Course Syllabus

Course Information

Course Number/Section	MECO 3300 (same as ENGY 3300)
Course Title	Introduction to energy technology (and management)
Term	Fall 2016
Days & Times	Thurs. 4-6:45

Professor Contact Information

Professor	Dr. Stephen Molina, JD
Phone	214-629-2223
Email Address	Stephen.molina@utdallas.com or stevemolina8@gmail.com
Office Location	SM14.328
Office Hours	Tues. / Thurs. 9-10 am
Other Information	If my cell number above rolls to voicemail try sending a text or an email

Course Pre-requisites, Co-requisites, and/or Other Restrictions

None

Course Description

This course explores global energy requirements, technologies, government regulation, and business considerations. It will provide an introduction to the resources, technology and business considerations related to both renewable and non-renewable energy sources. Topics will include discovering/inventing, exploring, producing, exploiting, transporting, converting, and marketing different energy sources (oil, gas, coal, nuclear, wind, solar) as well as the business processes involved in the energy supply chain from resource discovery to end user sales. It will also explore the power industry and global power needs.

About the instructor--- Dr. Molina is a 1970 graduate of the University of Texas at Austin, where he earned a Bachelor of Arts degree, majoring in economics; and, a 1974 graduate of the SMU School of Law, with a Juris Doctor degree. He has served as the Vice President/General Counsel at four large oil and gas companies---ARCO Oil and Gas Company; Vastar Resources, Inc.: Benton Oil and Gas Company; and, the Oman Oil Company, the national oil company of the Sultanate of Oman, located in Muscat, Oman. During his time at ARCO he was also the Chief Counsel for ARCO Latin America, residing in Caracas, Venezuela. His oil and gas legal practice has taken him all over the world. He has spent the past ten years as a senior oil and gas lawyer with two prominent law firms--- Patton Boggs, the largest lobbying firm in the US, and Dentons, which is the largest law firm in the world. Texas Governor Perry appointed him a Texas Member of the Interstate Oil and Gas Compact Commission, where he served as Chair of the International Affiliate Committee until the end of his term limit. Molina continues with the IOGCC, and serves on the Legal and Regulatory Affairs Committee. He is also a Senior Advisor to the Bilateral US

Arab Chamber of Commerce in Houston, and a board member of the US Mexico Chamber of Commerce in Washington D.C.

Student Learning Objectives/Outcomes

A student taking this course will come away with a basic understanding of global energy supply and demand, global power needs, and the ability to assess the general business processes involved in the energy supply chain from resource discovery to end user sales. Also, the student will understand currently available renewable energy sources and the current global demand/need for power.

Required Textbooks and Materials

Required Texts

None

Required Materials

None

Suggested Course Materials

Suggested Readings/Texts

The professor will assign readily accessible reading materials available on the Internet, and by handing out printed materials in class. There will be several energy-related experts, scholars and lawyers making presentations to the class throughout the semester.

Suggested Material

None.

Assignments & Academic Calendar

Topics, Reading Assignments, Due Dates, Exam Dates

Aug. 25 Science of hydrocarbons, renewable energy, and nuclear energy

Sept. 1 Global energy supply and demand; the politics of energy technology

Sept. 8 Power

Sept. 15 Coal, Nuclear

Sept. 22 Current event prsentations

Sept 29 Solar, Wind

Oct. 6 Mid-term exam

Oct. 13 Environmental concerns, regulation and conservation

Oct. 20 Oil; exploiting the North Slope

Oct. 27 Gas; commercialization

Nov. 3 Value chain; papers due

Nov. 10 Energy economics, and other business considerations

Nov. 17 Student Presentations

Dec. 1 Student presentations

Grading Policy
Mid-term will count for 15% of course grade; Class attendance, participation in discussions and exercises will make up 50% of the course grade. A three (3) page paper on an assigned energy-related topic, presented to the class, will count for the remaining 35%.

Course Policies
Make-up exams
As an undergraduate class, there is a mid-term exam, and a paper (not to exceed 3 pages) will be required.
Extra Credit
Extra credit, up to an additional 5% of a student's grade, is encouraged. The extra credit will be earned in the form of short research projects.
Late Work
Turning a paper in late will lower the paper grade by 15%
Special Assignments
A three page paper will be required, which will deal with an energy-related topic.
Class Attendance
Absences, with a valid excuse and advance notification to the instructor will be excused. However, due to the nature of the class and its emphasis on attendance and discussions too many absences will negatively impact a course grade.
Classroom Citizenship

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.