

## **Global Programs**

GIM Global Energy – UAE, Jordan, Israel December 15, 2014

# Syllabus GIM Global Energy – United Arab Emirates, Jordan and

Winter 2015-B – Spring 2015-A

Israel

Thursdays, 6:30 to 9:30 pm

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# **GIM Objectives**

The objective of the GIM program is to help you gain an understanding of the economic, political, social, and culture characteristics of a country or region outside the United States. This includes learning about key business trends, industries, and sectors. The core of GIM is an independent business research project carried out here and in-country, which will help you further develop your teamwork and leadership skills.

# **Course Objectives**

This course will provide students with a basic understanding of today's dynamic energy environment and help them to develop a framework for assessing its impact on companies and markets. To do this, we will consider how politics, economics and geography come together to make energy economics and politics one of the most consequential topics of our time.

# **Topic Description**

The global energy landscape is undergoing a profound transformation. Traditional consumers like the United States are becoming producers and traditional producers like China have become major consumers. This transformation is upending energy markets, global trading patterns and geopolitics.

In this class, we will use the 1973 Arab oil embargo as our starting point for understanding the contours of the global energy market for the last forty years, including a focus on the creation and evolution of OPEC, the fundamentals of energy pricing, the perniciousness of "the resource curse," (why countries benefiting from an abundance of commodities often struggle to develop healthy economies), among other topics. We will then shift to a discussion of major changes underway in energy markets, including the shale revolution, hydraulic fracturing, deep water drilling and growing demand from non-OECD countries like China and India. We will also consider how increasing global demand and a concern for the environment is driving the pursuit of renewables and alternative fuels.

During our two week trip to the Middle East, we will visit Abu Dhabi, a traditional oil exporter to discuss its growing trade with Asia and what is compelling leaders to invest in MASDAR, a planned city run on renewables. We will visit Dubai, a global shipping hub and energy-financing center. En route to Israel we will stop in Jordan to better understand why developing countries with limited resources are investing so heavily in new energy infrastructure. We will conclude in Israel, the home of major advancements in clean tech and major new gas finds. We will explore how a resource poor country is working to improve its energy security, and consider its implications. The trip will touch on many of the energy questions that the rest of the world is also grappling with.

#### **Attendance**

Due to the nature of the GIM program, attendance for all GIM classes is mandatory, as is participation in the two-week field trip. Attendance on the first day of class is also mandatory. If a student misses more than one class throughout the term, one letter grade will be deducted from his or her final grade. The faculty member may make exceptions in cases of extreme circumstances.

#### **Advisor**

Matthew Temple, the Director of Alumni Career Services, will be your in-country advisor. He is responsible for the integrity and quality of the in-country experience. Among other logistical tasks before and during the trip, he will assess your level of participation during the plenary meetings and will be assigning 15% of your overall grade.

# **Kellogg Honor Code**

The students of the Kellogg School of Management regard honesty and integrity as qualities essential to the practice and profession of management. The purpose of the Kellogg Honor Code is to promote these qualities so that each student can fully develop his or her individual potential. Upon admission, each student makes an agreement with his or her fellow students to abide by the Kellogg Honor Code. Students who violate the Kellogg Honor Code violate this agreement and must accept the sanction(s) imposed by the Kellogg community.

The Kellogg Honor Code is administered by students and is based on the concept of self-government. The efficacy of such a student-administered honor code is dependent upon a high degree of dedication to the ideals of honesty, integrity and equal opportunity reflected by the code. The Kellogg Honor Code requires that each student act with integrity in all Kellogg activities and that each student hold his or her peers to the same standard. In agreeing to abide by the code, the Kellogg students also agree to report suspected violations. By not tolerating lapses in honesty and integrity, the Kellogg community affirms the importance of these values.

### **Course Materials**

You need to purchase Jan H. Kalicki and David L. Goldwyn, Energy & Security: Strategies for a World in Transition, 2013, 2<sup>nd</sup> edition and the course pack for this course. Additional materials will be made available via Canvas.

