Seton Hall University

eRepository @ Seton Hall

DIPL 6133 Energy and Resource Security

G. A. Pigman Ph.D.
Seton Hall University

DIPL 6133: Energy and Resource Security

Seton Hall University
School of Diplomacy and International Relations
Spring Term 2015
Thursdays 5:00 pm - 7:10 pm at xxx Hall xx

Dr. G.A. Pigman
Office: McQuaid 101C
Consultation hours: Tuesdays 11:00 - 11:45 am or by appointment
tel. 413 358 8600
[gapigman@mindspring.com]

The timetable in this course outline is subject to revision.

Introduction

As a result of increasing global demands for energy, natural resources and a clean environment, serious conflicts of interest have amongst nations and private actors, creating the potential for deadly violence. Popular expectations of and demands for economic, human and environmental security in many cases are likely to be incompatible, presenting policy makers in governments and senior managers of global firms with difficult choices. Each type of energy produced poses its own combination of economic, political and environmental risks. Using carefully selected case studies, this course addresses these pressing security concerns.

Commonly identified resources posing security challenges include:

- Energy (particularly oil, gas, coal and other fossil fuels, but also nuclear, hydroelectric and renewables)
- Minerals, precious metals and other 'rare earths' required for industrial production
- Commodities, e.g. iron and timber
- Water
- Food (including agricultural produce and seafood stocks)

Other resources less commonly identified as such but also critical to economic well being, growth and security include:

- Land (particularly arable and transport-accessible land)
- Labour
- Capital
- Information/data

The course begins by considering critically a survey of energy and resource security that uses a 'nexus' model to explain how energy and resource security concerns are interrelated. We shall then focus on three specific issue studies. The first is an in depth study of the oil and gas industry: how these fuels are prospected, drilled, distributed, marketed and traded, the different public and private actors involved in oil and gas markets and the environmental impact of oil and gas production and consumption. This background will prepare us to consider the international political and security implications of global demand for oil and gas, nuclear power and the environmental security issues surrounding climate change and renewable energy sources. Our work on oil and gas will culminate in a debate, which will simulate a US Congressional hearing, on the Keystone XL pipeline project.

The second issue to be considered is the scramble for access to 'rare earths', which are used in the production of familiar electronic devices such as smart phones, in Africa. Using Dambisa Moyo's somewhat polemical work *Winner Take All* as a point of entry, we shall examine the political and security consequences of the leading rôle taken by China in the race for African resources.

If time permits, we shall examine water and its multifold importance for economic development: hydroelectric power generation, irrigation of agricultural production, flood control, safe and accessible drinking water for populations.

The final portion of the course will permit students to explore resource and energy security issues and cases of particular interest. Each student will choose a particular country or resource on which to focus, study the constraints, risks and opportunities relating to it, and make reasoned policy prescriptions that follow from their analysis. Each student will write up their findings as an extended research essay, make a multimedia presentation of their findings to the seminar and lead the seminar in a discussion and debate of questions of interest arising therefrom.

Skills and capacities to be developed in the course include: critical reading and analysis, analytical and advocacy writing, multimedia (slides/video) presentations.

Organization and Assessment of the Course

For each seminar meeting, students will be responsible for preparing and introducing the discussion of a portion of the readings assigned for that seminar meeting. On some occasions these presentations will be made individually, on others in pairs or groups. Students presenting should be ready to summarize for the group the main points in the readings and identify important issues and questions for the seminar to discuss and debate. Students should feel free to take positions on these questions, if they wish, with which others may agree or disagree. Students are encouraged to show slides or use handouts to facilitate communication of information to the group, as appropriate.

Students are also encouraged to read more widely on each topic than assigned readings and to share with the group articles or sites (or links thereto) via the Blackboard site for the class.

You should have read the assigned readings for each seminar meeting before the seminar at which they will be discussed. All students are expected to attend each seminar meeting (on time, please!). As seminars are your opportunity to share ideas with and learn from one another, everyone is expected to participate in seminar discussions. If you are unable to attend a session, you must contact me in advance of the session with a valid reason for not attending. If you miss classes without approved excuses, you will not be able to receive credit for the course.

You will receive written feedback on your work during term. Your final assessment will be calculated based upon your performance on the following pieces of assessed work as noted below.

Assessed Work

Although students will not be assessed (i.e. marked) on their presentations of readings for the seminar meetings, participation in this important work of the course is a requirement for receiving course credit. If you miss more than two meetings, even for excused reasons of serious illness or significant family emergency, you may be required to submit makeup work in order to receive course credit.

All assessed written work for the course **must** be handed in **on time**. Coming to terms with deadlines and learning to accept what you able to do within the time that you allow yourself is part of the learning of the course. Requests for extensions may be made only in the event of significant illness or serious family emergency and must be made according to established university and departmental procedures.

All forms of dishonesty whether by act of omission, including but not limited to, cheating, plagiarism, and knowingly furnishing false information to the University are prohibited and may elicit University sanctions of suspension or expulsion. See University and school statements for academic conduct here: http://www.shu.edu/offices/community-development/community-standards/community-standards.cfm and http://www.shu.edu/academics/diplomacy/academic-conduct.cfm.

Mid-term Collection – Oil and Gas Markets

The mid-term collection is a set of short answer questions, some of which may be quantitative in nature, covering energy industry and security issues covered up to that point in the course. The mid-term collection will be taken during one of the seminar meetings in March.

Congressional Hearing Simulation – Keystone XL Pipeline

This exercise will simulate a hearing by a Congressional Select Committee considering whether to recommend approval of the Keystone XL Pipeline. You will be divided into an interest group supporting the pipeline, an interest group opposing its construction, and members of the Select Committee. On the first week of the exercise, both interest groups

will make presentations to the Committee, after which the Committee may ask questions of the presenting groups, and the two groups may seek points of information/clarification of one another. In the week that follows, the Committee will meet *in camera*, consider the petitions of the interest groups, and prepare a finding with recommendations on the issue that they will present when the hearing reconvenes during the following seminar meeting. More details on the exercise will follow.

