

Department of Environmental Science & Policy
College of Science
George Mason University

Course and Instructor Information

EVPP 505/POGO 750: Introduction to Energy & Climate Law

Spring 2023

Instructor Information

Instructor: Paul Bubbosh
Email Address: pbubbosh@gmu.edu
Office Hours: Fridays, 10am-3pm. Contact me by e-mail to schedule a time to meet in-person, online, or by telephone. In-person meetings available before and after class.

Course Information

Credit Hours: 3

Class Times: Wednesdays, 7:20pm to 10:00pm

Course Location: Arlington Campus, Room 318

Course Description:

This course will provide an overview of the major laws and policies that shape and regulate the complex energy and climate system in the United States and, to a greater degree, the world. The goal is to provide students with a framework for understanding and analyzing energy and climate laws and policies of today and those likely to be important in coming years. The course will review laws and policies across all major types of energy (fossil fuels, nuclear energy, and renewable energy), including issues related to extraction, conversion, distribution, use, and conservation. Laws and policies ranging from local, state, federal, and international levels will be included. Laws and policies will be presented again in the context of profound changes occurring in the climate sphere. The course will be largely empirical, but attention will be given to major theories. Most aspects of the course will be illustrated by reference to contemporary issues, client-based needs, court decisions, and changes in state, federal, and international policies.

About Your Course

Course Structure

This course attempts to cover a subject that is expansive in its scope and breadth. Energy and climate systems impact our lives and society in a pervasive manner and can be viewed through a variety of lenses, such as public policy, laws, and politics, to name just a few. The vastness of energy and climate systems yields to laws and policies that are disaggregated and highly fragmented, thus a thorough examination of energy and climate issues must examine the full spectrum of influences.

This course will approach the vast and complex subject of energy and climate systems methodically. First, we will frame energy and climate issues at a broad level which examines all the lenses and influences and establishes the scope of this course. Second, we will explore administrative law and agencies and how the three branches of government interact to create, implement, and interpret laws. Third, we will examine the electric power industry, fossil fuels, nuclear power, renewables, and transportation in greater detail. Finally, we will weigh how the issues impact disadvantaged communities and how best to assist these communities.

Within each module, we will cover legal fundamentals, major policy and societal issues, and legal controversies and cases. You should expect to learn about legal fundamentals through the pre-recorded lectures. You should expect to cover the remaining topics during our classroom discussions and group activities. The subject of environmental, energy, and climate justice issues will be interspersed throughout most modules.

What to Expect in this Course

This course consists of 14 modules or weeks of instruction. We will meet in the 15th week for group presentations. The course is in-person instruction. Attendance is mandatory.

The course employs a hybrid mode of instruction, whereby you listen to a pre-recorded video prior to attending class. During class you will engage in group discussion and activities. Work products will include occasional self-reflective blogs or short essays, three exams, and a final research paper and presentation. Student participation is expected and graded.

Each weekly module in Blackboard contains that week's student learning objectives and required assignments.

This course assesses students in four ways. First, students will be assessed on understanding and applying key legal and policy principles and concepts. This will be accomplished through the three exams. Second, students will be assessed on their participation in class discussions and group activities. Third, students will be assessed in writing blogs or short essays. Finally, students will be assessed on analytical skills in their final research paper.

An important consideration for your success in this endeavor is for you to slow down and think carefully about the work. The course is designed to first assess basic understanding of energy and climate law and policy fundamentals, but then shift to the higher level of learning (analysis, critical thinking, and creation), which equips you well for a future career in energy and the environment. You reach this higher plane of learning only through careful and considered work effort. Therefore, this course will focus on analytical capabilities.

Final Research Paper: The final research paper will be on a subject for an actual client. The potential topics for research will be provided to you at the start of the semester. Final research papers are group projects. The size of the group will depend on the number of students in the class. You will be allowed to submit your preference for the final research paper, but final selections will be made by the instructor. The final research papers will be submitted to the instructor and client. You will also present the highlights of your paper to the client. Exemplary papers will be given extra credit points and available for posting on Schar School's Center for Energy Science and Policy website (<https://cesp.gmu.edu/>).

Course Learning Objectives

When you successfully complete the course, you will be able to:

C1 - Explain the most important sections and principles of major energy and climate laws and policies and how these sections and principles affect energy and climate systems in practice.