# **Research Project**

The core of this class is a research project. You will form a group of 4 to 6 students and select a business, economic, or management topic related to changing role of energy. You will perform secondary research and incorporate perspectives from the class readings and speakers; during the trip you will spend considerable time gathering local data and testing your hypotheses and recommendations for inclusion in your report. Your topic does not need to be limited to the Middle East, but interviews in each country we visit must inform your final research project.

#### **Topics**

Your team will develop its own topic, which needs to be reviewed with me. Good research projects start with clear and relatively narrow topics. Your topic must have some connection with the evolution of the energy landscape.

### **Report Format**

Results of your research will be presented in a 20-25 page written report. In consultation with me, may choose any of the following report formats:

- Traditional analytical research paper A research question is described, competing answers to the question are discussed, and evidence collected on the trip is used to argue for or against the alternative answers.
- Industry analysis A particular industry is surveyed in order to examine a narrowly focused, well-defined topic pertaining to the competitive dynamics of the industry. An example would be an analysis of a market entry opportunity presented to a foreign multinational.
- Business recommendation report A consulting report recommending specific strategic, operational and organizational actions to solving a clearly defined business issue, e.g., strategies for overcoming cold-chain logistics and distribution challenges in India.
- **Case study** A case for possible classroom use developed with a clear underlying business question in mind. Teams pursuing this option should work with me before and after the trip to ensure a high quality product that could be used in future classes.

#### **Deliverables**

Your project has six deliverables:

- 1. **Topic Proposal** –A two-page description of your proposed topic, including:
  - a. Research question(s)
  - b. Preliminary identification of possible in-country visits with companies, governmental agencies, NGOs, etc.

Note: this is not graded, but it needs to be reviewed with me.

- 2. **Background Research** A review and synthesis of secondary information relevant to your topic. This will serve as a first draft of the background section of your report.
- 3. In-Country Research Plan A detailed plan for five or more investigative research meetings to be held during the trip. You will turn in a written report and briefly present your plan in class. The best plans will include day/time/location of meeting; name/description of organization; name/title/bio of interviewee; agenda and interview guide for each meeting.
- 4. **In-Class Presentation** A presentation in class summarizing your research findings. You will have 15 minutes to present and 5 minutes for audience questions and suggestions.
- 5. **Written Paper** The final paper. In addition to turning in your paper to me, please email a copy to the Global Programs Office on the agreed-upon date.
- 6. **Peer Evaluation** You will assess the contribution of each member of your group (including yourself) using a confidential peer review form. The assessment measures intellectual contribution, initiative and organization, workload contribution, and overall contribution.

#### **Due Dates**

•	Topic proposal	February 26	(Week 3)
•	Background research	March 5	(Week 4)
•	In-country research plan	March 12	(Week 5)
•	In-class presentation	April 30	(Week 10)
•	Written report	April 30	(Week 10)
•	Peer evaluation	April 30	(Week 10)

# **Assessment**

Research Project	70%
Background Research	10%
In-Country Research Plan	10%
In-Class Presentation	10%
Written Report	25%
Peer Evaluation	
Participation	
In-Class Participation (attendance, discussion, engagement)	15%
In-Country Participation (plenary meetings; determined by GIM advisor)	

# **Course Schedule and Assignments**

Week 1	February 12
Topics	Course overview, expectations, and final project
	Student and instructor introductions
	<ul> <li>Team selection for research project and preliminary discussion of proposal ideas</li> </ul>
	Begin discussion of the formation of OPEC and the 1973 oil
	embargo and the governance structures that emerged and have
	guided energy markets for the past 40 years
Speaker	TBA
Reading and	• IEA, World Energy Outlook, chapt. 2, pp. 53-93.
preparation	<ul> <li>Explore the website <a href="http://needtoknow.nas.edu/energy">http://needtoknow.nas.edu/energy</a></li> </ul>
	Explore "US Energy Facts Explained,"
	http://www.eia.gov/energyexplained/endex.cfm?page=us
Assignments due	

