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The Proceedings appear four times a year as an adjunct to all of the PSO journals and are among the most widely distributed sources in the policy world. All Proceedings are permanently available online at https://ipsonet.org/publications/open-access/proceedings
Material for the Proceedings, including syllabi, meeting and professional announcements, scholarships and fellowships should be sent to the Proceedings editor, Daniel Gutierrez at dgutierrezs@ipsonet.org
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It is no secret that the curriculum of many universities has been greatly impacted by the virus and world warming, as well as by increasing student preference for subjects directed more at contemporary concerns. Rather than a problem, that is a challenge for all of us to be aware and open to innovation more than ever. Time, an old Scottish lay goes, makes some dear things outdated.

The PSO has always been and is glad to publish syllabi as a service to the education community. We maintain a curriculum section on our website at https://ipsonet.org/sin-categoria/policy-studies-curriculum-and-courses/ and urge a look at videos of our conferences at https://www.youtube.com/user/PSO73/playlists

We realize that every teacher has what is distinctly their own unique approach, and that their interests are reflected in their lesson plans. And we welcome the material of their teaching, be it lecture notes, websites, or reading lists or whatever else they would like to share.

This issue of Proceedings reflects the diversity within the policy community that is a basic strength; take it also as an invitation to submit. We are anxious to dialogue, discuss, and promote.

Paul Rich  
President, Policy Studies Organization  
pauljrich@gmail.com
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American Foreign Policy
Professor Edward Rhodes, George Mason University

Course Description:

This class is an upper-level undergraduate introduction to the history of American foreign policy, the process of American foreign policymaking, and current issues in American foreign policy. Given the role of the United States on the world stage, American foreign policy has a significant impact on lives across the world, affecting regional stability as well as political, economic, and social development. At home, here in America, decisions on foreign policy significantly impact not only American prosperity and the safety of the American people but also the evolution of America’s political institutions and political culture. Understanding the forces and influences shaping America’s interaction with states and nations around the world thus is a critical element in understanding today’s world and predicting tomorrow’s.

Learning Objectives:

Upon completion of this course, students should have acquired an understanding of:

- The historical evolution of American foreign policy and the historical, intellectual, and cultural forces that have shaped and continue to shape American foreign policy;
- The institutions and processes of American foreign policymaking; and
- Foreign policy challenges facing the United States.

Course Organization:

This course is being taught in a distance learning format. Although we will have opportunities to meet with each other virtually via Zoom, we will not meet face-to-face. Students will need internet access to complete this course.

All course requirements need to be completed and all assignments must be submitted by the final day of the course, Thursday, December 3. That deadline is hard and fixed.

The course is self-paced. Students may proceed learning the course material and submitting the assignments at whatever pace they like.
**WARNING:** It will be very nearly impossible to complete the entire course in the last couple of weeks of the term. Last-minute completion of assignments typically results in poor results. Poor results will result in poor grades. Poor grades include C-, D, and F grades for the course. C- and D grades do not count for departmental credit. F grades do not count for university credit. The instructor will grade honestly. Last-minute submission of assignments is not a reason for leniency.

The course is organized into 34 topical units. Each unit contains course materials and a required, graded assignment. It is strongly recommended that students complete the units in the order presented in the syllabus. This said, except for the very first assignment (the Plagiarism worksheet), students may complete these units in whatever sequence they prefer.

On a roughly weekly basis, the class will meet virtually during the course’s assigned meeting time. The dates of our virtual meetings are indicated on the course syllabus. These virtual class meetings will NOT be lectures. They are intended to offer an opportunity for students to pose questions to the professor and to each other, and for class members to engage in discussion about specific course topics. While I hope that these class meetings run for the full, available time, if there are no questions and if discussion dries up, the meeting will simply end. For students to gain maximum benefit from these virtual meetings, they will need to have completed the course material relevant for that meeting’s topic of discussion. Attendance and participation in these virtual class meetings is encouraged, though not required.

Students are encouraged to organize their own study groups. If any two or more students email with a request, I am happy to create a chat-room for those particular students on the course Blackboard site.

**Course Materials:**

Class members are responsible for reading, watching, or listening to all assigned course materials. Study groups and the sharing of reading notes are encouraged. Used, shared, rented, or borrowed copies of assigned materials are fully acceptable.

The following books are required reading:


The texts are available at the campus bookstore. Used or discounted copies of these books are also generally available through online retailers such as Amazon or AbeBooks. Prices may vary substantially. In particular, used copies of the McDougall and Meade books should be available for very modest prices.

Other course materials will be available online.

**Requirements and Grading:**

Class members are required to:

- Complete all assigned readings and view/listen to all assigned media items; and
- Complete all required and graded assignments.

While class members are strongly encouraged to work together in study groups to master course materials, all assignments are individual work. Students are not to give or receive help on any graded assignment. Academic dishonesty – “cheating” and plagiarism – will not be tolerated or excused.

All assignments must be handed in via the course Blackboard site. Students should retain a copy of their assignment for their records.

Course grading is **NOT** on a curve. Class members are not competing with each other for marks.
Course Topics:

Unit 1: Introduction:

- Watch Rhodes, “Welcome to GOVT 344” (available in “Media” on course Blackboard site).
- Read and review syllabus (available in “Syllabus” on course Blackboard site).
- Read George Mason University English Department’s “Plagiarism” (available online at https://writingcenter.gmu.edu/guides/plagiarism).
- Complete and hand in Assignment 1. **THIS ASSIGNMENT MUST BE SUCCESSFULLY COMPLETED PRIOR TO SUBMITTING ANY OTHER ASSIGNMENT.**

Unit 2: Theories of Foreign Policy:

- Watch Rhodes, “The Sovereign State” (available in “Media” on course Blackboard site).
- Watch Rhodes, “The Westphalian System” (available in “Media” on course Blackboard site).
- Read Hook, Chapter 3.
- Complete and hand in Assignment 2.

Unit 3: The American Novus Ordo Seclorum:

- Watch Rhodes, “Novus Ordo Seclorum” (available in “Media” on course Blackboard site).
- Read McDougall, Chapter 1.
- Read “The Declaration of Independence” (available online at: https://www.archives.gov/founding-docs/declaration-transcript).
- Read John Quincy Adams, “Fourth of July Speech” (available in “Course Materials” on course Blackboard site).
- Read Nye, Chapter 1.
- Complete and hand in Assignment 3.

Unit 4: Separating America from Europe (I): Avoiding Entanglement

- Read Rhodes, “American Foreign Policy Tradition: Introduction” (available in “Course Materials” on course Blackboard site).
- Read McDougall, Chapter 2.
- Read “Washington’s Farewell Address” (available in “Course Materials” on course Blackboard site).
• Complete and hand in Assignment 4.

**Unit 5: Separating America from Europe (II): Solving the British Problem**

• Watch Rhodes, “The War of 1812” (available in “Media” on course Blackboard site).
• Watch “The War of 1812” (available online at https://www.youtube.com/watch?v=qMXqg2PKJZU).
• Complete and hand in Assignment 5.

**Unit 6: Separating America from Europe (III): The Monroe Doctrine:**

• Watch Rhodes, “The Two-World Solution” (available in “Media” on course Blackboard site).
• Read McDougall, Chapter 3.
• Watch “The Monroe Doctrine” (available online at https://www.youtube.com/watch?v=Woh4gwIFpic).
• Complete and hand in Assignment 6.

**Unit 7: The Imperative to Expand (I): The Mississippi Jugular**

• Watch Rhodes, “New Orleans: the Essential City” (available in “Media” on course Blackboard site).
• Read Rhodes, “Collection of Documents on the Louisiana Purchase” (available in “Course Materials” on course Blackboard site).
• Complete and hand in Assignment 7.

**Unit 8: The Imperative to Expand (II): Pre-emptive Expansion**

• Read McDougall, Chapter 4.
• Watch Rhodes, “The Polk Corollary to the Monroe Doctrine” (available in “Media” on course Blackboard site).
• Read Rhodes, “Collection of Documents on the Annexation of Texas” (available in “Course Materials” on course Blackboard site).
• Read Rhodes, “Collection of Documents on the Mexican-American War and the Polk Corollary” (available in “Course Materials” on course Blackboard site).
• Complete and hand in Assignment 8.
Unit 9: The Imperative of Unity

- Watch Rhodes, “America’s Original Sin” (available in “Media” on course Blackboard site).
- Watch Rhodes, “A House Divided Cannot Stand” (available in “Media” on course Blackboard site).
- Read Rhodes, “Collection of Documents on Civil War Diplomacy and French Intervention in Mexico” (available in “Course Materials” on course Blackboard site).
- Complete and hand in Assignment 9.

Unit 10: The Triumph of Classical American Foreign Policy

- Watch Rhodes, “The Completion of the Old Testament of American Foreign Policy” (available in “Media” on course Blackboard site).
- Richard Olney, Letter to Thomas Bayard (available in “Course Materials” on course Blackboard site).
- Complete and hand in Assignment 10.

Unit 11: Industrialization and the Closing of the Frontier

- Watch Rhodes, “The Emergence of Modern America” (available in “Media” on course Blackboard site).
- Read Theodore Roosevelt, “The Strenuous Life” (available in “Course Materials” on course Blackboard site).
- Complete and hand in Assignment 11.