C2 - Describe and critically analyze the most important judicial cases and philosophies associated with energy and climate law with the arguments advanced by the different parties and judges.

C3 - Evaluate the influences and interactions by governments, businesses, advocacy groups, communities, and other actors in shaping energy and climate policy and laws and how they have and will likely evolve over time.

C4 - Analyze energy and climate issues and provide recommendations for legal or policy changes.

Required Text and Other Materials

Textbook

The following textbooks are required for this course:

- Tomain, Joseph P. *Energy Law in A Nutshell* (4th Ed), 2022. West Academic Publishing.¹
- Heuer, Richards J & Pherson, Randolph H. *Structured Analytic Techniques*, (3rd Ed). CQ Press.
- Villa, C; Ahmad, N; et al. *Environmental Justice: Law, Policy & Regulation* (3rd Ed), 2020. Carolina Academic Press

Specific Technology Requirements & Skills for this Course

You are asked to bring your laptop to class to conduct internet searches during group exercises.

Learning online requires some basic knowledge of computer technology. At a minimum, you need to be able to:

- Navigate in and use Blackboard
- Create and save MS Word documents; review [MS Word training and tutorials](#) for PC users (all versions); [Word Help](#) for Mac users
- Create in and use MS PowerPoint
- Find basic resources on the Internet
- Create and organize files and folders on your computer
- Send, receive, and manage email

Evaluation and Grading Policy

In the table below, you will find a brief description of the various course requirements including assignment weights and frequency. A grading rubric will be provided in Appendix A and on the Blackboard course page. Please see Appendix B for a course schedule.

¹ 15% Student Discount: Students can save 15% when they purchase their book directly from the publisher at www.westacademic.com by using the Discount Code: HESTUDENT. The discount code can be applied to both print books and eBooks providing flexible, affordable options for students in the format that best suits their learning. Students who purchase their print books on the West Academic store receive free ground shipping and instant 14-day digital access to most casebooks while their book ships.

Course Requirements	Total Points	Weight
Exams: Based on pre-recorded videos, classroom lectures, and assigned readings, students answer questions on three online exams throughout semester. (3 exams)	0-50 points per exam (150 max points for all exams)	30%
Reflective Blogs or Short Essays: Students reflect on how the content of the weekly readings and activities relate to their own experiences, personal and/or professional. Identify patterns between the module's content and what you know and understand. (8 entries)	0-10 points per entry (80 max points)	20%
Student Participation: Students actively participate in discussions and group activities. (14 modules)	0-10 points per class (140 max points)	20%
Final Research Paper & Presentation: Students assigned topic and group. Students conduct research, analysis, writing, and presentation.	100 points	30%
Total (max)	470	100%

Grading Scale (UPDATED, Fall 2021)

A	94 - <100%
A-	90 - <94%
B+	88 - <90%
B	84 - <88%
B-	80 - <84%
C	70 - <80%
F	0 - <70%

Note, GMU no longer offers A+.

Assignment Policies

Assignments

Assignment Submission

In Appendix B and on the Blackboard course page, you will find due dates on assignments (research paper, blogs/essays, exams). If there is a discrepancy between Appendix B and the Blackboard course page, please contact the instructor for clarification.

Students are required to adhere to the following guidelines when submitting written work:

- Use APA format for proper citations (<https://apastyle.apa.org/>)
- SafeAssign: All policy memos and the research paper will be submitted through SafeAssign, an educational tool designed to identify plagiarism. You do not need a SafeAssign account. This software program assigns an originality score which you and your instructor will be able to see. Note, if your SafeAssign score is high you should be prepared to explain why if asked.

Assignment Feedback

The instructor will aim to evaluate assignments within 7 days following the due date, depending on the length of

the assignment and size of the class (i.e., longer assignments and larger classes may take longer). You will receive feedback in the My Grades area of the course which can be accessed via the navigation menu.

Late Policy for Assignments

If you are unable to meet any assignment due date, you must contact your instructor **prior to the due date** and arrange for an alternative due date. If an assignment is turned in passed the due date and without an agreed upon revised due date, the assignment will receive a penalty of 10 percent for each day late. For example, if an assignment has a 10-point total score, and the assignment is turned in two days late, then the final score is docked 2 points (20%) from the grade before my review and grade.

Extra Credit

Available on a discretionary basis.