Week 2	February 19	
Topics	Current Issues in the Middle East	
	Doing Business in the Middle East	
Speaker	Roey Gilad, Consul General of Israel to the Midwest	
	Paul Kinscherff, CFO for International Finance, the Boeing Company	
Reading and	Dan Senor & Saul Singer, Start Up Nation, pp. 1-20.	
preparation	Steven Cook, The Middle East's Emerging Power: The Rise of the	
	Emirates," Octavian Report.	
Assignments due		

Week 3	February 26
Topics	The Global Energy Framework and Governance
	Changing Supply: The Shale Revolution
Speaker	Robert Skaggs, CEO, NiSource
Reading and preparation	<ul> <li>Daniel Yergin, "OPEC's Imperium," The Prize, pp. 633-652.</li> <li>Chakib Khelil, "Energy Sector Governance in the 21<sup>st</sup> Century," in Kalicki and Goldwyn, pp.157-164.</li> <li>Amy Myers Jaffe and Edward L. Morse, "OPEC: Can the Cartel Survive another 50 Years?" in Kalicki and Goldwyn, pp.121-139.</li> </ul>
	#######
	<ul> <li>Stephen P.A. Brown, "The Shale Gas and Tight Oil Boom: U.S. States' Economic Gains and Vulnerabilities," Council on Foreign Relations, OCT-2013.</li> <li>"Game Changers: Five Opportunities for US Growth and Renewal," McKinsey Global Institute.</li> </ul>
	Michael Levi, <i>Power Surge</i> , chap. 1,2 and 8.
Assignments due	Topic Proposal

Week 4	March 5
Topics	<ul> <li>Supply, Demand, Technology and Politics: What Determines the Price of Energy?</li> <li>Changing Demand: Asia is Growing</li> </ul>
Speaker	Phil Levy, Senior Fellow, Global Economy, The Chicago Council on Global Affairs and Adjunct Professor of Strategy, Kellogg School of Management
Reading and preparation	<ul> <li>Martin Feldstein, "The Geopolitical Impact of Cheap Oil," Project Syndicate.</li> <li>Michelle Billig Patron and David L. Goldwyn, "Managing Strategic Reserves," in Kalicki and Goldwyn, pp. 464-482.</li> <li>Thomas Friedman, "A Pump War," The New York Times, October 14, 2014.</li> </ul>
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	<ul> <li>Kalicki and Goldwyn, Part IV, "The Pacific Rim," pp. 279-322</li> <li>Elizabeth Economy and Michael Levi, By All Means Necessary, pp. 1-9.</li> </ul>
Assignments due	Background Research

Week 5	March 12
Topics	<ul> <li>Producers become consumers, and consumers become producers:         The Changing Energy Profile in the Middle East     </li> <li>In class presentation on Research Project and Research Plan</li> <li>Trip Preparation</li> </ul>
Speaker	
Reading and preparation	<ul> <li>EIA, Eastern Mediterranean Region, "Overview of oil and natural gas in the Eastern Mediterranean Region.</li> <li>Rachel Bronson, "Pay Attention to this Gas Deal," The American Interest.</li> <li>Efraim Inbar, "Israel's Challenges in the Eastern Mediterranean," Middle East Quarterly</li> <li>Joel Greenberg, "Israel No Longer Worried about Its Water Supply, Thanks to Desalination Plants," McClatchy US.</li> <li>David Weinberg "Israel an Energy Superpower? Not Quite," Times of Israel.</li> <li>EIA Country profiles on UAE, pp. 1-18.</li> <li>EIA, Jordan: Country Analysis Note, p. 1.</li> <li>Salman Zafar, "Solar Energy in Jordan," EcoMENA.</li> </ul>
Assignments due	In Country Research Plan

# March 16 –28 In-Country Field Research

Remember that GIM is an academic program, not merely a trip. Fifteen percent of your overall grade will be based on your participation in the in-country plenary meetings and other activities as assessed by the advisor. In order to achieve a high grade, you will need to not only attend all in-country plenary meetings, but also be actively engaged during all other in-country activities.