Unit 12: Progressive Imperialism

- Watch Rhodes, “The Spanish American War and Annexation of the Philippines” (available in “Media” on course Blackboard site).
- Read Theodore Roosevelt, “The Roosevelt Corollary to the Monroe Doctrine” (available in “Course Materials” on course Blackboard site).
- Read Albert Beveridge, “Speech on the Philippines” (available in “Course Materials” on course Blackboard site).
- Read McDougall, Chapter 5.
- Read Rhodes, “The Search for Monsters to Destroy” (available in “Course Materials” on course Blackboard site).
- Complete and hand in Assignment 12.
Unit 13: Making the World Safe for Democracy: America’s First Crusade

- Watch Rhodes, “A One-World Solution?” (available in “Media” on course Blackboard site).
- Read Woodrow Wilson, “Fourteen Points Speech” (available online at: https://avalon.law.yale.edu/20th_century/wilson14.asp).
- Read McDougall, Chapter 6.
- Read Rhodes, “The League Debate” (available in “Course Materials” on course Blackboard site).
- Complete and hand in Assignment 13.

Unit 14: What Would a Moral U.S. Foreign Policy Look Like?

- Read Nye, Chapter 2.
- Complete and hand in Assignment 14.

Unit 15: Returning to Normalcy and Pursuing the “Pathway of Peace”

- Watch Rhodes, “A Pathway of Peace” (available in “Media” on course Blackboard site).
- Read Rhodes, “Charles Evans Hughes Reconsidered, or: Liberal Isolationism in the New Millennium” (available in “Course Materials” on course Blackboard site).
- Read Warren Harding, “Inaugural Address” (available in “Course Materials on course Blackboard site).
- Complete and hand in Assignment 15.

Unit 16: The Great Depression and the Collapse of the International System

- Read Rhodes, “Great Depression and World War II Timeline” (available in “Course Materials” on course Blackboard site).
- Watch “The Great Depression” (available online at https://www.youtube.com/watch?v=TtttXC9tFPU).
- Read Hook, Chapter 2.
- Complete and hand in Assignment 16.
Unit 17: Defeating Fascism and Imposing Liberal Order: America’s Second Crusade

- Watch “Extra Credit History World War II: The Resource War,” parts I-IV (available online at https://www.youtube.com/watch?v=NYv-GC8DgMk&list=PLhyKYa0YJ_5CpF0wJeXpZAJp6A-sQ_M3A).
- Watch Rhodes, “The Logic of a United Nations” (available in “Media” on course Blackboard site).
- Read Franklin Delano Roosevelt and Winston Churchill, “Atlantic Charter” (available online at: https://avalon.law.yale.edu/wwii/atlantic.asp).
- Read “Universal Declaration on Human Rights” (available online at: https://www.un.org/en/universal-declaration-human-rights/).
- Read Eleanor Roosevelt, “Sorbonne Speech” (available online at: https://www.americanrhetoric.com/speeches/eleanorroosevelt.htm).
- Complete and hand in Assignment 17.

Unit 18: Containment

- Watch Rhodes, “The Logic of Containment” (available in “Media on course Blackboard site).
- Read President Harry Truman’s “Truman Doctrine” Speech. (Available online at https://avalon.law.yale.edu/20th_century/trudoc.asp). Feel free to skim forward until the paragraph that begins with “I am fully aware of the broad implications…..”
- Watch “Berlin Airlift” (Available online at https://www.youtube.com/watch?v=nwjFSQCrShM)
- Read McDougall, Chapter 7
- Read Hook and Spanier, Chapter 2.
- Complete and hand in Assignment 18.

Unit 19: Militarized Containment and Cold War

- Watch Rhodes, “NSC-68 and Korea” (available in “Media” on course Blackboard site).
- Read Hook and Spanier, Chapter 3.
- Read summary of NSC-68 (available online at https://history.state.gov/milestones/1945-1952/NSC68 ).
Complete and hand in Assignment 19.

Unit 20: Planning for “the Long Haul,” Taking a “New Look,” and Worrying about “the Military-Industrial Complex”

- Watch Rhodes, “Extended Deterrence and Mutual Assured Destruction” (available in “Media” on course Blackboard site).
- Read Bernard Brodie, “The Absolute Weapon” (Available online at: https://www.osti.gov/opennet/servlets/purl/16380564-wvLB09/16380564.pdf ) Note that you are reading Eisenhower’s own copy of Brodie’s manuscript.
- Read Nye, Chapter 3.
- Complete and hand in Assignment 20.

Unit 21: The Need for “a New Frontier”

- Watch Rhodes, “Kennedy’s Search for a New Frontier” (available in “Media” on course Blackboard site).
- Read or listen to President John F. Kennedy’s “Inaugural Address” (Available online at: http://www.americanrhetoric.com/speeches/jfkinaugural.htm ).
- Read McDougall, Chapter 8.
- Read Hook and Spanier, Chapter 4.
- Complete and hand in Assignment 21.

Unit 22: Realpolitik Interlude: Kissinger and Détente

- Watch Rhodes, “America Attempts to be a ‘Normal’ Great Power” (available in “Media on course Blackboard site).
- Read summaries of Secretary of State Henry Kissinger’s vision of an American foreign policy based on U.S. participation in a global balance of power.

- Read Hook and Spanier, Chapter 5.
- Read Nye, Chapter 4.
- Complete and hand in Assignment 22.

Unit 23: Carter and the Search for a Moral Compass

- Watch Rhodes, “Principles vs. Realpolitik” (available in "Media" on course Blackboard site).
- Read Hook and Spanier, Chapter 6.
- Read Nye, Chapter 5.
- Complete and hand in Assignment 23.

Unit 24: Defeating the Evil Empire

- Read Hook and Spanier, Chapters 6-9.
- Watch “The Berlin Wall (available online at https://www.youtube.com/watch?v=KgdiYvcOi_w).
- Read Nye, Chapter 6.
- Complete and hand in Assignment 24.

Unit 25: An End of History? Clash of Civilizations? Or Back to the Future?

- Watch Rhodes, “Imagining the Future” (available in “Media” on course Blackboard site).
- Read Edward Rhodes, “Technology, Knowledge, and the Unraveling of the Institutions of International Relations” (Available in “Course Materials” on course Blackboard site).
- Read Hook and Spanier, Chapters 8-9.
- Read Hook, Chapter 1.
- Complete and hand in Assignment 25.

Unit 26: 9/11, Tyrants, and Terrorists: America’s Third Crusade

• Read Edward Rhodes, "The Imperial Logic of Bush's Liberal Agenda," *Survival*, Spring 2003 (available in "Course Materials" on course Blackboard site).
• Read Hook and Spanier, Chapters 10-11.
• Read Nye, Chapter 7.
• Complete and hand in Assignment 26.

**Unit 27: Obamavision: Just War and Cooperation across Civilizations**

• Read Hook and Spanier, Chapters 12-13.
• Read or listen to President Barack Obama, “Nobel Prize Lecture.” (Available online at: https://www.nobelprize.org/prizes/peace/2009/obama/26183-nobel-lecture-2009/)
• Read President Barack Obama, “UN Address,” 2009. (Available online at: https://obamawhitehouse.archives.gov/the-press-office/remarks-president-united-nations-general-assembly)
• Complete and hand in Assignment 27.

**Unit 28: Trumpism**

• Watch Rhodes, “Trump and Transactional Foreign Policy” (available in “Media” on course Blackboard site).
• Read Jeffrey Goldberg, "A Senior White House Official Defines the Trump Doctrine: ‘We’re America, Bitch’"
• Read Hook and Spanier, Chapter 14.
• Read Nye, Chapter 8.
• Complete and hand in Assignment 28.

**Unit 29: What Next?**

• Watch Rhodes, “What Are We Afraid of?” (available in “Media” on course Blackboard site).
• Read Nye, Chapter 9.
• Complete and hand in Assignment 29.

**Unit 30: The President and Foreign Policy**

• Read Hook, Chapter 4.
• Complete and hand in Assignment 30.
Unit 31: Co-Equal Congress and Foreign Policy

- Read Hook, Chapter 5.
- Complete and hand in Assignment 31.

Unit 32: The Bureaucratic and Governmental Politics of Foreign Policy

- Read Hook, Chapter 6.
- Complete and hand in Assignment 32.

Unit 33: Foreign Policy in a Democracy

- Read Hook, Chapters 7, 8, and 9.
- Complete and hand in Assignment 33.

Unit 34: American Foreign Policy Wrap-Up

- Watch Rhodes, “Final Thoughts” (available in “Media” on course Blackboard site).
- Complete and hand in Assignment 34.

Schedule of Weekly Discussions

Thursday, August 27, 10:30-11:45: Unit 1.

Thursday, September 3, 10:30-11:45: Units 2 and 3.

Thursday, September 10, 10:30-11:45: Units 4, 5, and 6.

Thursday, September 17, 10:30-11:45: Units 7, 8, and 9.

Thursday, September 24, 10:30-11:45: Units 10, 11, and 12.

Thursday, October 1, 10:30-11:45: Units 13, 14, and 15.

Thursday, October 8, 10:30-11:45: Units 16 and 17.

Thursday, October 15, 10:30-11:45: Units 18 and 19.
Thursday, October 22, 10:30-11:45: *Units 20 and 21.*

Thursday, October 29, 10:30-11:45: *Units 22, 23, and 24.*

Thursday, November 5, 10:30-11:45: *Units 25, 26, and 27.*

Thursday, November 12, 10:30-11:45: *Units 28, 29, and 30.*

Thursday, November 19, 10:30-11:45: *Units 31, 32, and 33.*

Thursday, December 3, 10:30-11:45: *Unit 34.*
Public Policy Fellowship
Henry Sokolski, Executive Director, The Nonproliferation Policy Education Center

**COURSE AIMS**
This course focuses on questions central to assessing the merits of any nation’s civil and military nuclear policies. Course topics include nuclear deterrence, nuclear energy and technology, the history of nuclear nonproliferation and arms control, energy economics, nuclear terrorism and intelligence, and future trends.

