental policies and regulations, a relationship that will be further explored throughout the duration of the course.

**Unit 1 - Key Assignments**

1. **Create a Class Social Contract**

   In order to set a conceptual foundation and a behavioral guide for the duration of the course, students will use the philosophies of Enlightenment thinkers such as John Locke and Jean-Jacques Rousseau to establish a Social Contract for the class. Using key Enlightenment ideas, quotes from primary source documents such as the Federalist papers, the Constitution, and the Bill of Rights, students will propose class laws or norms that they would like to abide by for the duration of the course. Through an introduction to current environmental issues which can include a film clip, experiential, close reading of a text or data charts on the current global crisis, students should be cognizant of the end goals of the course, which are to develop ideas for global policies that will protect the world’s environmental resources. As such, and knowing that much of the course will require students to peer review, comment, and publicize their work on social media platforms, students must develop a set of norms to abide by to promote efficacy and mutual respect. After students (in teams or individually) have proposed norms (citing evidence from primary documents to logically support these proposals), norms will be voted on in order to create a “Class Contract”, to be signed by each member of the class, thus introducing the fundamental principles of civil society and the rights and responsibilities of citizens.

2. **Construct a Digital Historical Timeline of Environmental laws, Agencies (EPA, UN etc.) and Dominant Perspectives on Climate Change and Energy Resources:**

   In order to create foundational knowledge about environmental law needed for the remainder of the course, this assignment asks students to create a comprehensive digital historical timeline using any graphics and animation software, like Adobe Flash.
and Photoshop. If there is no access to the software the timeline can be created using poster boards and picture cut outs from magazines. This timeline will be created by each student in the class after extensive research (going back to the early 1900’s or earlier). Through research, students should investigate and illustrate for each decade:

1) What were the main environmental issues in that particular decade (include data charts that illustrate the ongoing process of climate change and its impact on humans, ecosystems, and energy resources)
2) What kinds of panels and global governing bodies were established (e.g. Intergovernmental Panel on Climate Change, U.S Environmental Protection Agency, etc.)
3) What laws were passed globally regulating carbon emissions, water and air quality
4) Which policies represent a human-centered and life-centered worldview of the environment (The western world view which is more human centered and utilitarian and hence concerns about the environment are derived from human interests vs. the deep ecological world view which is more life centered around all life forms)

This timeline will be digital and can be shared by students with their peers via social media (such as youtube or a class Facebook group). Students should be reminded to abide by the class-created social norms (Unit 1, assignment 1) when publishing and commenting on each other’s work.

3: Synthesize and Critically Analyze Climate Change Controversy via a Blog:
Using concepts learned about the environment and the global issues faced by humanity through the historical timeline created in assignment 2, students are now ready to synthesize and analyze the major controversies around climate change. Students will research recent Congressional debates or speeches on climate change and consider the role of religion (and the historical relationship between religion and government) in these differing opinions. Students are encouraged to research and analyze current case studies and examples of authoritarian rule (such as modern-day North Korea) as well as other western and non-western democracies and those government’s stances on climate change. Students will reference and analyze these examples as they articulate their own perspectives by writing their individual blog (an analytical essay can be used if technology is not available, although a key feature of this course is the collective building of knowledge through the ability to peer review and comment in real time). Their written position should include:

   a. Which U.S. Congressional representatives and foreign government positions they agree with and why
   b. Which Congressional representatives and foreign government positions they disagree with and why

This blog can include pictures, videos and audio recordings of the thoughts from their own classmates if appropriate. Each student can then post the link of the blogs of their own classmates onto their own blog and thereby create an online learning community where students are collaborating, posting comments on each other’s blogs and engaging in discussions and co-creation of new knowledge.
4: Podcast or Digital Video: Interview a Scientist:
This assignment will now allow students to seek an expert opinion on climate change, learn about two different perspectives (social science and natural science), and compare with perspectives of lawmakers as explored in assignment 3. Students will also explore the tension between the promotion of the public good and the protection of individual liberties, in terms of human behavior that impacts the environment. Student contact a Climate Scientist and a Social Scientist (e.g. Anthropologist) from a university, energy company, environmental non-profit organization, or anyone they can research and find online who is willing to be interviewed (an interview via e-mail might be the most feasible). Students should develop questions for the interview based on what they have learned in assignment 2 and the questions that have arisen during their blog conversations in assignment 3. Interview questions should include:

1) How does your discipline inform and impact your views on climate change?
2) What types of policies (global, federal, state or local) need to be implemented in order to protect our environment and the earth’s resources?
3) How do these proposed policies impact individual liberties of citizens within the United States or other countries?
4) In your opinion, should corporations or industries be held accountable to the same laws/regulations of individual citizens. If not, how should they differ?

