ENERGY & INTERNATIONAL SECURITY

Dr. Adam N. Stulberg Habersham 315 (404) 385-0090 adam.stulberg@inta.gatech.edu Office Hrs: Tues. 1:00-3:00pm; OBA INTA 4803-AS Spring 2013 TTh. 4:35-5:55pm Instructional Center Rm. 219

OBJECTIVES AND DESCRIPTION

This course examines issues at the intersection of national energy security and international conflict and cooperation. Is oil import dependence a foreign policy liability or cause war? Do globalization and the interdependence of energy markets favor international cooperation and peace? Will the global financial crisis precipitate energy conflict? More specifically, can Saudi Arabia, Russia, and Iran use hydrocarbon exports for strategic leverage? Are the U.S. and China doomed to compete for access to global energy supply? Will there be a nuclear energy renaissance, and if so, will it increase the probability of weapons proliferation and regional conflict?

The course introduces students to the major theoretical and policy analytical lenses that can be used to examine such critical geopolitical and geoeconomic issues. Accordingly, the above questions and others will be probed by dissecting the complex interaction between resource endowments, technologies/innovation, economics, politics, power, and strategy in the oil, natural gas, nuclear, and alternative energy sectors; and by analyzing the implications for broader themes of international security. The course is structured around historical and comparative analysis of core issues in each sector that cut across different states and regions related to resource scarcity, market dynamics, corporate behavior, state policymaking, national welfare and threat perceptions, and strategic interaction. By the end of the course, students will be able to critique alternative explanations for international competition/conflict/war and to assess systematically the respective policies adopted to bolster energy security by different actors in the international system. In addition, students will learn to apply critical analysis to generate concrete policy recommendations on related issues.

FORMAT & REQUIREMENTS

The course consists of lectures and discussion, with in-class documentaries occasionally interspersed. Students are expected to complete the required reading for each class and to contribute actively to all in-class discussions. Most classes will begin with a lecture on the designated topic, and conclude with a structured discussion of a major theoretical puzzle and attendant policy debate.

In addition to the in-class midterm exam and regular class participation, each student will be expected to participate actively in a course simulation that will take place during the weekend of April 13-14, 2013. The specific scenario and format of the simulation will be discussed in class. As part of the preparation, each student will be required to write two short background papers (3-4 pages double-spaced) and contribute to the drafting of a group policy position paper (7 pages double-spaced). For the first background paper, each student will summarize the policy issues at stake with the specific scenario. The second background paper will focus on identifying the interests and strategic perspective associated with the institutional or corporate actor represented by the student. Furthermore, each student will participate actively in all group exercises during the simulation.

Each student also will be responsible for drafting one short (2-3 pages double-spaced) critical review of official and/or expert commentary on the international security implications of the changing energy landscape or climate change. This can include critiques of presentations given on campus, government statements, expert blog or other internet-based commentary, articles in policy journals/outlets, etc. Specific details will be discussed in class.

Finally, each student will write a policy memo (15 pages double-spaced) on a contemporary case study or topic of her/his choosing. Each memo will be addressed to a client—a head of a government agency or international institution, or a policy strategist at a firm or NGO—and will briefly summarize the geopolitical significance of the event or issue, analyze the state of play of existing policy towards that event/issue, outline the policy options, and explain how to choose among them. The idea behind this memo is not to do extensive additional research but to synthesize what has been learned about the case/issue and to explain policy choices. Examples will be discussed in class. A single page summary of the paper topic and prospective argument must be submitted to Professor Stulberg no later than April 18th. The final paper will be due on April 30th at 5:00pm. No late papers will be accepted.

GRADING

Class Participation	10%
In-Class Midterm	20%
Simulation	30%
Background Papers (5% each)	
Group Position Paper (10%)	
Participation (10%)	
Critical Review	10%
Individual Policy Position Paper	30%

READING

(Available for Purchase at GT Barnes & Noble and Engineer's Bookstore)

Brenda Shaffer, *Energy Politics* (Philadelphia, PA: UPenn Press 2009);
Daniel Yergin, *The Quest* (New York: Penguin Press 2011);
Michael Klare, *Rising Power, Shrinking Planet* (New York: Holt, 2008);
Charles Ferguson, *Nuclear Energy: What Everyone Needs to Know* (New York: Oxford University Press, 2011); and
Carlos Pascual and Jonathan Elkind, *Energy Security: Economics, Politics, Strategies, and Implications* (Washington, DC: Brookings Institution Press, 2010)

*Francisco Parra, Oil Politics: A Modern History of Petroleum (New York: Tauris, 2010);

*Jan Kalicki and David Goldwyn, eds., *Energy & Security: Toward a New Foreign Policy* (Baltimore: The Johns Hopkins University Press, 2005).

*Falola, Toyin, and Ann Genova. 2005. *The Politics of the Global Oil Industry: An Introduction*. Annotated edition. Praeger.

