The Graduate School of Political Management

THE GEORGE WASHINGTON UNIVERSITY

M.P.S. in Legislative Affairs Spring Semester 2022 January 13 – May 5, 2022

Domestic Energy & Environmental Policy LGAF6264.LH1 3 Credits

Thursday evenings, 6:00-8:00 p.m. Hall of the States

Jeff Lane

Adjunct Professor of Legislative Affairs <u>lanej@gwu.edu</u> or jeff.lane38@gmail.com Office hours: 5:30 – 6:00 p.m., right before class, in the Hall of the States lobby, or Zoom call by appointment

Course Description

This is a graduate level course in U.S. energy and environmental policy. We will focus on several key topics: (a) an overview of energy and environmental policymaking in the United States; (b) an overview of energy resources worldwide and in the United States; (c) the use of fossil fuels — oil and gasoline, coal, and natural gas; (d) the use of non-fossil sources of energy and renewable energy sources — nuclear power, solar, wind, biomass, hydropower and others; (e) energy, the environment, and climate change; (f) reducing the demand for energy and protecting the environment through conservation and efficiencies; (g) an analysis of recent energy and environmental legislation and regulation; and finally (h) the future of U.S. energy and environmental policymaking.

The Learning Objectives for this Course

By the end of this course, you will be able to:

- (a) Demonstrate an understanding of U.S. domestic energy and environmental policy and related scientific, technological and political issues.
- (b) Describe how energy needs are met in critical areas of U.S. life, from transportation through transmission of electricity.
- (*c*) Explain the major legislative, regulatory and policy initiatives in the area of energy and the environment.
- (d) Convey your understanding of energy and environmental terms, concepts, issues, and

industry sectors, from fossil fuels to renewables.

(e) Convey your understanding of energy terms, concepts, issues and policy in writing and in speech.

How Your Grade Will be Determined

Research Paper: You will write a 10 to 12-page research paper (2500 to 3000 words, 12 pt font, double-spaced, not counting footnotes, bibliography, charts and figures) on a contemporary energy or environmental policy issue. In this paper, you will (a) summarize the current state of the federal policy related to this issue; (b) advocate for federal policy changes related to this issue that you think are desirable; and (c) describe relevant policy actors and institutions in the federal executive and legislative branches who would be most responsible for making such changes, and list and briefly describe the interest groups that would be most likely to support them.

You must submit your research paper topic and short outline to me no later than March 12. The paper will be due April 13 and will constitute 40 percent of your course grade. Unexcused late submission of your paper will result in a reduction of your grade.

Class Participation and Oral Presentation: Each student will give a 15-minute presentation of his or her research findings and advocacy in one of the last two class sessions. Students are also expected to participate actively in class discussions throughout the semester. Together this will count as 20 percent of your final grade.

Final Examination: The final examination will be a take-home, open-book, open-note examination. You will be asked two broad questions (you will pick two from three options) related to energy policy and youranswers will be grounded on the reading, lectures and discussions that we have done during the semester. This will count as 40 percent of your final grade.

Grade*		Grading Standard
А	94-100	Your work is outstanding and ready for submission in a professional
		environment. Your material, effort, research, and writing demonstrate
		superior work.

Following is the grade scale for all GSPM classes:

A-	90-93	Represents solid work with minor errors. Overall, excellent work.
B+	87-89	Very good. Represents well-written material, research, and presentation, but needs some minor work.
В	83-86	Satisfactory work, but needs reworking and more effort. Note that although not a failing grade, at the graduate level, anything below a "B" is viewed as unacceptable.
В-	80-82	You've completed the assignment, but you are not meeting all of the requirements.
C+	77-79	Needs improvement in content and in effort. Shows some motivation and concern.
С	73-76	Needs reworking, improved effort, and additional research. Shows minimal motivation and concern.
C-	70-72 (lowest grade to pass)	Poor performance. Major errors, too many misspellings, problems with accuracy, etc.
F	Below 70	Unacceptable performance, or inability to submit the assignment.

*Please note that you may be penalized for late submission of assignment(s).

Textbooks:

Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World* (Penguin, 2012) Walter A. Rosenbaum, *Environmental Politics and Policy*, 11th Ed., (CQ Press/SAGE, 2020)

Suggested Sources and Online Readings:

The U.S. Energy Information Administration, *Energy Explained, Your Guide to* Understanding Energy <u>http://www.eia.gov/energyexplained/index.cfm</u>

Suggested sources for current energy policy news:

RealClear Energy, Politico, The Hill: <u>http://www.realclearenergy.org</u> <u>http://www.politico.com/energy-and-environment</u> <u>http://www.politico.com/tipsheets/morning-energy</u> <u>http://thehill.com/policy/energy-environment</u>

The Bipartisan Policy Center, *The Executive Branch and National Energy Policy: Time for Renewal* (November 2012) <u>https://bipartisanpolicy.org/wp-content/uploads/2019/03/BPC_Governance_Report_0.pdf</u>

Michael Ratner, 21st Century U.S. Energy Sources: A Primer, Congressional Research Service (2018 <u>https://fas.org/sgp/crs/misc/R44854.pdf</u>