Course Participation Policies

Class Attendance

Class attendance is mandatory. If you have more than 3 unexcused absences, your FINAL grade is reduced by a fraction of a letter grade (e.g., A to A-, A- to B+, etc.). For example, if your final grade is an A-, and you had four or more unexcused absences, your final grade is lowered to a B+. Excused absences are usually for documented medical reasons.

In-Class Participation

The course subject matter will be explored and developed through active and effective class discussions. Students are assessed on active and constructive class participation. Further, they are encouraged to make—and learn from—mistakes. Intellectual camaraderie fosters support, challenge, and collaboration. Classroom discussion is a form of community-centered learning where students learn from each other.

By “active” this means you should respond competently when called upon or when contributing to the discussions. You accomplish this by reading your assigned reading material and thinking about the information before class, and then trying your best to contribute and engage with others. By “effective class discussion,” this means contributing thoughtful and considered comments or questions. Avoid talking simply for the sake of talking. This is not genuine participation. As graduate students, you are expected to bring a higher-level of thoughtfulness, intellectual curiosity, and intelligence to the discussion.

Time Management Expectations

This is a graduate-level course which requires more attention and time to complete the assignments. It is expected that you look ahead to schedule and manage your time effectively. Plan to complete weekly course work across several days during the week rather than all on the day before class meets. This is critically important for the final research paper. Do not wait until the last month to work your research paper.

In-Class Etiquette

In this course, it is important to follow proper rules of group etiquette, especially communicating with others in a proper and respectful way both in the classroom and during group projects.

Inclement Weather or Other Reasons for Change in Class Meeting

If, for any reason, we cannot meet during our regularly scheduled class period, I will arrange to hold our class in a virtual live format (Zoom). This class may occur on the regularly scheduled class period or on a day and time when most students are available.

Group Work

Group work will be assigned as part of this course (in-class exercises, final research paper). Where group work is required, you are expected to work equitably within your group to complete collaborative group activities. For the final research paper, you will be given a sample group contract to fill out and sign. The purpose of this contract is

to ensure equitable distribution of the workload and agreed upon consequences for failure to comply with its terms and conditions. You will have an opportunity to assess how your group partners performed.

Course Protocols and Getting Help

Amendments to the Course

Changes to the course will be posted in the Announcements section of your course Blackboard page. If there is a discrepancy between the syllabus and the Blackboard course page, consult with your instructor.

Course Communication

When you have a question about an assignment or a question about the course, please contact your instructor. Email messages will be responded to within 24-48 hours.

If you have any questions, or if you feel like chatting about energy or environmental-related work or careers, please reach out to arrange some time to meet. I welcome the opportunity to engage with and provide advice to students embarking on an energy or environmental career, shifting to this career, or seasoned professionals.

General University Policies

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies:

ACADEMIC INTEGRITY

GMU has an Honor Code with clear guidelines regarding academic integrity, which covers cheating and attempted cheating, plagiarism, lying, and stealing. Plagiarism includes using third-party information on an exam without attribution to the source. The principle of academic integrity is taken very seriously, and violations are treated gravely.

GMU's honor code is available here: <http://www.gmu.edu/academics/catalog/9798/honorcod.html>.

Let's keep this simple: do not plagiarize. You are here to learn and grow intellectually as a person. If you are having difficulty keeping up with the work or it is too challenging, come see me. Do not risk disciplinary action for violating the honor code.

DISABILITY ACCOMMODATIONS

If you have a documented learning disability or other condition that may affect academic performance you should: (1) make sure this documentation is on file with Office of Disability Services, and (2) talk with me to discuss your accommodation needs at the beginning of the semester. I do not need to see your disability documentation as long as it is confirmed by the Office of Disability Services.

DIVERSITY/INCLUSIVITY

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study, and personal growth.

An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, political affiliations, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

STUDENT PRIVACY

Family Educational Rights and Privacy Act of 1974 (FERPA) is a federal law that governs the educational records of eligible students. It grants students continuous access to their educational records upon request, allows students to amend their records if they feel they're inaccurate, and restricts how and when their educational records can be disclosed.

When a student turns 18, or attends a postsecondary institution, FERPA rights belong to the student, not the parent. In general, Mason does not disclose non-directory information to third parties unless the student has provided consent, the release is to the parent of a dependent student, as required by § 23.1-1303.B.5 of the Code of Virginia, or the disclosure meets a qualified exception under FERPA. To find out more about FERPA see <https://registrar.gmu.edu/ferpa/>.