*Recommended

USEFUL LINKS

Baker Institute, Energy Forum Research, <u>http://www.rice.edu/energy/research/</u>

CIA "The World Fact Book", <u>https://www.cia.gov/library/publications/the-world-factbook/index.html</u>

Council on Foreign Relations, Energy and Environment

http://www.cfr.org/publication/20511/energyenvironment.html?breadcrumb=%2F issue%2F17%2Fenergyenvironment

Energy Information Agency – Country Analysis Briefs. http://www.eia.doe.gov/cabs/CambridgeEnergyResourceAssociates,

http://www.cera.com/aspx/cda/public1/home/home.aspx

Energy Policy Research Foundation, Inc., <u>http://eprinc.org/?page_id=58</u>

Harvard University, Belfer Center, Energy Technology Innovation Policy http://belfercenter.ksg.harvard.edu/project/10/energy_technology_innovation_policy.cy.html

International Energy Agency: <u>http://www.iea.org/</u>

Oil Drum Blog: <u>http://www.theoildrum.com/</u>

- Oxford Institute for Energy Studies, <u>http://www.oxfordenergy.org/research.shtml</u>
- Stanford University, Precourt Center for Energy Research, http://pie.stanford.edu/
- White House Blog: Energy and the Environment: http://www.whitehouse.gov/blog/issues/Energy-%2526-Environment
- World Bank Energy: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTENERGY2/0,,me nuPK:4114636~pagePK:149018~piPK:149093~theSitePK:4114200,00.html

LexisNexis accesses hundreds of energy sources: Platts, Oil and Gas Journal, Petroleum Economist, among many others.

DECORUM & INTEGRITY

Learning together requires that everyone must feel welcome and able to trust others in the class. A central aim of the course is to encourage students to think and be critical. Accordingly, all students are expected to exchange freely ideas while respecting the opinions of each other. Similarly, each student must recognize that academic dishonesty (such as cheating on a test/quiz or plagiarism on a paper) completely undermines the mission of this class, is surprisingly easy to detect, and is taken very seriously by your professor and the Institute. Don't be tempted to take a short cut to complete an assignment the GT honor code/Honor Advisorv Council consult (http://www.honor.gatech.edu/index.php), if there are any questions.

All lectures and discussions are not to be taped or recorded, unless approved by the professor. Students must turn off cell phones, pagers, and other electronic devices that could be distracting during class. Exceptions for emergency situations can be made upon prior consultation with the professor.

COURSE SCHEDULE

PART I: HISTORY & FUNDAMENTALS

Jan. 8: Introduction

Jan. 10 Conventional Wisdom Yergin, "Introduction & Prologue;" Shaffer, "Introduction;" National Petroleum Council, "Hard Truths: Executive Summary," pp. 5-32. (T-square); "Alternative Energy: Historical Time-Line" (peruse) http://alternativeenergy.procon.org/view.resource.php?resourceID=002475

Jan. 15-17: Energy Basics (Oil, Natural Gas, and the Nuclear Fuel Cycle) Ferguson, Chps, 1, 2, 7, 8; Yergin, 16, 18 (peruse 19-20); "The Energy Story," Chps. 1, 2, 8, 9 http://www.energyquest.ca.gov/story/chapter08.html

*Kalicki & Goldwyn, Chp. 7.

Jan. 22-29: From "King Coal" to the Rise of "Big Oil" & OPEC (In-class Film: *The Prize*, Parts 2 & 5 or 6 or 7) Parra, Chp. 2, 5; James D. Hamilton, "Historical Oil Shocks," unpublished draft (February 2011) dss.ucsd.edu/~jhamilto/oil_history.pdf

> *Parra, Chp. 3-4, 12-14. *Kalicki & Goldwyn, Chp. 3

Jan. 31:Peak Oil Debate & Beyond Hydrocarbon Man?
(In-class Film: "4Corners: Peak Oil?")
Yergin, Chps. 11, 12 (peruse 14);
Campbell-Lynch Debate, Oil & Gas Journal, 14 July 2003 (T-square).

Feb. 5:Nuclear Energy: Past & Future
(Guest Lecture: Dr. Charles Ferguson, President, Federation of
American Scientists)
Ferguson, Chps. 3-5;
"Final Report," Investigation Committee on the Accident at the
Fukushima Nuclear Power Station, Executive Summary (T-square), peruse.

*Charles Ferguson, "Think Again: Nuclear Power, *Foreign Policy* (November 2011) http://www.foreignpolicy.com/articles/2011/10/11/think_again_nuclear_p ower

Feb.: 7-19:International Political Economy of Energy Security
(Definitions, Independence vs. Interdependence, Resource
Nationalism, IOCs vs. NOCs; Financial & Market Power)
Klare, Chp. 1, 2, 8;
Shaffer, Chps. 1-2;
Yergin, Chps. 4-6, 13;
Kalicki & Goldwyn, Chp. 4;
Pascual and Elkind, Chp. 5.