**ATTENDANCE POLICY AND SCHEDULE**
The course will cover the following topics over an 11 week period. Participants are expected to attend six or more seminars, and at least three must be priority topics. Any class marked with an (*) is considered a priority topic.

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<td>September 25th</td>
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<td>October 2nd</td>
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<td>International Nuclear Controls: The Acheson-Lilienthal Report, the Baruch Plan, and Eisenhower’s Atoms for Peace*</td>
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<td>November 20th</td>
<td>Thinking About the Next Arms Race*</td>
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1. CITY BUSTING, THE NUCLEAR WEAPONS REVOLUTION, AND PRECISION GUIDANCE

REQUIRED READINGS


Simon Denyer, One-third of Americans would support a preemptive nuclear strike on North Korea, researchers say, Washington Post. June 25, 2019. (Last Accessed August 26, 2019)

RECOMMENDED READINGS

The Importance of Reading History


Targeting Innocents before World War II: Theories and Practice


Strategic Bombing: World War II


First Half: Password protected PDF

Second Half: Password protected PDF


The Nuclear Revolution


Civil Defense


Precision Guidance


Password protected PDF

Mark Gunzinger and Bryan Clark, Maintaining the U.S. Military’s Advantage in Precision Strike, Center for Strategic and Budgetary Assessments, 2015.


The Morality of City Busting


Introduction: **Password protected PDF**

Chapter 3: **Password protected PDF**

Chapter 4: **Password protected PDF**


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### 2. NUCLEAR DETERRENCE

#### REQUIRED READINGS


#### RECOMMENDED READINGS

*First Thoughts on Nuclear Deterrence*


National Committee on Atomic Information, “One World or None,” filmed 1946, YouTube video, posted by FA Scientists, 9:12, posted August 5, 2013.


**Robust Nuclear Deterrence: Requirements and Practice**

Always Never, the Quest for Safety, Control, and Survivability. YouTube video by the National Security Archive, December 23, 2014.


Albert Wohlstetter, Fred S. Hoffman, Robert J. Lutz and Henry S. Rowen, Selection of Strategic Air Bases, special staff report R-244-S (Santa
Monica, CA: RAND Corporation, March 1, 1953), and special staff report R-266 (Santa Monica, CA: RAND Corporation, April 1954).


**Origins of “Finite Deterrence”**


**Password Protected PDF**


**Proliferation: A Plus or Minus for Deterrence?**


**Accidents and Illicit Use**


**Tactical Nuclear Weapons and First Use**


*Password Protected PDF*

**What Might Nuclear Deterrence Require Today?**


Harold Smith and Raymond Jeanloz, “Britain Leads the Way to Global Zero,” Arms Control Today 40, no. 10 (December 2010).

**How Effective is Nuclear Deterrence?**


Sebastien Roblin, “Madmen With Nuclear Codes—An History of Unpredictable Foreign Policy,” War is Boring, November 22, 2016.


**NUCLEAR ENERGY BASICS, PART 1: FISSION, FUSION AND BOMB DESIGNS**

**REQUIRED READINGS**


Sutherland Productions and General Electric, A is for Atom, B is for Bomb Daily Motion video, 14:44, from a film produced in 1953, posted by “Propaganda Hound,” November 2, 2008.
RECOMMENDED READINGS

*Histories of the First Bombs*


Albert Einstein to President Franklin D. Roosevelt (letter), August 2, 1939.


Weapons Physics and Design


Thomas B. Cochran, “Technological Issues Related to the Proliferation of Nuclear Weapons” (paper presented at the Strategic Weapons Proliferation Teaching Seminar sponsored by the Institute on Global Conflict and Cooperation and the Nonproliferation Policy Education Center, University of California at San Diego, August 23, 1998).


"Pit (nuclear weapon)," Wikipedia, last updated January 30, 2015,

Frank Settle, “Nuclear Chemistry and the Community,” accessed May 2, 2013,


US and Russian Nuclear Weapons: A Cold War Catalog


NUCLEAR ENERGY BASICS, PART 2: REACTORS AND NUCLEAR FUEL MAKING

REQUIRED READINGS


Victor Gilinsky, Harmon Hubbard, and Marvin Miller, Fresh Examination of the Proliferation Dangers of Light Water Reactors, Nonproliferation Policy Education Center, October 22, 2004.

RECOMMENDED READINGS

Reactors and Fuel Cycle Basics


Military Potential of Civilian Nuclear Activities
Richard L. Garwin, “Reactor-Grade Plutonium Can be Used to Make Powerful and Reliable Nuclear Weapons: Separated plutonium in the fuel cycle must be protected as if it were nuclear weapons,” (draft paper, August 26, 1998).


Arthur Steiner, “Denaturing Through the Years,” AJS 10-6-75. Password Protected PDF


3. INTERNATIONAL NUCLEAR CONTROLS, PART 1: THE ACHESON-LILIENTHAL REPORT, THE BARUCH PLAN, AND EISENHOWER’S ATOMS FOR PEACE

REQUIRED READINGS


* A Report on the International Control of Atomic Energy (The Acheson-Lilienthal Report), a report prepared for the Secretary of State’s


**RECOMMENDED READINGS**

**The Acheson-Lilienthal Report and the Baruch Plan**


“Declaration on Atomic Bomb by President Truman and Prime Ministers Attlee and King” (Washington, November 15, 1945).


National Committee on Atomic Information, “One World or None,” filmed 1946, YouTube video, posted by FA Scientists, 9:12, posted August 5, 2013.


Arthur Steiner, “Denaturing Through the Years,” *AJS* 10-6-75.


Atoms for Peace


Paul Boyer, By The Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age (New York: Pantheon Books, 1985), 107-130. Password Protected PDF


Also see the Dwight D. Eisenhower Presidential Library and Museum, Atoms for Peace online document collection.

A short clip of President Eisenhower’s speech.


The full report, including the key findings and March 2005 agenda is available here.

Charles Duelfer, “The Inevitable Failure of Inspections in Iraq,” Arms Control Today 32, no. 6 (September 2002).


Edwin Lyman, “Can Nuclear Fuel Production in Iran and Elsewhere be Safeguarded Against Diversion?” in Falling Behind: International Scrutiny of the Peaceful Atom, ed. Henry Sokolski (Carlisle, PA: Strategic Studies Institute, 2008), 101-120.


4. INTERNATIONAL NUCLEAR CONTROLS, PART 2: THE NUCLEAR NONPROLIFERATION TREATY (NPT) AND THE CURRENT THREE PILLARS VIEW

REQUIRED READINGS


Henry Sokolski, Assessing the IAEA’s Ability to Verify the NPT, in Falling Behind: International Scrutiny of the Peaceful Atom, ed. Henry Sokolski (Carlisle, PA: Strategic Studies Institute, 2008), 3-41.

Robert Zarate, The three qualifications of Article IV’s Inalienable Right, in Reviewing the Nonproliferation Treaty (NPT), ed. Henry Sokolski (Carlisle, PA: Strategic Studies Institute, 2010), 219-230.

RECOMMENDED READINGS

The Nonproliferation Treaty (NPT)

Always Never, the Quest for Safety, Control, and Survivability. YouTube video by the National Security Archive, December 23, 2014.


**The Current 3 Pillars View**


Paul K. Kerr and Mary Beth Nikitin, “Nuclear Cooperation with Other Countries: A Primer” (report RS22937, Congressional Research Service, June 19, 2012).


David Simon, “Article VI of the Non-Proliferation Treaty is a Pactum De Contrahendo and Has Serious Legal Obligations by Implication,” *University of Pennsylvania Journal of International Law & Policy* II (2004-2005).


U.S. State Department, Report Pursuant to Section 104 (c) of the Hyde Act Regarding Civil Nuclear Cooperation with India, submitted to Congress September 10, 2008.

5. **NUCLEAR ARMS CONTROL**

**REQUIRED READINGS**

Selected readings from President Trump’s Nuclear Posture Review and National Defense Strategy.


**RECOMMENDED READINGS**


6. ENERGY ECONOMICS: NUCLEAR AND NONNUCLEAR

REQUIRED READINGS


John Rowe, Energy Policy: Above All, Do No Harm (transcript of a presentation at the American Enterprise Institute, March 8, 2011).

RECOMMENDED READINGS

*Nuclear Power’s Economic Competitiveness*


John Mueller, “Costs of the Proliferation Fixation,” in Atomic Obsession: Nuclear Alarmism from Hiroshima to Al Qaeda (New York: Oxford University Press, 2010), 129-142. Password Protected PDF

“Nuclear Energy’s Economic Benefits – Current and Future” (white paper, Nuclear Energy Institute, April 2012).


Small Modular Reactors


Nuclear Power and Global Warming


Nuclear Subsidies


"Insurance: Price-Anderson Act Provides Effective Liability Insurance at No Cost to the Public" (fact sheet, Nuclear Energy Institute, September 2012).


**Uranium Enrichment**


Hui Zhang, China’s Uranium Enrichment Capacity: Rapid Expansion to Meet Commercial Needs, (Managing the Atom Project, Belfer Center, August 20, 2015).
Plutonium Recycling


Natural Gas


**Grid Storage Batteries**

Rob Day, “Why Batteries May Not Be the Climate Change Savior We All Want Them To Be,” Forbes, August 31, 2018.


Peter Maloney, “An inside look at using energy storage to integrate renewable resources,” Utility Drive, September 18, 2017.


**Distributed Non-nuclear Electrical Systems**


**Resilience of Electricity Supply**

Alison Silverstein, “The IHS Markit electric resiliency study – much less than meets the eye,” Utility Drive, December 6, 2017.


7. NUCLEAR TERRORISM

REQUIRED READINGS


RECOMMENDED READINGS


James D. Fearon, “Catastrophic Terrorism and Civil Liberties in the Short and Long Run” (draft paper, Department of Political Science, Stanford University, October 9, 2003).