OTHER USEFUL CAMPUS RESOURCES

WRITING CENTER: Robinson Hall B213; 703-993-1200; <http://writingcenter.gmu.edu>. I highly recommend the Writing Center. I have used it in the past, and I value their input.

UNIVERSITY LIBRARIES: "Ask a Librarian" <http://library.gmu.edu/mudge/IM/IMRef.html>

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): 703-993-2380; <http://caps.gmu.edu>

LEARNING SERVICES: 703-993-2999; <http://caps.gmu.edu/learningservices>; offers many good study skills workshops!

ACADEMIC COUNSELING PROGRAM: 703-993-2380;
<http://caps.gmu.edu/learningservices/academiccounseling.php>

UNIVERSITY POLICIES: The University Catalog, <http://catalog.gmu.edu>, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at <http://universitypolicy.gmu.edu/>. All members of the university community are responsible for knowing and following established policies.

APPENDIX A GRADING RUBRICS

Exams

The mid-term exam includes multiple choice and short essay questions.

Participation

The objective in grading participation is to ensure students engage, share, problem solve, and collaborate on issues presented in class. You learn and retain knowledge by applying knowledge in exercises.		
Unsatisfactory Participation (0-3 pts)	Satisfactory Participation (4-7 pts)	Exemplary Participation (8-10 pts)
Student did not attend class (0 pts) or did not contribute satisfactorily to class discussion or group activities, or student did not come prepared to class.	Student attended class, came prepared (read material), and contributed to classroom discussions.	Includes criteria in satisfactory participation, and student offered insights that furthered the discussion, commented well on other student's comments, led discussions, and posed thoughtful comments.

Blogs or Essays

The objective of self-reflective blogs and short essays is to carefully think about how the material relates to you, personally and/or professionally. The goal is for you to make and share connections between the material and your own life's experiences. This helps in your comprehension and retention of material, especially cross-disciplinary topics. Avoid regurgitating material covered in the reading. If you cannot think of how the material might relate to you, you should opine on how the material be relate to others.		
Unsatisfactory entry (0-3 pts)	Satisfactory Entry (4-7 pts)	Exemplary Entry (8-10 pts)
Student fails to articulate self-reflective connections with the material or fails to relate connections with others or regurgitates material without any self-reflection.	Student draws connections between the material and their own lives, either personally or professionally.	Includes criteria for satisfactory entry, and student's reflection provides significantly meaningful insights that others can learn from.

Research Paper

The final research paper is evaluated on how well you respond to the following three areas:

- A. Analysis
- B. Format & Presentation
- C. Grammar

	Unsatisfactory	Satisfactory	Exemplary
Analysis (50 pts)	The paper examines only a few of the potential issues, influences, angles on the question posed (leaving much unanalyzed). The analysis is surface-only and lacks depth in thinking. The analysis is one-sided and fails to consider other angles. The analysis is obvious and apparent, which reflects a lack of analytic rigor. (0-20 points)	The paper examines several issues, influences, and angles on the question posed (leaving only a few unanalyzed). The analysis is deep and reflects careful consideration of the issues. (21-40 points)	The paper examines all the various possible issues, influences, and angles on the question posed. The analysis reflects deep and comprehensive research (e.g., includes interviews with experts). The analysis discusses the “3 rd order” implications, effects, and consequences of the findings (i.e., the future implications of your findings). (41-50 points)
Format & Presentation (25 pts)	The paper does not contain the required sections (see "Satisfactory"); is poorly organized; does not meet the page or format requirements; or lacks appropriate APA reference style. (0-10 points)	The paper contains a title page, executive summary, body with appropriate sub-headings, conclusion or recommendations, list of references in APA format, and is within a 20–40-page limit. Presentation conveys salient points of paper (11-20 points)	Meets the requirements of satisfactory, and the paper’s presentation to client or class is well rehearsed and delivered in a professional and concise manner. (21-25 points)
Grammar (25%)	The paper is poorly written with several grammatical and punctuation errors; poor word choices; weak transitions, awkward sentences, and generally difficult to follow. (0-10 points)	The paper is well written with only a few grammatical and punctuation errors. The paper has an easy-to-read flow. (11-20 points)	The paper has no errors in grammar and punctuation. The sentence structure is strong (noun + verb), word choices are precise, section transition is smooth. The paper is easy to read. (21-25 points)
Plagiarism	Mason requires that papers be submitted through a plagiarism checker (SafeAssign). Under no circumstance should you copy material from any other source (not yours) without proper attribution. If you copy material verbatim, put it in quotes and include a reference to the source. If you decide to synthesize another person’s findings in your own words, you must reference the source. Plagiarism will result in disciplinary action.		