This assignment will provide an opportunity for students to reflect, challenge and/or form new opinions on their own learning about environment, energy resources and climate change and how to create a more sustainable world. Podcasts or digital videos should be published on student’s blog for comment and peer review, and/or presented to the class.

5: Civic Engagement in your Backyard: Publicize a Digital Poster Board about a Local Environmental Issue
This assignment takes the global perspective of environmental laws and governmental regulations and asks students to apply it to an issue in their own local community. Each student will conduct research on an important environmental issue (or set of issues) in their own community and provide their own possible solutions. They will research (using publicly available data or collecting their own data) issues such as transportation, heating and cooling, use of fossil fuels, waste management, air quality, or other local environmental concerns. Each student will then create a digital or hard-copy poster board presentation that includes an abstract, their research question or issue, findings data, and proposed solutions. (This poster board can then be presented face to face using a research symposium or walk through gallery. Subsequently, a facebook page can be created for an online virtual research symposium. Students can post a digital copy of their poster board on facebook and get feedback and comments from their peers as well as teachers. This facebook page can serve as a launching pad for students to communicate and collaborate beyond the class time and used as a tool to
work toward their final culminating project.)

Finally, students will become participatory citizens by finding a resource person, elected official, city council, or other local agency to share their digital poster board with. This can be done on a virtual or public platform.

Resources:

http://roadtoparis.info/top-list/10-climate-change-controversies-now-that-cause-settled/

**Unit 2 - Law of the Land: Up in the Air**

Based on the first unit’s introduction to democratic thought and the link between environment and policy, this unit establishes the basic foundations of United States government. Students will understand the role of the three branches of the government (legislative, executive and judicial) at federal and state governmental levels in passing, enforcing and evaluating air quality bills and legislation. Additionally, students will research and present on the impact of these three branches on air quality legislation and policy nationally and in their own communities. Knowledge of how American government is structured will be utilized in further units in which students will compare United States governments to other governments, in order to analyze global environmental policy.

**Unit 2 - Key Assignment**

1: **Create a Multimedia Presentation of Enacted Air Quality Legislation**
This foundational assignment allows students to understand and explain how a bill becomes a law and to gather information regarding air quality regulations and their impact on air quality. Students will analyze recent air quality regulations that contain sufficient evidence of the causes of air pollutants and how those pollutants have become a threat to society’s well being. They will then take their understanding of that evidence and combine it with their understanding of the process through which air quality regulations are created and bills become laws and create a succinct (7-8 slides) multimedia presentation (using PowerPoint, Prezi, Flash, etc.). They can focus on any of the researched air quality bills that have been passed locally or at the state or federal level. The presentation will include:
   a. Description of the bill
   b. Who authored/supported the bill
   c. Congressional process to obtain approval
   d. Controversies associated with the bill
   e. Student’s personal evaluation of the bill
   f. Impact on air quality since passed
2. Research Executive Actions Related to Air Quality Bills: Essay and Presentation
Utilizing their knowledge of the executive branch and the scope of presidential powers enumerated in Article II of the Constitution, students will research the executive branch’s action(s) around federal air quality and environmental bills. Students will first incorporate this developing knowledge of the executive branch into their presentation created in the previous assignment by adding onto it. Their presentation will include:

a. Actual government authorities involved in enforcing federal air quality legislation
b. The process by which these authorities were elected
c. The powers these authorities hold
d. The role played by these authorities in the execution of the air quality law described in the previous assignment
e. The role of citizens in electing leaders who are concerned with air quality standards
f. Photos, speeches or iconic symbols that represent the people involved in executing this law and the environmental impacts of the law

Students will then compose an expository essay synthesizing their research, allowing them to integrate and evaluate multiple sources of information, and should use the presentation slides as secondary sources. In the essay, students should demonstrate an understanding of how the executive office’s enumerated powers and length of term has an impact on a bill’s progress, demonstrate an understanding of the role an ordinary citizen plays in the electoral process, and how they can influence environmental policies that affect them directly.