**Nuclear Power Plant Vulnerabilities**

National Consortium for the Study of Terrorism and Responses to Terrorism, “Nuclear Facility Attack Database.”


8. NUCLEAR PROLIFERATION INTELLIGENCE

REQUIRED READINGS


Victor Gilinsky, Sometimes We Don’t Want to Know: Kissinger and Nixon Finesse Israel’s Bomb (paper prepared for NPEC Stanford Seminar, Stanford University, August 4, 2011).
RECOMMENDED READINGS

Specific Cases


Robert Zarate, “The Non-Use and Abuse of Nuclear Proliferation Intelligence in the Cases of North Korea and Iran” (NPEC working paper, April 8, 2013).
General Arguments


Catherine Collins and Douglas Frantz, Fallout: The True Story of the CIA Secret War against Nuclear Trafficking (New York: Simon and Shuster, 2011), ix-xiii. Password Protected PDF


Jeffrey Richelson, Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea (New York: W.W. Norton & Company, 2007).


9. THINKING ABOUT THE NEXT ARMS RACE

REQUIRED READINGS


RECOMMENDED READINGS

The Future of Conflict


North Africa and the Middle East


Asia


**Latin America**


**Future Military Strategies in a Proliferated World**


Mark Gunzinger and Bryan Clark, Maintaining the U.S. Military’s Advantage in Precision Strike, Center for Strategic and Budgetary Assessments, 2015.


R. Jeffrey Smith, “Cautious Shift in Nuclear Arms,” Center for Public Integrity, June 20, 2013.


**Possible Arms Control and Nonproliferation Efforts**


White House Press Office, “Remarks by President Barack Obama,” Hradcany Square, Prague, Czech Republic, April 5, 2009. Also see the video of President Obama’s remarks and his Berlin Speech given June 19, 2013.


Public Policy Theory  
Brent S. Steel, Oregon State University

COURSE CATALOG DESCRIPTION
Theoretical approaches to the study of the policy process, policy elements, policy tools, (e.g., regulation), and policy typologies. PREREQS: Departmental approval required.

COURSE OVERVIEW
Public policy can be studied in a variety of ways. In general, students tend to be most familiar with approaches that focus on the content of public policy: specific policy prescriptions, regulations, incentives, etc. A policy analysis or a policy evaluation course, for example, would likely spend a great deal of time on this content focused way of understanding public policy. This course takes a different approach.

The title of this course is Public Policy Theory. As such, this class will take a broader more general view of public policy than the content focus most students already understand or intuitively gravitate toward. This class focuses more so on understanding the processes of public policy as opposed to the specifics of any particular policy or context. In a way, any policy content we embrace is incidental or merely illustrative of the processes that are the focus of this class. As you can imagine, such a view of public policy is necessarily wide-angle, sweeping, and in need of both reliable assumptions and generalizations. The intent with this kind of approach is to better understand the how and why of policy. Why and how do some policies end up on the agenda and others do not? Why and how do some policies fail and others succeed? Who makes decisions? When does policy change or policy learning occur? These kinds of questions guide the content and course readings of this class. As we move through our exploration you will observe that different approaches have been applied to different questions to varying effect. Consequently, we have seen a proliferation of policy process approaches where no one approach works equally well for all questions or contexts. Our goal is to explore the major approaches.

COMMUNICATION
Please post all course-related questions in the General Discussion Forum so that the whole class may benefit from our conversation. Please email your instructor for matters of a personal nature. I will reply to course-related questions and email within 24-48 hours. I will strive to return your assignments and grades for course activities to you within five days of the due date.

COURSE CREDITS
This course combines approximately 120 hours of instruction, online activities, and assignments for 4 credits.
LEARNING RESOURCES
Readings are divided into three types: 1) core texts refer to texts which will provide the foundational material for the course; 2) auxiliary texts refers to books that are used as alternatives to or critiques of our foundational material; and, 3) Web Readings and External Links, which will supplement our other texts and guide critical discussions.

The core texts:

   This book provides an excellent overview of the mainstream approaches to studying the policy process including but not limited to institutional rational choice, social construction, narrative policy framework, punctuated equilibrium and the advocacy coalition framework.


   This book approaches major questions posed by policy scholars (and practitioners) and makes some attempt to provide a broad sense of what answers have been produced, and then evaluate those answers.

Auxiliary texts:

   Provides an alternative class based sociological macro-framework for analyzing the policy process and power relationships in the U.S. context (although much of this framework could be applied to other countries as well).


   Stone’s book can and should be read as a postmodern critique of dominant economic approaches to the study of public policy. Read for basic concepts, not details. She includes one or two tables in most chapters as excellent summaries after you have read the chapter.

Web Readings and External Links:

There are numerous required articles, chapters and external web links required. All readings are located under “Modules” located at the course Canvas site.
STUDENT LEARNING OUTCOMES
The course seeks to develop in students…

1. A sense of alternative approaches to the examination of public policy and of their respective strengths and limits.
2. Awareness of the role of interests, ideas, knowledge, uncertainties, and other factors in relation to the development and consideration of public policy.
3. Awareness of factors that affect whether and how topics become “problems” and get on the agendas of government for consideration.
4. A sense of approaches toward and tools of policy formulation and policy enactment, including the importance of language and other political elements that affect public and elite perceptions and actions.
5. Recognition of the importance of policy application (implementation, and its sub-component, budgeting) and awareness of factors that affect the relative success of implementation of policy decisions.
6. Awareness of the complexity of policy evaluation in terms of mixes of values, interests, competing orientations, and other factors, and of the ubiquity and effect of the evaluation of policies.
7. Conceptual clarity in evaluating overall policy development, drawing on various approaches that attempt to account for those developments.
8. The ability to synthesize all these to a specific area of public policy development.
9. Enhanced ability to explore policy issues and to present the results of those explorations clearly, concisely, and in compelling form in written and oral communication.

Additional skill set outcomes:

A. Learn how to write a policy brief.
B. Develop presentation skills.
C. Ability to facilitate group discussion.
D. Ability to work with groups.
E. Ability to take on leadership roles.

EVALUATION OF STUDENT PERFORMANCE
Weekly Canvas Discussion

Participation in NINE weekly Canvas discussion groups is required beginning Week 2. Discussion topics should relate to the week’s assigned readings and other relevant observations. Each student must submit ONE original posting by Wednesday (11:00 pm). Then each student is responsible for TWO additional replies (minimum) to another student’s posting by Sunday (11:00 pm).
Policy Response Papers

Each MPP student is responsible for submitting **FOUR** Policy Response (PR) papers. There are ten opportunities to submit these assignments. Each précis/reaction paper should be a succinct two-page paper (single-spaced, 11 point, times new roman font, with normal borders) that distills the essential elements of the assigned article and related elements of the core readings. PR Papers are due by 11:59 pm Sunday of the content selected (e.g., IAD PR is due Second week of class). For the purposes of this class, these essential elements are defined as:

1. **Theory:** Summarize the policy process framework. You should identify the core components and subcomponents, as well as core processes and relationships (you should supplement this section with core readings for that week).
2. **Method:** Briefly summarize the methods used in the study.
3. **Findings:** Briefly summarize the findings in the study.
4. **Compare and/or Strengths and Weaknesses:** Briefly compare/contrast this study with policy process frameworks that we have already covered in the course (e.g., you might note where another framework might be more useful; why “this” framework is especially useful for this case). If you do not feel comparison is appropriate, please speak to the strengths and weaknesses of the study (both theoretical and methodological).
5. **Practical Utility:** Speculate about how useful this process framework and this type of study would be to a practitioner. (If you were working as a policy analyst, when would you use this? When would you avoid it? Why?)
6. **Brilliant Insights or Thoughts:** Category six is the only reason you should go over two pages. As to what you write here, well….hard to say: it should be brilliant though! (And no more than one additional page).
7. **Be sure to cite appropriately and include a reference page (this page will not be counted against your page limit).**

The PR paper assignments are intended to accomplish two goals. The first goal is to help students distill the intricate and complex policy process approaches we cover in class into manageable and memorable core concepts. I want each of you to be able to return to these papers and quickly remember what it is about this or that framework that was important. Second, each of the papers will be written on actual academic research. This is important (and we will learn in this class) because policy people rarely use academic research to make policy. My hope is that when you go out into the policy world, you will be better equipped to bridge the aloof ivory tower and the messy political world of actual public policy making (including analysis, evaluation, and implementation). I want to emphasize, however, that students in my past courses have found these to be very difficult papers to write because of the required brevity and precision. Please budget an appropriate amount of time (i.e., likely more than your initial inclination) to complete these assignments.
Policy Theory Paper

The major project in the course is a policy theory paper in which you apply course materials and review extant scholarship and research to better understand a policy area or policy problem of your own choosing. This assignment usually works best if the topic is relevant to your own interests and/or degree track (e.g., ocean policy, forest policy, water policy, health policy, rural policy, etc.). The paper should be 15-20 pages (double-spaced, normal font, standard margins, numbered, etc.) and is worth a maximum of 300 points. Papers should use a consistent citation format, have proper grammar and spelling, and presents a proper introduction. If there are multiple spelling errors, bad grammar, or a failure to communicate the thrust of your paper in the introduction, I will not read the rest of the paper.

Your analysis should include the components below. In each case it is essential that you draw on and cite relevant course and other materials:

1. **Introduction:** This section introduces your chosen policy area or problem. In this section you want to briefly establish why your policy area is important, how your paper addresses the policy area or problem, and tell us where your paper is going and how it plans to get there.