**APPENDIX B
TENTATIVE COURSE SCHEDULE**

ELN = Energy Law in a Nutshell
SAT = Structured Analytic Techniques
EJ = Environmental Justice

WEEK	COURSE OBJECTIVES ⁺	TOPICS	READINGS	ASSESSMENTS & DUE DATES
1 (1/25)	C1	<ul style="list-style-type: none"> • Introductions • Syllabus • Framework on energy, analysis, and justice 	<ul style="list-style-type: none"> • ELN: Ch 1(E & F) & 2 • SAT: Ch 1 (1.2, 1.3, 2, 3) • EJ: Ch 1(B) 	Research paper selection: 1/31
2 (2/1)	C1	<ul style="list-style-type: none"> • Administrative law 	<ul style="list-style-type: none"> • ELN: Ch 3 • EJ: 4 (B & C), 10 (C) 	Blog: 2/7
3 (2/8)	C2, C3, C4	<ul style="list-style-type: none"> • Electric Sector and Decision Making • Guest Speaker: Shay Banton (research topic) 	<ul style="list-style-type: none"> • ELN: Ch 4 & 8 	Exam 1: 2/14
4 (2/15)	C2, C3, C4	<ul style="list-style-type: none"> • Coal, Water, & Public Lands • Guest Speaker: Marcus Kim (research topic) 	<ul style="list-style-type: none"> • ELN: Ch 7 (A, B, D) • EJ: Ch 4 (D & E), 5 (C) 	Blog: 2/21 Final Research Paper Group Contract Due: 2/21
5 (2/22)	C2, C3, C4	<ul style="list-style-type: none"> • Coal & Air Quality • Guest Speaker: Elliot Meyer (research topic) 	<ul style="list-style-type: none"> • ELN: Ch. 7 (C & F) • EJ: Ch 2 (B, Mizutani article), (C Saha & Mohai article), 5 (A & B) 	Blog: 2/28
6 (3/1)	C2, C3, C4	<ul style="list-style-type: none"> • Oil 	<ul style="list-style-type: none"> • ELN: Ch 5 • EJ: Ch 11 • EJ: Ch 6 (A & B – <i>In re Gulf of Mexico</i> and <i>In re Avenal Power Center</i>) 	Blog: 3/7
7 (3/8)	C2, C3, C4	<ul style="list-style-type: none"> • Natural Gas 	<ul style="list-style-type: none"> • ELN: Ch 6 • EJ: Ch 6 (D) 	Exam 2: 3/21
	SPRING BREAK			
8 (3/22)	C2, C3, C4	<ul style="list-style-type: none"> • Nuclear Power 	<ul style="list-style-type: none"> • ELN: Ch 9 	Blog: 3/28
9 (3/29)	C2, C3, C4	<ul style="list-style-type: none"> • Hydropower 	<ul style="list-style-type: none"> • ELN Ch 10 • EJ: Ch 12 	Blog: 4/4
10 (4/5)	C2, C3, C4	<ul style="list-style-type: none"> • Renewable Energy 	<ul style="list-style-type: none"> • ELN: Ch 11 A (1-4), C 	Exam 3: 4/11
11 (4/12)	C2, C3, C4	<ul style="list-style-type: none"> • Energy Efficiency & Conservation 	<ul style="list-style-type: none"> • ELN: Ch 11 A (5), B 	Blog: 4/18
12 (4/19)	C2, C3, C4	<ul style="list-style-type: none"> • Energy & Transportation 	<ul style="list-style-type: none"> • ELN: Ch 7 (E) 	Blog: 4/25
13 (4/26)	C2, C3, C4	<ul style="list-style-type: none"> • International Energy 		

14 (5/3)	C2, C3, C4	<ul style="list-style-type: none"> Community Energy 	<ul style="list-style-type: none"> EJ: Ch 13, 14 (F) 	Final Research paper due: 5/3
15 (5/10)				Final Research Paper Presentations (5/10)