International Energy Agency, *World Energy Outlook - Overview* (2020) https://www.iea.org/reports/world-energy-outlook-2020#h

The Aspen Institute Energy and Environment Program, *Energy in a Time of Innovation and Volatility*, Anne Pramoggiore & Clint Vince, Co-Chairs, 2016 Energy Policy Forum <u>https://www.aspeninstitute.org/publications/2016-energy-policy-forum-report/</u>

The Aspen Institute Energy & Environment Program, *Disruptive Forces and The Energy System's Response to Change*, Ernest Moniz & Anne Pramoggiore, Co-Chairs, 2017 Energy Policy Forum https://assets.aspeninstitute.org/content/uploads/2017/11/2017EnergyPolicy.pdf

Blackboard Site

A Blackboard course site has been set up for this course. Each student is expected to check the site throughout the semester, as Blackboard will be the primary venue for outside classroom communications between the instructors and the students. Students can access the course site at https://blackboard.gwu.edu. Support for Blackboard is available at 202-994-4948 or <u>helpdesk.gwu.edu</u>.

Personal Electronic Devices:

While taking notes in class by hand is recommended, students may use personal electronic devices in class only to reference course materials and take notes. Students may not do anything else with personal devices during class. If you wish to use a smaller electronic device such as a smartphone for any of these purposes, please notify me beforehand. Texting, emailing and other activities unrelated to class are not allowed. Each class session will include a break during which you can use your phone for those purposes.

Academic Integrity:

All members of the university community are expected to exhibit honesty and competence in their academic work. Students have a special responsibility to acquaint themselves with, and make use of, all proper procedures for doing research, writing papers, and taking exams. Members of the community will be presumed to be familiar with the proper academic procedures and will be held responsible for applying them. Deliberate failure to act in accordance with such procedures will be considered academic dishonesty. Academic dishonesty is defined as "cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information." Acts of academic dishonesty are a legal, moral, and intellectual offense against the community and will be prosecuted through the proper university channels. The University Code of Academic Integrity can be found at http://studentconduct.gwu.edu/code-academic-integrity.

In the Legislative Affairs program, we enforce a *zero tolerance* policy for plagiarism. If there is evidence that you plagiarized your research assignment, you will be given an "F" for the assignment and an "F" for the course. That also means you'll probably be kicked out of our master's program. To guard against plagiarism, we use SafeAssign, a feature found in Blackboard. All papers must be submitted to this site. More on this when we get closer to our research assignment.

Support for Students with Disabilities:

GW's Disability Support Services (DSS) provides and coordinates accommodations and other services for students with a wide variety of disabilities, as well as those temporarily disabled by injury or illness. Accommodations are available through DSS to facilitate academic access for students with disabilities. Please notify your instructor if you require accommodations. Additional information is available at http://disabilitysupport.gwu.edu/.

In the Event of an Emergency or Crisis during Class

If we experience some an emergency during class time, we will try to stay at this location until we hear that we can move about safely. If we have to leave here, we will meet at **[fill in proximate location]** in order to account for everyone and to make certain that everyone is safe. Please refer to Campus Advisories for the latest information on the University's operating status: <u>http://www.campusadvisories.gwu.edu/</u>.

Out of Class/Independent Learning Expectation

Over the course of the semester, students will spend at least 2 hours (100 minutes) per week in class. Required reading for the class meetings and written response papers or projects are expected to take up, on average, 7 hours (350 minutes) per week. Over the course of the semester, students will spend 25 hours instructional time and 87.5 hours preparing for class.

Course Evaluation

At the end of the semester, students will be given the opportunity to evaluate the course through GW's online course evaluation system. It is very important that you take the time to complete an evaluation. Students are also encouraged to provide feedback throughout the course of the semester by contacting any/all of the following:

Dr. Casey Burgat Director, Legislative Affairs Program <u>cburgat@email.gwu.edu</u> 202-994-1149

Suzanne Farrand Director of Academic Administration, GSPM <u>sfarrand@gwu.edu</u> | 202-994-9309

COURSE CALENDAR

(The instructor reserves the right to alter course content and/or adjust the pace to accommodate class progress. Students are responsible for keeping up with all adjustments to the course calendar.)

January 13

Week 1: Introduction and Energy Basics

Class Overview Discuss Syllabus and Class Requirements and Expectations Personal Introductions Energy Basics – lecture and discussion

Readings: Yergin, The Quest, Introduction and Prologue Rosenbaum, Chap. 1, "After Earth Day", pp. 1-13 Remarks by President Biden announcing energy and environmental executive actions (1/27/21) (link)

January 20

Week 2: An Overview of Energy Policymaking Institutions in the United States

Executive Branch: Key Cabinet Agencies and Independent Regulatory Agencies, White House and OMB Congress: Committees of jurisdiction and key members Role of the courts Role of states and local governments

Readings:

Bipartisan Policy Center, *The Executive Branch and National Energy Policy: Time for Renewal* (2012) (<u>link</u>) Rosenbaum, Chap. 3, "Making Policy: Governmental Institutions and Politics" Opening Statement of Energy Secretary Nominee Jennifer Granholm, Senate Energy and Natural Resources Committee (1/27/21) (<u>link</u>) Opening Statement of EPA Administrator Michael Regan, Senate Environment and Public Works Committee (2/3/21 – statement begins at 33:30 of recorded hearing) (link)

January 27

Week 3: Overview, Policy Context and Outlook

World and U.S. energy resources - basics, trends and outlook

Energy and Environmental Policy Context – From Scarcity to Abundance, Volatility in the Marketplace, Comparing Presidencies

Readings:

IEA World Energy Outlook - Overview (2020) <u>(link)</u> The Aspen Institute, Energy in a Time of Innovation & Volatility, pp. 1-10, pp. 16-25 (<u>link</u>) CRS, 21st Century U.S. Energy Sources: A Primer (2017) (Summary and Introduction – through p. 3) (<u>link</u>) Vig & Kraft, Environmental Policy (Chap. 4) (Blackboard electronic reserves)

February 3

Week 4: Fossil Fuels: Oil and Coal

Basics, trends and outlook Unconventional methods impact on oil production Geopolitics "Fracking" and other environmental issues U.S. policy affecting oil and coal

Readings:

Yergin, *The Quest*, chapters 11-14 EIA's *Energy Explained*: Oil, Coal Other Reading TBD

<u>Guest Speaker</u>: Chris Smith, former Assistant Secretary for Fossil Energy at the Department of Energy

February 10

Week 5: Fossil Fuels: Natural Gas and Liquefied Natural Gas (LNG)

Basics, trends and outlook Unconventional methods impact on production Role in electricity generation Liquefied natural gas exports "Fracking" controversy

Readings:

Yergin, *The Quest*, chapters 15-16 EIA's *Energy Explained*: Natural Gas and LNG

February 17

Week 6: Nuclear Power

Basics, History Nuclear power generation in United States Issues: Safety, Environmental, and Proliferation Nuclear Waste Policy

Readings: Yergin, The Quest, chapter 18 and chapter 20 (pp. 407-418) Aspen Institute, The Future of Nuclear Energy in the United States (2017), pp. 3-9 (Executive Summary and Status of Existing Nuclear Power Plants) <u>link</u> Rosenbaum, Chap. 8, pp. 247-255

<u>Guest Speaker</u>: Chris Hanson, Commissioner of the U.S. Nuclear Regulatory Commission, former Senior Advisor in DOE's Office of Nuclear Energy, Senate Energy and Water Appropriations Subcommittee staffer

February 24

Week 7: Solar, Wind, and other Renewables

Basics, Trends and Outlook Economics of renewables Federal and state incentives and regulation

Readings: Yergin, *The Quest*, chapters 27-30 Rosenbaum, Chap. 8, pp. 255-260

March 3

Week 8: Electricity Generation and the Utility Industry

The modern electric grid Challenges for electric utilities; distributed generation Grid resiliency and cyber security Environmental regulation of the utility industry

Readings: Yergin, The Quest, chapters 17, 19, 20

Guest Speaker: Tom Craig, Director of Federal Government Affairs, Duke Energy, and former majority clerk for Senate Energy and Water Appropriations Subcommittee

March 10

Week 9: Energy Efficiency, Energy Storage, Infrastructure

Efficiency as a resource Energy Storage Transportation & Distribution

Readings: Yergin, The Quest, chapters 31-32 Chairman's Memorandum, House E&C Committee, Hearing on "Saving Energy: Legislation to Improve Energy Efficiency and Storage" (Feb. 7, 2020) <u>link</u> "How energy storage is starting to rewire the electricity industry," (March 22, 2018) <u>theconversation.com</u>

Research Paper Topic and Outline Due – March 12th

March 17, Spring Break ---

March 24

Week 10: Energy and Climate Change

US Policy Issues Paris Climate Agreement

Readings:

Yergin, *The Quest*, chapters 23-26 Rosenbaum, Chap. 10, "The Politics and Policy of Global Change"

March 31

Week 11: Recent Federal Legislation and Regulation

Energy Policy Act of 2005 Energy Independence and Security Act of 2007 American Recovery and Reinvestment Act of 2009 EPA Clean Power Plan Crude oil exports ban and wind and solar tax incentives

Readings: CRS Reports, relevant news articles – will send email with links

<u>April 7</u>

Week 12: The Future of Energy & Environmental Policy

The Trump & Biden Administrations' energy and environmental policy Pending Court Cases International Issues

Readings:

Yergin, *The Quest*, chaps. 33-35 & Conclusion Additional Readings TBD

<u>April 14</u>

Week 13: Presentations

Research Papers Due April 13 Oral presentations of Research Papers and discussion, part 1.

<u>April 21</u>

Week 14: Presentations and Review

Oral Presentations and discussion, Part 2 Exam Review Final Examination Take Home Given Out

Final Exam Due on May 5

Copyright Statement

Unless explicitly allowed by the instructor, course materials, class discussions, and examinations are created for and expected to be used by class participants only. The recording and rebroadcasting of such material, by any means, is forbidden.