2. **Literature Review of Your Policy Area/Problem:** In this section you want to have an extended discussion of what was introduced in the introduction about your policy area/problem (a rule of thumb here is that a sentence in the intro usually equals a paragraph in the body of the paper, but this is only a rule of thumb). In this section will overview your policy area by detailing what has happened (e.g., on the agenda, passed, being implemented; or put on agenda but failed to pass), the emergence of key issues/concerns/etc., and the current status of your policy area or problem. Most importantly, however, your literature review will tell us what we already know in terms of extant research (when it comes to sources academic presses and peer-reviewed journals are best. Focus on these where possible—but other sources can and should be consulted, such as government agency reports, trade books from trustworthy sources, etc.)

3. **Theories of the Policy Process and Your Policy Area/Problem:** In this section you will need to determine what the various theories, policy sub-fields, and policy process frameworks have to say about your policy area or problem (e.g., ACF, IAD, Multiple Streams, policy evaluation studies, policy analysis reports, etc.). You do not need to cover every single theory, sub-field, or framework that we covered in class. In most cases what you pay attention to will be dictated by what has been done; in some cases however, (such as if you picked the broad area of environmental policy), you might find you have too many sources. In those cases pick the best of what you find.

4. **Assess the Theories of the Policy Process and your area:** What aspects of your policy or problem have been addressed extensively? To what end? Where is work needed? Are there similar findings produced by different frameworks? Ultimately, how this section is structured will depend on what you found in the previous section. The important part here is that you need to think synthetically
(synthesize what you found), comparatively (compare findings, approaches, etc.), and analytically (argue and write well).

5. **Moving Forward**: In this final section, you have the opportunity to map where you would like to see policy theory to better understand your policy area/problem. You can focus on whatever you like here: solutions, gaps in our knowledge, a specific research design that you would like to employ, etc.

In order to help facilitate a quality paper, your policy theory paper will be “turned in” for assessment at several critical points throughout the semester. The rubric used to evaluate this paper is available

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<th>Policy Theory Paper</th>
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<td>Assignment</td>
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<td>Statement</td>
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<td>Annotated Bibliography</td>
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<td>Outline</td>
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<td>Rough Draft</td>
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<td>Final Draft</td>
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**Total:** 325 Points
Course Assignments and Points

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<thead>
<tr>
<th>Assignment</th>
<th>Possible Points</th>
<th>Learning Outcomes</th>
<th>Skill Set Outcomes</th>
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<tr>
<td>Weekly Canvas Discussion</td>
<td>135 (15 points each)</td>
<td>1, 2, 3, 4, 5, 6, 9</td>
<td>B, C, E</td>
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<td>Policy Response Papers</td>
<td>100 (25 points each)</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9</td>
<td>A</td>
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<tr>
<td>Policy Theory Paper</td>
<td>325</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9</td>
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<td><strong>Total=</strong></td>
<td><strong>560</strong></td>
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### Policy Response Article


### Week 2

**Institutional Analysis and Development Framework**


### Policy Response Articles

5. **Stone Chapters 2-6**, pp. 39-154: Goals

### Week 3

**The Multiple Streams Approach**

1. **Smith & Larimer, Chapter 4 (2nd ed) or Chapter 5 (3rd ed)**: “Where does Policy Come From? The Policy Process.”

### Policy Response Articles

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<th>Week 4</th>
<th>Punctuated Equilibrium Theory</th>
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<th>Policy Response Articles</th>
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<th>Week 5</th>
<th>The Advocacy Coalition Framework</th>
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<th>Policy Response Articles</th>
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<td>Week 6</td>
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<th>Policy Response Articles</th>
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<th>Week 7</th>
<th>Policy Design and Social Construction</th>
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<tbody>
<tr>
<td>1. <strong>Smith and Larimer, Chapter 8 (2nd ed) or Chapter 4 (3rd ed)</strong>: &quot;Whose Values? Policy Design.&quot;</td>
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<th>Policy Response Articles</th>
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<td>5. <strong>Stone, Chapters 12-16, pp. 271-378</strong>: Solutions.</td>
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<th>Week 8</th>
<th>The Narrative Policy Framework</th>
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**Policy Response Articles**


**Week 9**

**Policy Feedback Theory**


**Policy Response Articles**


**Week 10**

**Surveying and Critiquing the Field**

1. **Smith & Larimer, Chapter 9 & 10 (both 2nd & 3rd ed).**

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<th>Policy Response Book</th>
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**Finals Week** **Policy Theory Paper Due**

**COURSE POLICIES**

**Discussion Participation**
Students are expected to participate in all graded discussions. While there is great flexibility in online courses, this is not a self-paced course. You will need to participate in our discussions on at least two different days each week, with your first post due no later than Wednesday evening, and your second and third posts due by the end of each week.

**Incompletes**
Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, usually everything but the final paper). If you are having any difficulty that might prevent you completing the coursework, please don’t wait until the end of the term; let me know right away.

**Academic Integrity**
Students are expected to comply with all regulations pertaining to academic honesty.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:

(i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent
mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.

(ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.

(iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).

(iv) TAMPERING - altering or interfering with evaluation instruments or documents.

(v) PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.
Global Energy Markets, Business and Policy
Bernard L. Weinstein, Associate Director, Maguire Energy Institute, Southern Methodist University

Description of course:

BUSE 4334 is designed to give students an overview of the energy industry and public policies that affect energy investment and production. Because most sectors of the energy industry are global in scope, readings, lectures and discussions will focus on both the domestic and international energy markets. The specific topics and areas we will examine are listed below under the weekly assignments.

Since this is an interdisciplinary course, there is no required textbook. Instead, students will be exposed to a wide range of articles and policy studies, and these readings will provide different points of view on each topic. URL links to the readings will be provided so that in most cases it will be unnecessary to go to a library to find the documents.

Weekly assignments:

The topics and approximate dates to be discussed are shown below. Articles on the reading list are keyed to each topic. Though the number of readings is lengthy, keep in mind that this is not textbook material. You do not have to commit specific facts to memory, nor do you need to make references to particular articles or reports in class or on your exams. Rather, the readings are intended to give you broad exposure to the topics being covered.

As energy policy is a moving target, during the semester additional readings will be assigned.

Week of August 24: Introduction to instructor and course
Week of August 31: An overview of the U.S. energy industry and policy
Week of September 7: The impact of COVID-19 on the American energy industry
Week of Sept. 14: Spindletop, oil and natural gas
Week of Sept. 21: The shale revolution: an energy game changer?
Weeks of Sept. 28 and October 5: **The future of coal and nuclear power**

Week of October 12: (No Zoom classes this week. Midterm will be distributed on October 13 and must be submitted no later than October 20)

Week of October 19: **Electricity and the transmission grid**

Week of October 26: **Renewables and clean energy**

Week of November 2: **Energy and the environment: policy, taxation and regulation**

Week of Nov. 9: **Macroeconomic and community impacts of energy development**

Week of Nov. 16: **Transportation and pipelines**

Week of Nov. 23: 26) **Energy and global competition** (no class on Nov. 26)

Week of Nov 30: **Can the U.S. become energy independent?** (Final exam will be distributed on December 4 and must be submitted no later than 5 p.m. on December 11)

**Issue paper:**

Each student will be required to write a “policy report” or “issue paper” on a subject of their interest. This assignment is not the same as a heavily researched and footnoted term paper. It should be viewed as an 8-10 page briefing paper on a critical strategy or policy matter facing a senior decision maker in a private or public organization in the energy field. The paper must be submitted no later than December 3, which is also the last class of the semester. A list of topics that students have addressed in the past will be posted.

**Reading Assignments:**

1. **The impacts of COVID-19 on the energy industry**


   https://www.wsj.com/articles/a-decade-in-which-fracking-rocked-the-oil-world-11576630807 (how fracking changed the energy world over a decade)
https://www.commentarymagazine.com/articles/the-fracking-decade/ (the fracking decade)

https://www.ft.com/content/07dd54e4-2e3b-11ea-bc77-65e4aa615551?desktop=true&segmentId-dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (does lower gross imports mean less price volatility?)

https://www.axios.com/energy-predictions-reality-check-524b9be9-2c0c-407e-86cb-37b11aa72ed2.html (energy predictions and actuals for the 2010s)

https://www.ft.com/content/4e1fa700-4334-11ea-a43a-c4b328d9061c?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (Shell profits down 50%)

https://www.eenews.net/energywire/2020/02/10/stories/1062310667 (Corona virus threatens energy sector)


https://www.ft.com/content/18f37c42-4d97-11ea-95a0-43d18ec715f5?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (Big Oil is at a critical crossroads)


https://www.reuters.com/article/us-kinder-morgan-permian/kinder-morgan-uncertain-about-proposed-texas-permian-pass-natgas-pipeline-idUSKBNS2S2IC (Permian gas pipeline may be canceled because of lack of customers in low price environment)


https://finance.yahoo.com/news/america-days-net-oil-exporter-195451194.html (will the price war make the US a net oil importer again instead of an exporter?)

https://www.economist.com/finance-and-economics/2020/03/12/no-one-is-likely-to-win-the-oil-price-war (everyone loses in the oil price war)
can Russia kill US shale? (shale will survive)

will growing Saudi production crimp US exports?

how COV-19 is changing the energy outlook

local pushback against solar farms

growth of Saudi production may reduce US exports

oil find offshore Guyana is mixed blessing for locals

is the oil crash the beginning of the end?

(social distancing helps fight climate change?)

FERC approves LNG export terminal in Oregon but project faces opposition from state and enviros

(Texas leads the nation in wind energy)

closure of last NY coal plant brings economic gloom to small upstate community

world running out of storage for oil
(is energy independence over for the U.S.?)

(do we need more wind and solar subsidies at this time of economic crisis?)