Sources students can use are international laws and regulations on climate change and air quality agreed on by United Nations member states. This essay allows students to research and articulate their understanding of the role of a country and its citizens in law making as preparation for participating in U.N mock debate in the culminating assignment of this course.

3. Collect and analyze data on different governmental jurisdictions that deal with air quality bills through a student-created graphic
As a stepping stone for a mock trial in Unit 4, students will explore the judicial branch and its powers as outlined in Article III of the Constitution. Students will research some landmark Supreme Court cases, the powers of inferior courts, the selection, terms, and eligibility of judges, and different types of court jurisdiction. Students will also research governmental websites (Environmental Protection Agency, California Air Resource Board) and collect data on different court jurisdictions that deal with air quality bills. Students will create a data chart/graphic organizer to be included in their multimedia presentation (begun in assignment 1), which illustrates an overview of the American court system, as well as differentiates which air quality bills fall under various jurisdictions and why. Students should also include if any recent federal air quality bills have been challenged in court, and the outcome of these cases.

4. Participate in a Mock Election for Environmental candidates
In groups, students will evaluate the roles of polls, campaign advertising, and the controversies over campaign funding in order to prepare a public environmental campaign for office (can be a local, state or federal election). Students will analyze the means that citizens use to participate in the political process (e.g., voting, campaigning, lobbying, filing a legal challenge, demonstrating, petitioning, picketing, running for political office) and analyze trends in voter turnout, the causes and effects of reapportionment and redistricting, and the function of the Electoral College. Each group of students should choose a candidate among them, and 1) write a campaign speech that incorporates a pressing environmental issue, 2) establish a campaign platform which includes environmental proposals, and 3) prepare their candidate to participate in a debate with the other candidates in class. Depending on the forum where candidates will deliver their speeches and participate in the debate (may be in class, in front of other classes, or on one of the online forums established throughout this course) student votes can be counted and published. In a discussion, written reflection or other appropriate teacher chosen format, students should reflect on the winner of the election, the environmental issues to be tackled by this candidate, and evaluate what environmental impact this candidate will have.

5. Advocate for a student-written air quality bill, How a Bill Becomes Law Simulation
Students will research air quality standards within their own community, and the laws pertaining to their community. Students will then formulate their own air quality bill and create a proposal to advocate for their bill. This proposal will be the culmination of their multimedia presentation from the previous three assignments, and will include:
   a. Language of their proposed bill
   b. Advantages of the bill and its impact on local air quality
   c. Address possible concerns or opposing arguments
   d. Develop a logical argument in favor of the bill
Once students have presented their multimedia presentations, the class list of all proposed bills will be voted on by peers through a Congressional simulation, in which students take on the role of Senators or members of the House of Representatives. Each house (roughly ¼ of the class should be the Senate and ¾ should be the House of Representatives, or a more realistic ratio), will simulate how a bill becomes a law by debating and voting on the bills in each house before sent to the President (which could be played by the teacher) for approval. Simulation results can be published on a public class platform (such as the Facebook or blog created in Unit 1).

Unit 3 - “Law of the Land-Down to the Earth”

Building on a foundational knowledge of the structure of U.S. government and how it impacts environmental laws and policies from the first two units; Unit Three allows students to see how citizens can engage in and impact government in today’s society. This unit focuses on civic engagement, the rights and responsibilities of citizens in a democracy and the role of lobbyists as they apply these concepts to the issues of land use, waste management, and the environmental impact of land regulations. Students will explore how land use policies are created, and how citizens can impact public policy
to preserve habitats and create viable ecosystems. Ultimately, students will develop strategies to transform their own city into a sustainable urban ecosystem, keeping in mind issues such as land use regulations, food production, transportation, and other key infrastructure elements. Furthermore, students will advocate for their proposal with different local policy makers such as school administrators and public officials.

