Course Code	Course Title	ECTS Credits
ENEM-210	Economics of the Oil & Gas Industry	6
Department	**Semester**	**Prerequisites**
Life and Health Sciences	Fall / Spring	None
Type of Course	**Field**	**Language of Instruction**
Major Elective	Environmental and Energy Management	English
Level of Course	**Year of Study**	**Lecturer(s)**
1st Cycle	3d	Dr Theodoros Tsakiris
Mode of Delivery	**Work Placement**	**Co-requisites**
face-to-face	N/A	None

Objectives of the Course:

To provide the student with a comprehensive understanding of the economic parameters of oil & gas exploration, production, refining, distribution and transportation as well as the structure of the international oil & gas system.

Learning Outcomes:

On completion of this module, students are expected to be able to:

1. Understand the process through which hydrocarbon resources are transformed to reserves and differentiate between the different types of reserves as well as their worldwide distribution
2. Evaluate the impact of technological innovation on the exploration, production, refining, distribution and transportation of petroleum and natural gas
3. Analyze the significance of hydrocarbons for the world economy and the global energy mix
4. Identify the major players of the oil & gas industries while critically assessing the different priorities, characteristics and co-dependencies between corporate and state actors
5. Comprehend the basic dynamics of price formation for the international oil market and the regional gas markets while analyzing the fundamental differences and similarities between the structure of the oil and natural gas systems

Course Content:

The impact of technology on the transformation of resources to reserves. Types of Conventional and Unconventional Reserves and their worldwide distribution. The Economic Fundamentals of Oil & Gas Exploration and Production. The role of hydrocarbons in the global energy supply/demand mix: Differences and Similarities Across the OECD states and the Developing World. The Structure of the Oil & Gas Markets: The Midstream and Downstream Sector. The Structure of the Oil & Gas Markets: Price Formation and Cartelization Dynamics. The Oil & Gas Policies of the Major Exporting and Importing States. The role of OPEC and the GECF. The Role of the Multinational Oil & Gas Companies.

Teaching Methods:

Lectures, In-class exercises, In-class discussions and homework

Assessment Methods:

Assignments, mid-term exam, final exam

Required Textbooks:

Authors	Title	Publisher	Year	ISBN
Marcello Colitti & Claudio Simeoni	*Perspectives of Oil & Gas: The Road to Interdependence*	Springer	1996	

Recommended Textbooks / Reading:

Davis W. Edwards, *Energy Trading and Investing: Trading, Risk Management and Structuring Deals in the Energy Market*, (McGraw-Hill: 2009)

Havard Devold, *An Introduction to Oil & Gas Production,* Oslo, (ABB Oil & Gas: 2009)

International Energy Agency, *Resources to Reserves: Oil & Gas Technologies for the Energy Markets of the Future,* Paris, (OECD: 2006)

Francisco Parra, *Oil Politics: A Modern History of Petroleum,* (I.B.Tauris: 2004)

Daniel Yergin, *Prize: The Epic Quest for Oil, Money and Power,* (Touchstone: 1992)

Websites:

International Energy Agency (http://www.iea.org)

Organization of Petroleum Exporting Countries (http://www.iea.org)

European Commission, Directorate for Energy (http://ec.europa.eu/energy/index_en.htm)

U.S. Department of Energy, Energy Information Administration (http://www.eia.doe.gov)