(does a north American oil cartel make economic and political sense?)

(COVID decimates the Texas oil industry)

(let’s go back to wearing loin cloths!)

(do we need a global Texas Railroad Commission to balance supply with demand?)

(unified effort by OPEC, Russia and G20 to cut global oil production by 15 million bbd)

(will corona kill fracking?)

(retaining American energy dominance)

(battle between independents and majors at Texas Railroad Commission)

(electric power demand lowest in 16 years.)

https://www.ft.com/content/75c32809-2cf7-40d6-9c27-b4131d372234?desktop=true&segmentId=7c8f09b9-9b61-4fb-9430-9208a9e233c8#myft:notification:daily-email:content (Saudi shipments arrive in use, increasing net imports)

https://www.economist.com/leaders/2020/04/16/the-future-of-the-oil-industry (is the virus a foretaste of things to come for the oil industry?)

https://www.nytimes.com/2020/04/20/business/oil-prices.html (oil prices go negative; how long will this last?)


https://www.statesman.com/opinion/20200423/opinion-texas-should-slow-production-to-stop-oil-and-gas-waste (an argument for limiting oil production in Texas and elsewhere)

https://www.nytimes.com/2020/04/23/business/oil-markets-tankers.html?searchResultPosition=1 (now’s the time to be in the tanker business)


https://www.insidesources.com/the-greening-of-texas/ (Weinstein commentary)

https://thehill.com/opinion/energy-environment/490949-america-must-take-steps-now-to-sustain-its-energy-dominance (Weinstein commentary)

https://www.ft.com/content/695be02b-cbc8-4f0f-9d17-968a3fe9b9a2?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738ff#myft:notification:daily-email:content (the new reality facing Big Oil)


https://www.ft.com/content/d9ae865b-fe55-4727-a935-589c0fe27976?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738ff#myft:notification:daily-email:content (30,000 oil jobs may be lost in the North Sea)


https://www.wsj.com/articles/chevron-lowers-outlook-for-capital-spending-by-another-2-billion-11588333062?mod=hp_lead_pos7 (Exxon reports first loss in 30 years)

(has Covid moved up the date for “peak oil” demand?)

(Covid puts oil deal-making on hold)

(oil bust decimates UT endowment funds)

(Progressive in Congress want to prevent oil and gas companies from receiving any federal assistance during pandemic)

(commentary by B. Weinstein)

(it may take years for oil regions to recover)

(has “peak oil” arrived early, thanks to Covid-19?)

(Argentina to support $45 oil in an effort to save the Vaca Muerta shale play)

(investments deferred on Texas LNG projects)

(will telecommuting kill the shale industry?)

(orphan wells a growing financial burden in oil and gas states)
https://www.ft.com/content/21affff2-1e57-4000-a439-62cfe634ff4f?desktop=true&segmentId=dd5c99e9-30be-3347-ff30a0c2b738f#myft:notification:daily-email:content (has Covid-19 ushered in peak oil demand?)


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https://www.ft.com/content/e2ec8421-6ee4-4d59-8052-4580a3337bc2 (shale companies lose $26B in quarter while bankruptcies rise)

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https://www.wsj.com/articles/coronavirus-threatens-to-hobble-the-u-s-shale-oil-boom-for-years-11590312601?mod=searchresults&page=1&pos=1 (pain in the shale patch likely to last for years)

https://www.ft.com/content/72e89c06-cb0f-4a92-beec-f2cdec3bb7b02?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (energy investment projected to fall 20 percent over next year due to Covid)


https://www.ft.com/content/a51e029b-e439-4b7d-a5c0-93fe3d0c9ec0?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (BP to cut 10,000 jobs)

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https://www.reuters.com/article/us-oil-shale-texas/texas-and-new-mexico-shale-basins-hold-49-years-worth-of-oil-usgs-idUSKBN1O52IV (USGS says Permian has 50 years of reserves)

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https://www.eenews.net/energywire/2019/02/19/stories/1060121347 (Alaska native Americans fight development of the ANWR)

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https://www.ft.com/content/dea984f4-39a7-11e9-b72b-2c7f526ca5d0 (head of Aramco worries about perception that fossil fuels will fall into disuse)

(because of sluggish global demand, short-term outlook for oil darkens)

(uncertainty for shale companies as oil prices rebound)

(a growing number of banks boycott energy companies)

(more universities opt for divestment from fossil fuel companies)

(Halliburton posts huge loss)

(Chevron to buy Noble Energy)

(banks stop lending to oil and gas companies)

(Does Chevron/Noble merger signal a new wave of consolidation?)

(BP shift away from oil toward renewables. Will this become an industry wide trend?)

(U.S oilfield services sector shifts overseas)
2. **Spindletop, oil and natural gas**


https://www.ft.com/content/76c15898-52a2-11ea-90ad-25e377c0ee1f?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (shale bankruptcies likely to rise because of heavy debt)


https://www.ft.com/content/6f8f334e-0ebd-11e9-a3aa-118c761d2745 (flaring wastes a valuable resource and lights up the sky)

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https://www.mrt.com/business/oil/article/PSP-Permian-to-become-fourth-largest-oil-13650490.php (Permian projected to produce 6 million bbd by 2025)

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https://www.ingaa.org/Foundation/FDNreports/Flagship2019.aspx (how natural gas can reduce carbon emissions)
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https://www.wsj.com/articles/energy-producers-new-years-resolution-pay-the-tab-for-the-shale-drilling-bonanza-11577880001 (huge debt coming due for frackers)

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https://www.nytimes.com/2020/01/27/us/politics/pennsylvania-democrats-fracking.html?searchResultPosition=1 (Democratic presidential candidates backing a fracking ban may have a hard time winning Pennsylvania)


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https://www.ft.com/content/bf230420-a570-4fcf-a2c3-3c38b5429b6f?desktop=true&segmentId=fe4987a4-0d36-0eb5-d88f-99ac7b30c569#myft:notification:weekly-email:content (The rise and fall of Chesapeake Energy)

https://www.economist.com/business/2020/07/04/how-chesapeake-energy-changed-the-world (another piece on the rise and fall of Chesapeake)

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https://www.wsj.com/articles/big-fracking-profits-at-50-a-barrel-dont-bet-on-it-1543919401?mod=hp_lista_pos1 (can frackers make money at $50?)

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https://www.eenews.net/energywire/2019/03/06/full (Colorado continues to fight fracking)

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https://www.nytimes.com/2020/01/16/climate/germany-coal-climate-change.html?searchResultPosition=1 (quitting coal will be expensive for Germany)

https://www.eenews.net/energywire/2020/01/22/stories/1062144851 (court battle looming over coal export terminal in the state of Washington)


https://www.bbc.com/news/business-51233444?fbclid=IwAR11ZdAFWyWw7ukv4nQMXBUBj7Jj8NenNKncz9Ly_5nNULEKrIFnlq8R0 (Rolls Royce plans to build small nuclear power plants)


https://www.wsj.com/articles/an-antitrust-attack-on-coal-11583078559?mod=opinion_major_pos1 (will anti-trust regulators kill the coal industry?)


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COVID-19 accelerates the decline of coal in power generation

Indian Point #1 shuts down

(largest coal plants currently operating in the U.S.)

(China keeps investing in coal)

(Vogtle plant behind schedule and way over budget)

(China permits record number of new coal plants)

(what will happen to thousands of laid off US coal workers?)

(Britain to close last coal plant)

(an alternate world in which nuclear power is dominant)

(can nuclear plants be repurposed to manufacture hydrogen?)

(New Mexico hopes to keep coal plant alive through carbon capture)

(rising cost of carbon hastens demise of European coal generation)

(Poland loves coal!)

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https://www.wsj.com/articles/energy-department-initiative-aims-to-keep-u-s-competitive-on-nuclear-plant-fuel-11546893816 (maybe nuclear has a future in the U.S. after all)


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https://www.dw.com/en/germany-to-stop-using-coal-by-end-of-2038/a-47244572?maca=en-EMail-sharing (Germany plans to shut all coal plants by 2038 and remaining nuclear plants by 2022)

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https://news.gallup.com/poll/248048/years-three-mile-island-americans-split-nuclear-power.aspx (Americans are evenly split over nuclear power)


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https://www.iea.org/publications/nuclear/?utm_campaign=IEA%20newsletters&utm_source=SendGrid&utm_medium=Email (nuclear must be part of a clean energy future)


https://www.apnews.com/94dd1bcd02f04381bd588cf87d8da989 (should Ohio taxpayers subsidize two nuclear plants at a cost of $1 billion?)

https://www.nytimes.com/2019/08/15/climate/coal-adani-india-australia.html (coal will be around a long time)

https://www.investors.com/politics/commentary/coal-is-dead-long-live-king-coal/ (long live King Coal)


5. **Electricity and the transmission grid**

https://www.eenews.net/energywire/stories/1061787851/print (grid congestion in the Midwest from too much renewable power)

https://www.eenews.net/energywire/2020/01/16/stories/1062091889 (more renewable energy will require more high-voltage transmission lines)

https://www.eenews.net/energywire/2020/01/27/stories/1062188485 (more on grid congestion)

https://www.eenews.net/energywire/2020/04/24/full (threats to the power grid from pandemic and cyber attacks)

https://www.eenews.net/energywire/2020/05/08/stories/1063076375 (here’s a case where low demand can affect grid integrity, especially when lots of solar and wind are on the network)


https://www.realclearenergy.org/articles/2020/06/01/in_new_york_and_new_england_wind_energy_projects_are_like_siting_landfills_nobody_wants_them_494945.html (does it make sense to invest heavily in wind in New York State?)