Unit 3 - Key Assignments

1. Develop a Proposal to School Administrators via Public Speech and Multimedia Presentation
   In this three part assignment, students explore the concept of citizenship by taking on the role of a group of concerned citizens and advocates for a cleaner school while learning about the interdependence of local, state, and federal government. The rationale behind this assignment is to have students build on their knowledge about state and federal governance and see how policies from a local level can be taken to a national level and become a law that impacts everyone in their community and country. This knowledge is necessary for students in order to participate in the international U.N. debate which is the final culminating project of this course.

   Part one: Students form waste audit teams, research the best ways to conduct a waste audit of their school, and identify ways that food, paper, plastics, cardboard, bottles, cans and other materials are disposed of at their school site. Students will create a waste audit checklist, perform the audit, and create a multimedia presentation and speech, with school administrators as the intended audience, that includes their waste audit results. Students will also try to encourage local policy makers to adopt their proposed policies by delivering their speech in a mock town hall meeting, and consider methods such as petitions to and proposals for school regulations that will reduce waste at their school site.

   Part two: Students will then take their policy to a state level. Students research how this local issue has an impact on the rest of the state of California and then write a proposition that can be put on the California ballot in an upcoming election. Additionally, students will research how environmental issues from particular states have influenced other states to pass similar laws, and can eventually be brought to the national level in Congress. (For example, the fracking ban in New York and its impact on other states http://www.nationofchange.org/2014/12/21/fracking-ban-new-york-paves-way-states/)

   Part three: This assignment culminates with students identifying their state representatives in Congress, and writing a letter about their local and state proposals, and how a similar proposal can be made at the national level.

2. Create a virtual map
   Building upon the experience of participatory citizenship regarding school issues in assignment 1, assignments 2 through 4 help students prepare to advocate for a
city-wide policy in assignment 5. Students will explore the concept of federal and local congressional districts by discovering who their congressional representative is and what district he/she lives in. Students will also research local land use types by using a mapping tool such as Google Earth or GIS software to map their local city or neighborhood, identifying and labeling the different land use types and environmental hazards in their region. In addition to labeling their virtual maps by type of land use and hazards present, students will also distinguish the local congressional districts in their community and illustrate those on their map. An image of each student’s map can be printed and shared in a classroom gallery walk or uploaded to a virtual class page (Facebook or other) for other students to comment. After exploring the role of the Federal, State and local government in regards to environmental regulation, students will then work as a class to determine if their environmental concerns should be addressed to their Congressional Representative or local agency, in preparation for assignment 4.

3. Contribute a Comparative Analysis to a Peer-reviewed Blog
In order to gain more insight about the environmental needs of their community, and create an environmental proposal for one of their local or Congressional representatives, students will compare their cities to others around the world. Students will research the most sustainable cities in the world and the most toxic, composing a list of sustainable qualities and comparing those cities’ governments and structures. Students will create graphic organizers (such as a venn diagram) comparing their city to one of the most sustainable (such as Vancouver) and one of the most toxic cities (such as Beijing). Students should research the types of economic systems, government systems, standards of living, and cultural/religious viewpoints in these countries, in order to develop a hypothesis about whether these factors have any connection with the environmental sustainability of the cities. Students will then develop a checklist of key features of a sustainable city, and create a rating system borrowed from rating systems seen in their research, and finally, rate their own city on a scale of sustainability. Students will then submit an analytical written piece to their blog (created in Unit 1) which assesses their city’s sustainability as compared to others, and draws conclusions about the impact of emerging vs. developed economies, authoritarian vs. democratic governments, and cultural world views on sustainability.