*Parra, Chp. 17; *Pascual & Elkind, Chp. 6

PART II: ENERGY SECURITY & REGIONAL CONFLICT & COOPERATION

Feb. 21:Changing Landscape: Emerging Global Trends
IEA, "World Energy Outlook, 2012," Executive Summary

http://www.iea.org/weo/ EIA, "International Energy Outlook," Highlights, Chp. 1 http://www.eia.gov/forecasts/ieo/ Yergin, Chp. 8.

*National Intelligence Council, Global Trends 2030: Alternative Worlds" (December 2012): <u>http://www.dni.gov/index.php/carousel-items/778-global-trends-2030-alternative-worlds-available-for-download</u>

Feb. 26: MIDTERM EXAM

Feb. 28: U.S. Energy Security & Middle East Supply

Mar. 5

Yergin, Chp. 5-7 EIA, "How Dependent is the US on Oil Imports" <u>http://www.eia.gov/energy_in_brief/foreign_oil_dependence.cfm</u> Klare, Chp. 7; Shaffer, Chp. 9, 11, 12; Pascual & Elkind, Chp. 3

*Ed Morse, et. al, "Energy 2020: North America, the New Middle East?" *CITI-GPS: Global Perspectives and Solutions* (20 March 2012), (T-square). *Parra, Chp. 15.

Mar. 7:Russia & Eurasia: Energy Superpower and Great Game Redux(1st PaperKlare, Chps. 4-5;Due)Shaffer, Chps. 7-8;
Yergin, Chp. 1;

*Kalicki & Goldwyn, Part II.

Mar. 12-14: China and the Rise of Asia Shaffer, Chp. 10; Klare, Chp. 3; Yergin, 9-10;

> *Kalicki & Goldwyn, Part IV. * Pascual & Elkind, Chp. 4

Mar. 19-21: SPRING BREAK: NO CLASS

Mar. 26: Latin America & Africa Klare, Chp. 6; Kalicki & Goldwyn, Chp. 16;

*Kalicki & Goldwyn, Chps. 9-10.

PART III: ENERGY & STRATEGIC INTERACTION

Mar. 28-
April 4
(2nd PaperThe Energy Weapon, Conflict & Security DilemmasDue)Yergin, Chp. 2-3;
David Victor and Rebuttals, "What Resource Wars", *The National
Interest*, Nov/Dec 2007 and Jan/Feb, 2008 (Library e-journals);
Clive Schofield, etc. "From Disputed Waters to Seas of Opportunity,"
National Bureau of Asian Research (July 2011). (T-square).
Eugene Gholz, "The Strait Dope: Why Iran Can't Cut off Your Oil,"
Foreign Policy (Sept/Oct. 2009)
http://www.foreignpolicy.com/articles/2009/08/12/the_strait_dope
Goldhau & Witte, Chp. 2 (T-Square).

*Patrick Radden Keefe, "Reversal of Fortune," *The New Yorker* (9 January 2012), pp. 38-49. (Library: e-journals); and *Michael Ross, "Blood Barrels", *Foreign Affairs*, May/June 2008 (Library e-journals);

April 2-4: SIMULATION PREPARATION (NO CLASS)

April 9: Pipeline Politics

Shaffer, Chp 3-4; Adam N. Stulberg, "Eurasia's Pipeline Tangle," *Russia in Global Affairs* (24 September 2011) <u>http://eng.globalaffairs.ru/person/p_2445</u> EIA, "Oil Transit chokepoints" <u>http://www.eia.gov/countries/regions-topics.cfm?fips=WOTC</u>

*Kalicki & Goldwyn, Chp. 6.

April 11: Policy Challenge: Global Nuclear Energy Renaissance & Internationalization of the Fuel Cycle? Leonard Weiss, "Reliable Energy Supply and Nonproliferation," Nonproliferation Review 16:2 (July 2009). (T-square); Pierre Goldschmidt, "Multilateral Nuclear Fuel Supply Guarantees & Spent Fuel Management: What are the Priorities?" Daedalus (Winter 2010), pp. 7-19. (T-square); TBA

April 13-14 SIMULATION (Group Position Paper Due)

- April 16:Policy Challenge: Energy Dependency and International Terrorism
- (NF Critical Ferguson, Chp. 6;
- **Review Due)** Steve A. Yetiv, *The Petroleum Triangle: Oil, Globalization, and Terror* (Ithaca: Cornell University Press, 2011), Chp. 6 (T-square).
- April 18-23: Policy Challenge: Global Climate Change, the Rise of Unconventional and Alternative Energy Sources, and International Cooperation Ferguson, Chp. 3; Shaffer, Chp. 6; Pascual & Elkind, Chp. 9 Yergin, Chps. 21-32 (peruse); TBA

*Pascual & Elkind, Chp. 10

April 25: Conclusion

Yergin, Chps. 33-35 (peruse); Pascual & Elkind, Chp. 7

*Robert McNally and Michael Levi, "A Crude Predicament," *Foreign* Affairs (July/August 2011) (Library: e-journals).

April 30: FINAL POLICY MEMOS DUE 5:00PM