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https://www.eenews.net/greenwire/2019/03/01/full (like pipelines, some new power lines are being challenged)

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https://www.nytimes.com/2019/05/01/opinion/climate-change-gas-electricity.html (an all electric future?)

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https://www.eenews.net/energywire/2019/07/22/stories/1060771407 (summer heat wave stresses power grids all over America)
6. **Renewables, “green” energy, and electric vehicles**


https://www.economist.com/briefing/2019/12/05/climate-policy-needs-negative-carbon-dioxide-emissions (the complexity of carbon capture)

https://www.wsj.com/articles/german-shift-from-coal-spurs-fresh-pain-11579196959?mod=searchresults&page=1&pos=1 (Germany tries to get off of coal and nuclear simultaneously)


https://www.wsj.com/articles/the-best-laid-energy-plans-11579219416?mod=searchresults&page=1&pos=1 (this federally-financed renewable project went bust)
US companies invest heavily in European renewable energy

Electric vehicles won’t be cost-competitive with gasoline for at least another decade

Electric vehicles won’t be cost-competitive with fossil-fuel-powered vehicles for another decade—MIT study says

Will hydrogen become a viable alternative fuel?

Will cheap gasoline dampen the demand for electric vehicles?

Will the collapse of oil prices accelerate the adoption of renewables?

Will wind put more power into the national grid than coal on some days?
(demand for solar panels collapses worldwide)

(renewables expected to eclipse coal in US by end of 2020)

(the challenges of energy transition)

(NY Governor proposed $3 billion project to move hydropower from Quebec to New York City)

(EV sales fall in China despite huge subsidies)

(renewables surpass in coal in US power generation)

(using hydrogen to make pasta in Italy)

(floating platforms for deep water wind generators)

(waste-to-energy grows in Asia and Europe)

(potential and constraints of using hydrogen as a fuel)

(green energy makes inroads despite the pandemic)

(renewables battle natural gas)

(oil majors buy into green energy)
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https://www.eia.gov/todayinenergy/detail.php?id=39472 (tax credit phase out induces big jump in wind investments)


https://www.ft.com/content/3a145844-82f2-11e9-b592-5fe435b57a3b?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (a novel experiment to store energy)


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https://www.houstonchronicle.com/opinion/outlook/article/Renewable-energy-can-t-keep-Texans-A-C-14103550.php (Texas needs more than renewable energy)


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7. Energy and the environment: policy, taxation and regulation

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https://www.wsj.com/articles/u-n-climate-talks-end-without-accord-on-carbon-markets-11576424025?mod=searchresults&page=1&pos=2  (climate talks end without agreement)

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https://www.dallasnews.com/opinion/commentary/2020/01/05/the-texas-railroad-commission-must-tap-the-brakes-on-oil-and-gas-production/  (should the Texas Railroad Commission limit gas production?)

https://www.nytimes.com/2020/01/03/climate/trump-nepa-climate-change.html?searchResultPosition=1  (making life easier for pipelines and other infrastructure by removing climate change impact assessments; is this a good idea?)

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https://www.houstonchronicle.com/business/energy/article/Texas-oil-gas-industry-breaks-tax-records-while-14974180.php  (energy production generates record tax receipts in Texas)

https://www.wsj.com/articles/oil-producers-are-setting-billions-of-dollars-on-fire-11578652210?mod=searchresults&page=1&pos=3  (the economic and environmental costs of flaring)

https://www.insidesources.com/exxonmobil-wins-big-in-climate-change-trial-but-future-decision-could-have-major-effect/  (commentary on climate lawsuits)

https://www.wsj.com/articles/no-banks-dont-hold-the-key-to-climate-change-11580299203?emailToken=2f87d9d51ac97e1ce73bb524ba5da4a7iFtcmw1MWmVdLyIEeXn6Gii/BSBVh7VfAvA5GIPcujNKfVItWjcyYrscBvqebp5Xnh8RMWGWiujy99fhoCfmp9XaxOje3SHHjIB9wrS0cj4%3D&reflink=article_gmail_share  (targeting banks as facilitators of climate change makes no sense)
https://www.dallasnews.com/opinion/commentary/2020/02/09/the-zero-emissions-promise-relies-on-magic-math/ (is zero emissions achievable?)


https://www.eenews.net/climatewire/2020/06/01/stories/1063286379 (has the planet reached “peak” CO2?)


https://www.nytimes.com/2020/07/20/opinion/pipelines-clean-energy.html?searchResultPosition=1 (push against pipelines may also affect renewable projects)


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**THese Readings Are Optional:**


https://www.ft.com/content/de658f94-f616-11e8-af46-2022a0b02a6c?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (Shell sets a carbon footprint)

https://www.nytimes.com/2018/12/06/climate/trump-sage-grouse-oil.html (is this a death sentence for the sage grouse?)
trucks will account for an increasing share of carbon emissions in the future

US carbon emissions increased in 2018

(a negative view on a proposed carbon tax)

growing natural gas use has pushed emissions from the power sector to a 35 year low

is Trump’s deregulation agenda harming the environment?

Pennsylvania’s governor pushes for a severance tax

Chevron pledges to reduce GHGs by 25 percent

(text of “New Green Deal” resolution)

(states lead way in combatting climate change)

(Texas O&G industry pays billions in taxes to the state each year)

(commentary on the “green new deal)

(Big Oil split on a carbon tax)

(Big Oil invests in carbon removal)

(Alberta scraps its carbon tax)


https://durangoherald.com/articles/281802-money-from-oil-gas-revenues-gushing-into-state-coffers (oil and gas generate billions for state and local governments in New Mexico)


https://www.politico.com/story/2019/06/19/trump-coal-climate-rule-1539616 (EPA rolls out new power plant rules)


https://thehill.com/opinion/energy-environment/450357-its-time-to-end-subsidies-and-put-electric-vehicles-to-the-market (is it time to get rid of EV subsidies)


https://www.wsj.com/articles/texas-showdown-flares-up-over-natural-gas-waste-11563361201 (how to reduce flaring of associated gas in Texas?)


https://thehill.com/opinion/energy-environment/454824-natural-gas-is-the-real-green-new-deal (natural gas is helping to reduce GHGs)

8. Macroeconomic and community impacts of energy production

http://nmindepth.com/2020/01/01/carlsbad-wrestles-with-oil-gas-boom/ (saga of New Mexico boomtown)

https://www.wsj.com/articles/goldman-sachs-to-native-alaskans-drop-dead-11579908814?mod=searchresults&page=1&pos=1 (pullback from Arctic drilling will hurt native communities in Alaska)
https://www.nytimes.com/2020/03/05/world/americas/guyana-elections-oil.html?searchResultPosition=1 (oil gusher in Guyana doesn’t bring economic prosperity)
https://www.nytimes.com/2020/04/07/world/americas/guyana-oil.html (will oil bring prosperity to Guyana?)
https://www.wsj.com/articles/this-is-what-it-looks-like-when-a-texas-oil-boom-busts-11594440031?mod=hp_lead_pos7 (another oil bust comes to West Texas)
https://www.wsj.com/articles/cuomos-cold-weather-tax-11549325868?mod=searchresults&page=1&pos=1 (Governor’s opposition to fracking and pipelines drives up power costs for New Yorkers)
https://www.wsj.com/articles/appalachian-spring-11549586057?mod=searchresults&page=1&pos=1 (coal and natural gas boost the West Virginia economy)
https://www.instituteforenergyresearch.org/fossil-fuels/natural-gas-moratorium-in-new-york-due-to-lack-of-gas-pipelines/ (Governor’s policies lead to a gas moratorium in parts of New York)
https://www.smu.edu/-/media/Site/Cox/CentersAndInstitutes/MaguireEnergyInstitute/The-Social-Economic-and-Environmental-Impacts-of-Rapid-Energy-Development-on-Local-Communities.pdf?la=en (the good, the bad, and the ugly)
https://bismarcktribune.com/bakken/north-dakota-oil-industry-maturing-study-shows/article_0210cfaf-bef4-5d2f-9f0b-05137df5116e.html (economic impact of energy industry on the state of North Dakota)

http://wvmetronews.com/2019/03/24/gas-industry-pays-for-road-work-caused-by-industry-leader-says/ (gas industry pays for road repairs in West Virginia)

https://www.nytimes.com/2019/03/26/business/shell-polyethylene-factory-pennsylvania.html (energy boom helps to revive Rustbelt)


https://finance.yahoo.com/news/fastest-growing-u-city-scrambling-110000569.html (Midland is America’s fastest-growing city with Odessa close behind)


https://www.bizjournals.com/dallas/news/2019/05/06/is-texas-oil-the-new-gold-rush.html (boom in Permian Basin stresses infrastructure)

https://www.eenews.net/energywire/2019/05/16/stories/1060339965 (Texas to pass bill criminalizing destruction of O&G properties by protesters)


https://www.economist.com/united-states/2019/08/08/americas-coal-capital-knows-it-must-rethink-its-future (adjusting to large coal mines being closed in the West)