4. Build a sustainable city
Illustrating a firm grasp of the core principles and values of a civil society, including the tension between majority rule and individual freedom, students must envision a city that allows all residents to enjoy the right to a healthy environment, while maintaining the advantages of modern life that a majority of citizens are accustomed to. Students will use a program such as “Sim City” to create a virtual model, or create a 3-D model, of their city transformed into a more sustainable city. Students will add and change features to their city in order to preserve local habitats, support sustainable and viable ecosystems, and manage waste efficiently. Concepts learned in previous assignments of this unit such as waste management and land use regulations, as well as concepts from previous units such as air quality and congressional districts, should be addressed
and illustrated by having students outline in their model (or in the presentation of their model) how waste will be managed, which new spaces will be created and whether current land use regulations permit these changes. Students should identify which aspects of their city contribute to cleaner air should also outline the current congressional districts of the city, and whether they propose any changes to these districts. Students should also address other key elements of a functioning city such as food production, transportation, equitable open green space and other infrastructure elements. Overall, students should be able to explain through their presentation of their model how districts influence land use, zoning and societal sustainability. Models can be displayed using a virtual or real gallery walk or multi media presentation, providing avenues for students to justify their choices and for peer review and comment. This assignment will help students move from theory to application, e.g. impact of policies, regulations and understanding of how it translates into a sustainable city.

5. **Write a letter to a public official/committee**

Students will research and evaluate local zoning regulations as well as state and federal laws that regulate land use. Students will also identify the city planners, local councils, zoning boards or citizens groups in their area that impact land use policy. Students will explore the roles of lobbyists and identify if there are any nonprofit, corporate, or other associations in their community that use lobbyists to influence legislation that affects their community or state. Using some of the hazards identified in assignment 2, as well as the comparisons made in assignment 3, students will write a letter to a local official/committee proposing a new land use/waste management policy or law that addresses the local hazards.

**Unit 4 - Water Rights**

Building on students’ understanding of land use and regulations, in this unit students examine the idea of federalism and the relationship between state and federal power through an examination of the different aspects of fresh-water production, its use, and who has the rights to the resource. Students will evaluate and analyze how storm water, river, and ground-water is used within their local community and in their state. By utilizing various forms of media (i.e. print, radio, television, internet, etc.) and analyzing its influence on American Government, students will be able to discuss and defend various water treatments and conservation projects underway at the local and global levels. With a foundational understanding of how the Constitution is interpreted by the Supreme Court, students should be able to cite their evidence through a Mock-Trial. They will use the previous Supreme Court Case *Arizona v. California* (1963) as their format for their mock-trial and use a supporting mock-trial handbook from the Constitutional Rights Foundation. Once the mock-trial is completed students will research a contemporary water issue in a developing country and compare governments and the challenges American organizations might face in trying to aid and supply fresh water to the desired country’s citizens.

**Unit 4 - Key Assignments**
1. “Effectively communicate how local communities get their water through an expository essay”: Students will explore the powers reserved to states as stated in the 9th and 10th amendments by examining how local state environmental engineering projects for storing water, creating reservoirs, aqueducts, and dams, have impacted California and its neighboring states. Students will then create an expository essay analyzing the different levels of state and national government and how the state’s relationship with its neighbors has created tension due to their consumption of water. Within their essay, students should also state how California gets their water (i.e. are these projects for clean water being funded by the state or federal government? Were there any local laws, legislation, and/or lobbying going on for specific water projects?), how other communities/States might or might not be affected by California’s water use (was there any lobbying for or against these water projects?), what their local community is doing to control or not control the consumption of water (local, statewide, neighboring states), what the State’s government is doing to monitor water use (Are there any state laws to rationing water?), and what kind of projects are currently being implemented to obtain fresh water for California (How are these projects being funded?).

Resources:
CA Water Information: http://www.water.ca.gov/
Water Rights: http://www.waterboards.ca.gov/waterrights/

2. “Cite environmental evidence through a mock-trial”: In assignment 2, students take a closer look at the judicial branch and the media through participation in a mock trial. Students first examine various methods used in water flow management and how the principles and applications of drainage engineering have improved rural community life for people of developing countries. Students also watch the documentary Blue Gold, to enhance their understanding of corporations and investors’ forms of negotiations towards developing countries in order to purchase and use their water resources. Students will then connect local and global water policies through a mock-trial. This trial will consist of an opposing and supporting side on a hypothetical international water policy. An example can be of an American corporation establishing a water purification plant in a rural village in Africa. In order to gather and prepare their evidence, students will use reliable internet resources from both local and global water policies. Students should use the internet resources from the first assignment found in this unit as well as the internet resources provided below this activity to support their research and position on international water laws. The Arizona v. California (1963) Supreme Court case will be used as a secondary resource/model to provide students with an understanding of how water rights issues have been resolved at the federal level. Students will need to refer back to this activity as a resource tool for the upcoming unit six.