Week 6	April 2
Topics	Trip Debrief The Changing Energy Landscape in Europe, Latin America and Africa
Speaker	Moving Molecules Worldwide: How to Do It and What Hampers It, Senior

	Executive BP
Reading and preparation	<ul> <li>Maria van der Hoeven, Energy Policy of IEA Countries: In-depth Review of the European Union 2014.</li> <li>Pierre Noel, "European Gas Supply Security: Unfinished Business," in Kalicki and Goldwyn, pp. 169-186.</li> <li>Michael Ratners, et al, "Europe's Energy Security: Options and Challenges to Natural Gas Diversification," Congressional Research Service.</li> </ul>
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	<ul> <li>Thomas F. McLarty, "Latin America" in Kalicki and Goldwyn, pp.344- 360.</li> </ul>
	<ul> <li>David L. Goldwyn, Neil R. Brown and Megan R. Cayten "Mexico's Energy Reform: Ready to Launch" Atlantic Council, pp.3-6; pp. 35- 37.</li> </ul>
	<ul> <li>Phillip van Niekerk and Aaron Sayne, "Sub-Saharan Africa," in Kalicki and Goldwyn, pp. 257-273.</li> </ul>
	<ul> <li>Makhtar Diop, "Powering Up Africa's Renewable Energy Revolution," The World Bank.</li> </ul>
Assignments due	

Week 7	April 9
Topics	The Resource Curse
	Alternative, Renewable and New Energy
Speaker	Why Invest in Wind and Solar? Senior Executive Invenergy
Reading and	Jeffrey A. Frankel, "The Natural Resource Curse: A Survey," National
preparation	Bureau of Economic Research (NBER) Working Paper Series, # 15836.
	Richard Dobbs, et al, "Reverse the Curse: Maximizing the Potential of
	Resource-Driven Economies," McKinsey Global Institute, December
	2013, pp. 1-21.
	#######
	• Ernest Moniz, "Why We Still Need Nuclear Power," Foreign Affairs,
	November/December 2011, pp. 83-94.
	Amory B. Lovins, Imran Sheikh, and Alex Markevich, "Forget
	Nuclear," Rocky Mountain Institute, 6 April 2008, pp. 1-10.
	Daniel Yergin, "Rebirth of Renewables," The Quest, pp. 527-552.
Assignments due	

Week 8	April 16
Topics	The Energy/Environment Nexus
Speaker	Investing in Clean Tech, Senior Executive Clean Energy Trust or Senior Executive, Lazard
Reading and preparation	<ul> <li>Risky Business Project, "The Economic Risks of Climate Change in the United States, " Executive Summary.</li> <li>Diana Liverman and Amy Glassmeier, "What are the Economic Consequences of Climate Change?" The Atlantic.</li> <li>Richard Dobbs et. al., "Resource Revolution: Meeting the World's Energy, Materials, Food, and Water Needs," McKinsey Global Institute.</li> <li>Case Study: A Chinese Solar Company's Fleeting Run in the Arizona Sun, The Paulson Institute.</li> </ul>
Assignments due	All teams meet with me to discuss final presentations and reports

Week 9	April 23
Topics	The Energy/Environment Nexus (continued)
Speaker	Senior Expert, EPIC or ELPC
Reading and preparation	<ul> <li>"Climate Change 2014: Synthesis Report, Summary Report to Policy Makers."</li> <li>Michael Greenstone, "Paying the Cost of Climate Change," The Brookings Institution.</li> <li>"UN: Climate Change Costs to Poor Underestimated."</li> </ul>
Assignments due	

Week 10	April 30
Topics	Final presentations and wrap-up
Assignments due	Written report and peer evaluations