Research Project and Presentation

Early in term you will choose a day on which you will present your final research project to the seminar. By the middle of term you will need to choose and confirm with me your choice of topic. You should choose a country or contested resource on which to focus. Your project should lay out the context and analyze the constraints, risks and opportunities that the country in question faces or that relevant public and private actors face with respect to the contested resource. Based upon your analysis, in your conclusion you should identify objectives and argue policy prescriptions for the relevant actors. Your project should be between 5000 and 5500 words (anything significantly over or under will lose points). You will have a half hour of seminar time in which to make your presentation, including slides (and video, if you wish), of your findings and lead a discussion and debate of your policy prescriptions. You will be expected to submit your presentation in hard copy on the day of your presentation and electronically via the SafeAssign system.

Your **final assessment** for the course will be based upon your results for assessed work in the following proportions:

Mid-term Collection – 15 percent
Keystone XL Pipeline Hearing Simulation – 30 percent
Final Research Project – 55 percent

Students at Seton Hall University who have a physical, medical, learning or psychiatric disability, either temporary or permanent, may be eligible for reasonable accommodations at the University as per the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act. In order to receive such accommodations, students must identify themselves at the Office of Disability Support Services (DSS), provide appropriate documentation and collaborate with the development of an accommodation plan. The DSS phone number is 973-313-6003. For further information, please go to our website at http://studentaffairs.shu.edu/dss/.

Course Resources

Course Website

There is a website for the course on 'Blackboard'. On the site you will find a current copy of this course outline/syllabus/reading list and copies of the slide presentations that accompany the lectures. Details will follow.

Principal Texts

As we will be using these texts throughout the course you may wish to consider purchasing a copy, either individually or with a classmate for sharing.

Philip Andrews-Speed et al., *Want, Waste or War?: The Global Resource Nexus and the Struggle for Land, Energy, Food, Water and Minerals*, Routledge, 2014 (purchase as e-book or use the Library's e-book).
Andrew Inkpen and Michael H. Moffett, *The Global Oil and Gas Industry*, Tulsa: PennWell Books, 2011.
Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World*, New York: Penguin Press, 2011.
Dambisa Moyo, *Winner Take All: China's Race for Resources and What It Means for the World*, Basic Books, 2012.

All principal texts will also be on reserve in the Library. Other assigned articles and chapters will be available on Blackboard. You are responsible for making sure that you understand how to access all of the texts in which there are assigned readings.

Media and Official Websites – A Selected List

The Washington Post www.washingtonpost.com
The New York Times www.nytimes.com
The Financial Times www.ft.com
The Wall Street Journal www.wsj.com
The Journal of Commerce www.joc.com
The Guardian (London) www.guardian.co.uk
The Daily Telegraph www.telegraph.co.uk
Bloomberg www.bloomberg.com
The Economist www.economist.com
Business Week www.businessweek.com
Yahoo Finance finance.yahoo.com
Economic and Political Weekly (Mumbai) www.epw.orq.in/
The Hindustan Times www.hindustantimes.com
The Times of India www.timesofindia.indiatimes.com
Dawn (Islamabad) www.dawn.com
The Australian www.theaustralian.news.com.au
The South China Morning Post www.scmp.com

World Bank Group www.worldbank.org
World Economic Forum www.weforum.org

Seminar Topics and Assigned Readings

Topic 1 – Resource Security: the Nexus Approach Outlined

Andrews-Speed, et al., *Want, Waste or War*, introduction and chs. 1-5

Topic 2 – Resource Security: Nexus Cases and Conclusions

Andrews-Speed, et al., *Want, Waste or War*, chs. 6-12

Topic 3 – Understanding Oil and Gas: The Industry, The Players, E&P

Inkpen & Moffett, *The Global Oil and Gas Industry*, chs. 1,2,3 & 5

Topic 4 – Understanding Oil and Gas: Financing and the Gas Business

Inkpen & Moffett, *The Global Oil and Gas Industry*, chs. 7,8,9

Topic 5 – Understanding Oil and Gas: Transport, Refining and Markeing

Inkpen & Moffett, *The Global Oil and Gas Industry*, chs. 10,11,12, 15

Topic 6 – Oil, Nuclear Power and Global Security

Yergin, *The Quest*, parts 1-3

Topic 7 – Environmental Security and Alternative Energy

Yergin, *The Quest*, parts 4, 5

Topic 8 – China and the Race for Resources in Africa

Moyo, *Winner Take All*

Topic 9 – Imagining Energy Security Futures

Yergin, *The Quest*, part 6
Inkpen & Moffett, *The Global Oil and Gas Industry*, ch. 15

Projected Course Timetable

This is a projected timetable for the course. It will likely be adjusted regularly over the course of term to reflect the pace at which we cover the material and other unforeseen events.

Day	Month	Topic	Activity	Work Due
Thurs. 15	January	Introduction		
22		Topic 1		
29		Topic 2		
Thu. 5	February	Topic 3		
12		Topic 4		
19		Topic 5		
26		Topic 6		
Thu. 5	March	Topic 7		
12		SPRING BREAK	No meeting.	
19			Keystone XL Pipeline debate: arguments; Mid-term Collection	
26		Topic 8	Keystone XL Pipeline debate: findings	
Thu. 2	April	EASTER BREAK	No meeting.	
9		Topic 8/9		
16		Topic 9/10	Student research project presentations 1	
23			Student research project presentations 2	
30			Student research project presentations 3	