Resources:
Blue Gold: http://www.bluegold-worldwaterwars.com/
Mocktrial protocols, procedures, and roles are attached to the provided link:

mocktrial.org/form.2015Judgehandbook.pdf
International Water Laws: http://www.internationalwaterlaw.org/

1. “Design a video blog entry on experiences of American Organizations and their involvement working in developing countries”: Students will compare and analyze how natural water systems have become contaminated, and the ramifications for those living in developing countries. They will compare political systems and the social consequences of living in those systems by developing an understanding of how local agencies check the contamination levels of water, and what is being done to help restore the natural balance. Utilizing the information about water issues and regulations from the previous assignments within this unit, students will interview experts and organizations that are helping communities obtain fresh drinking water within a developing country. Some interview questions include, but are not limited to the following:

1. What is the purpose, mission and vision of your organization?
2. How does your organization help developing countries and their communities?
3. What are some of the social challenges that come with reaching out to these countries?
4. What are some of the political challenges, both at home and abroad, that your organization faces going into these developing countries?
5. Does your organization have to comply with sanctions or other legal ramifications imposed by the United States Government?

Students will then share their experiences by utilizing the class blog (as a reflective tool and presentation medium) that was created in Unit 1. They will create a video blog entry reflecting on their responses obtained by their interviews, and present their findings to the rest of the class on presentation day. (NOTE: Students can investigate local and private agencies, and/or governmental water power agencies.)

Resources:
International Water Laws: http://www.internationalwaterlaw.org/

http://waterdata.usgs.gov/nwis
National water data website showcasing water information on a national level.

Supreme Court case filed against the State of California in regards to its water use from the Colorado River.

http://waterdata.usgs.gov/nwis
Usage: ___X__ Primary Text_____ Read in entirely or near entirety
National water data website showcasing water information on a national level.

http://www.bluegold-worldwaterwars.com/
Usage: _X_____ Primary Text_____ Read in entirely or near entirety
Resource for using the documentary “Blue Gold.”

URL Resources(s): http://www.water.ca.gov/
Usage: ___X___ Primary Text_____ Read in entirely or near entirety
California Department of Water Resources website.

URL Resources(s): http://www.internationalwaterlaw.org/
Usage: ___X___ Primary Text_____ Read in entirely or near entirety
International Water Law website providing resources for current global issues pertaining to water consumption in various countries.

URL Resources(s): http://www.waterboards.ca.gov/waterrights/
Usage: ___X___ Primary Text_____ Read in entirely or near entirety
California Environmental Protection Agency website providing information of California water rights and protocols.

URL Resources(s): http://water.epa.gov/lawsregs/
Usage: ___X___ Primary Text_____ Read in entirely or near entirety
United States Environmental Protection agency website showcasing laws and regulations for water use and consumption.

**Unit 5 - Electing the Alternative**

In this unit, students will discover various forms of energy efficiencies, such as solar heated water design, and how our various levels of government interact with society to convey their message. They will also examine and cite how domestic and industrial appliances and systems affect the environment as a whole. The students use knowledge of comparative governments and the challenges of democracy in framing arguments that will result in an international U.N debate at the end of Unit 6. Students will analyze how these forms of energy efficiency play a role in the development of governmental policy-making as it pertains to the various levels of government locally, within a state and all the way into the nation’s Department of Energy. Also, students will analyze and connect how the role of the media plays on the American mosaic. Students will connect these effects to individual rights and responsibilities of the citizen by presenting them to the school.