9. Transportation and pipelines


https://www.ft.com/content/4c2a8e50-1a59-11ea-97df-cc63de1d73f4?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content

https://apnews.com/5b20988171086d59e1f4ba1770be363c (a sensible approach for dealing with potential pipeline spills)

https://www.detroitnews.com/story/news/politics/2019/12/19/what-line-5-shutdown-means-michigan-energy-enbridge/4334264002/ (shutdown of pipelines under Lake Michigan would have dire consequences for the state)

https://www.eenews.net/energywire/2019/12/23/stories/1061883759 (US sanctions delay completion of Nord Stream 2 pipeline)

https://www.wsj.com/articles/germany-calls-for-european-firewall-against-u-s-sanctions-11577459502?emailToken=3490c3a7344100d7d0f45e4b7937bb0fRZYaqTDEM+eIKjVksFJillxXJlbCaTToARay5eHd+FUEXMTEbHzxWk40dKwqcyUqm7819HS0qi9QzWF E8xHJs25Y1oX14cJmcGS1EFigldgOTgi2WdYutXEkMMiQQ5&reflink=article_gmail_share (Europeans look for ways to complete Nord Stream 2 despite sanctions)


https://www.wsj.com/articles/in-the-green-transition-transportation-is-the-next-big-baddie-11577119404?shareToken=st90c1c72fac9f4f4db50bf66d812b795d&reflink=article_email_share (transportation is the only sector where GHGs are rising in North America and Europe)

https://www.wsj.com/articles/americas-love-affair-with-driving-takes-a-back-seat-11577183402?shareToken=st935771abd9564c95852ab98bad66701c&reflink=article_email_share (Americans are driving less)

https://www.wsj.com/articles/report-puts-1-trillion-price-tag-on-cutting-ship-carbon-emissions-11579627855?mod=searchresults&page=1&pos=1 (reducing ship carbon emissions will be extremely expensive, more than $1T)

https://www.eenews.net/energywire/2020/01/30/stories/1062205107 (Energy Transfer accused of bribery in permitting for Mariner 2 pipeline in Pennsylvania)


https://www.wsj.com/articles/keystone-xl-pipeline-to-be-built-with-albertas-assistance-11585663027?shareToken=sta0c5540b1baa45ed9a3cf0204eb883f8&reflink=article_email_share (Keystone XL to move forward with help from Alberta)

https://abcnews.go.com/Health/wireStory/court-denies-request-revive-us-pipeline-permit-program-70937765 (federal court ruling may halt 70 pipeline projects, including XL)


https://www.ft.com/content/b8027937-43e9-4aeb-8e29-99fcb10d8a49?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (tough sledding for pipelines)

https://www.wsj.com/articles/articles-cancel-atlantic-coast-pipeline-after-years-of-delays-11593975601 ($8 billion Atlantic Coast Pipeline is canceled)

https://www.nytimes.com/2020/07/08/climate/dakota-access-keystone-atlantic-pipelines.html?searchResultPosition=1 (is this the “end of pipelines?”)

https://finance.yahoo.com/news/one-time-heart-shale-may-004058748.html (DAPL shutdown may kill the Bakken)

https://www.ft.com/content/95fd37f1-d8cc-4319-af8b-0946949abd20?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (pipelines are clean energy)


**THESE READINGS ARE OPTIONAL:**

https://www.ft.com/content/fc359642-e818-11e8-8a85-04b8afea6ea3?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (Nord Stream 2 nears completion)


https://www.wsj.com/articles/oil-trains-make-comeback-as-pipeline-bottlenecks-worsen-11548930600 (oil trains making a comeback due to pipeline constraints)

https://www.forbes.com/sites/judeclemente/2019/01/27/america-needs-more-oil-and-natural-gas-pipelines/#254b75dd452c (why America needs more oil and gas pipelines)

https://www.wsj.com/articles/oil-trains-make-comeback-as-pipeline-bottlenecks-worsen-11548930600?mod=searchresults&page=1&pos=2 (more oil is moving by rail due to lack of pipeline capacity)

https://www.chron.com/business/energy/article/Permian-Basin-to-Corpus-Christi-pipelines-get-13598295.php (final approval for two new pipelines to bring Permian oil to Corpus)


https://www.nytimes.com/2019/03/21/nyregion/con-ed-natural-gas.html (no new gas hookups in Westchester County NY because of a lack of pipeline capacity)


https://www.ft.com/content/29a60a66-92c4-11e9-b7ea-60e35ef678d2?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (DAPL induces a doubling of oil production in North Dakota)
https://on.ft.com/2YavWI7 (will oil tankers become “stranded” assets?)
https://www.houstonchronicle.com/opinion/editorials/article/The-future-is-electric-and-Houston-knows-that-14092289.php?cmpid=gsachronresult (is the future of transportation electric?)

10. Energy and global competition
https://oilprice.com/Energy/Energy-General/Is-This-The-Next-Big-Petrochemical-Hub-In-The-US.html (can Appalachia become a new hub for petrochemical production and exports?)
https://www.nytimes.com/2019/02/05/business/energy-environment/qatar-exxon-mobil-gas-export.html? (Qatar and Exxon to build large LNG export facility at Sabine Pass, TX)
https://www.ft.com/content/096ab1e8-2b18-11e9-88a4-c32129756dd8?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (good example of international energy politics)

https://www.ft.com/content/e0a6775c-2e4f-11e9-ba00-0251022932c8?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (Saudi Aramco goes global)


https://www.ft.com/content/e21ec520-523b-11e9-b401-8d9ef1626294?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily-email:content (global LNG market become more liquid)


https://www.nytimes.com/2019/05/17/world/middleeast/saudi-oil-risk.html (Saudi oil infrastructure vulnerable to attacks)


https://www.ft.com/content/1f6ac3d6-861f-11e9-97ea-05ac2431f437?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (Russian gas becomes a battleground for Trump v. Putin)


11. US energy independence, energy exports, and the future of fossil fuels

https://www.ft.com/content/0666ec58-218c-11ea-b8a1-584213ee7b2b?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content (should Norway leave it in the ground?)
better energy efficiency has reduced petroleum demand

opposition to LNG terminal in south Texas

is this bust signal the end of hydrocarbons?

another university divests from fossil fuels

opposition to big energy projects threatens America's energy dominance

universities cut investments in fossil fuel companies

the demise of the Petrostates

(US become a net exporter for first time in 70 years)

US to be net exporter of liquid fuels by end of 2020

Europe become major market for US LNG
The great oil paradox: too many good crudes, not enough bad ones (because of Venezuela embargo, Gulf Coast refiners have to buy heavy crude from Middle Eastern producers)

The Permian has changed global energy markets (how the Permian has changed global energy markets)

The truth about big oil and climate change (the long-term outlook for the oil industry)

Oil and gas industry boosts advertising to try to get their message across (Oil and gas industry boosts advertising to try to get their message across)

Cheniere cuts $18 deal to send LNG to China (Cheniere cuts $18 deal to send LNG to China)

US oil dominance as a political weapon (US oil dominance as a political weapon)

Carlyle to build billion dollar export terminal at Corpus Christi (Carlyle to build billion dollar export terminal at Corpus Christi)

More Texas gas going to Mexico (more Texas gas going to Mexico)

US exports average 2 million bbd in 2018 (US exports average 2 million bbd in 2018)

The limits of American energy dominance (the limits of American energy dominance)

Saudi Arabia to buy LNG from US (Saudi Arabia to buy LNG from US)
https://thehill.com/opinion/energy-environment/445990-trade-war-could-make-our-lead-in-natural-gas-evaporate (trade war may harm America's prospects for exporting LNG)


https://www.ft.com/reports/rethinking-energy (taking a long view)

https://www.dallasnews.com/opinion/opinion/2019/07/25/no-us-not-energy-independent (argues the U.S. is not energy independent)
Research Methods for Planning and Design  
Safei-Eldin Hamed, Texas Tech University

Course Description

"An introduction to research processes and techniques focusing on comparing and contrasting the different aspects of research in the fields of design and planning with the typical research method associated with science and technology. The course addresses issues of theory of knowledge, research organization, operation planning, data manipulation, and communication".

Course Approach

This class will introduce the research processes and techniques as an activity of intellectual inquiry. It will focus on the key issues of research in the fields of landscape architecture, environmental design, architecture, urban design, regional planning and environmental management. The course will also examine the typical research methods associated with other disciplines including natural sciences and/or social sciences. The purpose is to enable students from different backgrounds to identify researchable questions, select a suitable approach, prepare research proposals, develop programs for design projects, and write technical papers.

Course Objectives

1. To develop an appreciation of the key issues that affects the research activities within the fields of landscape architecture and planning.

2. To develop a familiarity with the research process as an intellectual and universal problem solving activity.

3. To survey the evolution of research within the fields of landscape architecture and its related fields.

4. To explore the “frontiers” of the emerging trends in landscape architecture and planning research and to formulate one’s personal model of inquiry and critical thinking.
Assessment

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<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Literature reviews</td>
<td>40%</td>
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<tr>
<td>Mid-term presentation</td>
<td>20%</td>
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<tr>
<td>Final research paper &amp; proposal</td>
<td>30%</td>
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<tr>
<td>Class participation</td>
<td>10%</td>
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</tbody>
</table>

Successful completion of this course requires the following:

- Regular and professional participation in the sessions,
- Completing and presenting all course assignments,
- Preparing an acceptable mid-term presentation, and
- Submitting an acceptable research paper & proposal

Final grades will be based on the following percentage scale:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
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<tr>
<td>70-79</td>
<td>C</td>
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<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>0-59</td>
<td>Failing</td>
</tr>
</tbody>
</table>

An incomplete grade is given only in rare situations when the student is not able to complete the coursework due to circumstances beyond his/her control.

Administration

1. The student is fully responsible for the academic integrity of his/her work.
2. All submitted work becomes the property of the Department of Landscape Architecture and may be retained for display and teaching purposes.
3. Regardless of your academic background or research interest, it is my intention to encourage maximum participation of each student. I strongly believe that such participation is an unparalleled learning experience, and therefore, I expect that free and rigorous dialogue will bring new insights, ideas and synergy to our work.
References

No single book adequately covers all five units addressed in this course. However, there are excellent references dealing with one or two facets only which you could research to complement the articles that I am assigning as required readings.

- Landscape and Urban Planning (Elsevier)
- Environment and Behavior (Sage)
- Landscape Research (Taylor & Francis)
- Landscape Journal (U of Wisconsin)