**Unit 5 - Key Assignments**
1. Predicting our Energy Efficiency: Students will investigate the relationship between power and energy and whether alternative energy is becoming more viable than traditional energy consumption. Through the use of research and/or a guest speaker, students will identify which governmental agencies control their consumption of energy. Students will then conduct an energy audit of their own home's energy consumption and recall their findings in the form of a reflective essay. The essay should introduce which department or agency controls the amount of energy being consumed, both at the local and national levels. They should also explain what this department's role is and what they do to supply power to society's homes and places of business. Once students complete the introductory portion of the essay they should then include their predictions of how much energy they consume as an individual, as well as an entire household. They must also explain how their audit has given them a greater understanding of needing to find alternative methods of energy consumption that would benefit their family. In the last section of the essay students must reflect on how these local, private, and governmental energy departments and agencies can better support their surrounding communities in being aware of energy consumption through various forms of media outlets.

2. Formulating a Promising Future by Grassroots Involvement: Students will use the information they’ve obtained in the prior assignment to create an energy conservation campaign on campus. This campaign should incorporate some specific energy conservation initiatives that will benefit both school and home. Students may wish to execute a plastic bottle recycling drive, in which the proceeds will go towards new forms of renewable energy for the school, such as motion sensors, LCD lighting, and the like. The campaign should include a written proposal, a timeline of action, measures of success, and a reflective written piece where students can evaluate the success or failure of their campaign.

3. Lobbying for Effective Solar Energy: Students will take on the role of a national environmental lobbyist group who will confront legislators with a particular environmental demand. They will then showcase their demand by creating a PSA by using various media outlets (e.g. youtube, vimeo, facebook, etc.) on different environmental energy resources and the role media plays in influencing new energy projects and local and governmental policies. The PSA should include a cumulative account of traditional energy use versus potential savings due to future usage of alternative energy resources. It should also include some of the newest alternative energy initiatives that are being introduced to ballots at the local, state and national levels. In their PSA students should be able to explain how some of these initiatives might affect their local communities and the state as a whole. The culminating event of the project will have students invite local and bipartisan community members and officials to an energy conservation event hosted by the energy conservation club they had created in the previous assignment.

**Unit 6 - “My Voice Creates My World”**
The final unit of the energy resources and government based course will culminate with a United Nations-type debate. Students, as they play the role of diplomats representing nations in the U.N., will apply and connect key concepts learned in the prior units of this course and create dynamic environmental policy solutions that relate to political, logistical and governmental regulation. Students will identify current policy and regulation of various countries along with their environmental challenges and debate/discuss the validity of such policy. Students will also have an opportunity to implement the knowledge they have acquired about energy resources and governmental protocol and propose a new international or national law or revise a law(s) that they believe is unjust or needs improvement. In addition, the student will articulate the social and economic ramifications of their proposal.

Unit 6 - Key Assignments

1. **Identify a country’s environmental resources and needs through an analytical essay**
   In this assignment students will be conducting research on one country assigned to them or the country of their choice. Students will get into 5-8 groups of 4-5 members. Each group represents a country (Japan, China, Mexico, France, India, etc.), and each group member individually researches and identifies elements of energy resources as they relate to governmental policy and regulation in their selected country (utilizing primary sources, secondary sources, documents, video clips, etc.) In their essay, they should discuss the various environmental policies and the role of government in implementing such policies within their selected country. Some focus should also be put on the economic impact of implementing regulation as well as making regulatory change. Students may use comments from peers for revisions after posting their analytical essay on their class blog. Other options include a real-time collaborative essay written by a team in a program such as google docs or by creating a wiki page. ([www.wikispace.com](http://www.wikispace.com), [www.pbworks.com](http://www.pbworks.com)). Students will be using their individual essay to then participate in the group discussion in assignment 2.

2. **Diplomatic role playing using technological modes of oral communication and collaboration**
   Using their analytical essay from the first assignment of Unit 6, students will regroup to compare their essays and conduct a student-led inquiry-based small group discussion to cohesively come up with a unified comprehensive country perspective encompassing a country’s governmental protocols, procedures and regulation in relationship to environmental resources and needs within their specific country. In addition, students will make observations of their country’s environmental regulatory system and attempt to describe the cause and effect of certain challenges (politically, economically and socially) due to the lack or change of regulation within their county. Students may research how various groups are currently taking an active role in changing the laws selected by the students. All of the groups should be able to answer the following questions during the seminar:
   1. Based on its impact on your country’s environment, which international or national law should be changed?
2. Why should your country’s law be changed?
3. What are some specific ways this law affects its citizens?
4. Are there economic issues behind changing the law? If so, explain what they are.
5. Who will be affected the most by the proposed change in the law? Citizens, the government, neighboring countries?
6. What are the potential consequences or ramifications of changing the law?

Once students have completed their small group discussions of the questions above, groups should be able to formulate a proposed resolution and effectively present it to the rest of the class. In the formal discussion and presentation, students should demonstrate and understanding of court hearing procedures, the ability to clearly support their perspective and provide evidence that supports their stance and to use digital media/visual displays to engage their audience. The evidence they use within their presentation can then be debated on at the upcoming United Nations debate.

http://www.unausa.org/global-classrooms-model-un/for-educators

3. United Nations Speech
In the same country teams established in Assignment 2, students will write a speech outlining an international or national law that should be changed, from their country’s perspective. The speech should articulate the environmental impacts of the proposed law change. The speech will be written collaboratively as a team, and students can use materials and content from this speech to prepare for the upcoming United Nations debate. The speech can be worked on collaboratively using platforms such as a closed Facebook group, edmodo, google docs, wikispaces, or other technological platforms. This speech will not be shared with anyone outside the country team.

4. Mock United Nations Debate Reflecting on Environmental laws pertaining to each government
Using a debate protocol, students will participate in a mock United Nations debate around global environmental issues (Protocols and procedures of how the American Model United Nations International executes their resolutions is provided in the resources section of this assignment). Each group, representing a country, will present its proposed resolution (a change to a law that impacts that country’s environment or resources) and other teams will decide whether they hold an affirmative or negative position on the proposed resolution by presenting affirmation or rebuttal arguments regarding the proposal. After debate and rebuttal, votes will be held on each resolution. The “Security Council”, a sub group consisting of one member from each group or a panel of teachers and administrators, will have the final decision on the proposal. All accepted proposals will be published in the class mock “United Nations Charter”. Mock debate can be posted on social media such as youtube, and the mock “United Nations Charter” can be posted on the class Facebook page, blog, or on public mock United Nations sites.
Course Materials:

Textbook
Edition:
Publication Date: 2006
Publisher: Pearson Prentice Hall
Author(s): William A. McClenaghan
URL Resources(s):
Usage: _X_ Primary Text ____ Read in entirely or near entirety
“American Government” is used as a primary text for students throughout the length of the course.

Title: Environment 8e (ISBN-13 (978-0470-94570-4)
Edition:
Publication Date:
Publisher: Wiley
Author(s): Peter H. Raven, David M. Hassenzahl (Author), Linda R. Berg (Author)
URL Resources(s):
Usage: ___X__ Primary Text_____ Read in entirely or near entirety
“” is used as an introduction to …

Title: California’s Education and the Environmental Initiative
Edition:
Publication Date:
Publisher:
Author(s):
URL Resources(s): www.californigeei.org/curriculum
Usage: __X____ Primary Text_____ Read in entirely or near entirety
Excerpts used as a textual source for an informational essay.
UNIT 4 Resources

Resources:

Additional Resources:
National water data website showcasing water information on a national level.
[http://water.epa.gov/lawsregs/](http://water.epa.gov/lawsregs/)
Edition:
Publication Date:
Publisher:
Author(s):
URL Resources(s):
Usage: _X_____ Primary Text______ Read in entirely or near entirety
Supreme Court case filed against the State of California in regards to its water use from the Colorado River.

Title:
Edition:
Publication Date:
Publisher:
Author(s):
URL Resources(s): [http://waterdata.usgs.gov/nwis](http://waterdata.usgs.gov/nwis)
Usage: ___X__ Primary Text______ Read in entirely or near entirety
National water data website showcasing water information on a national level.

Title:
Edition:
Publication Date:
Publisher:
Author(s):
URL Resources(s): [http://www.bluegold-worldwaterwars.com/](http://www.bluegold-worldwaterwars.com/)
Usage: _X_____ Primary Text______ Read in entirely or near entirety
Resource for using the documentary “Blue Gold.”

Title:
Edition:
Publication Date:
Publisher: