



STUDY PROGRAMME

European Interdisciplinary Studies, Natolin campus (Advanced Academic Master)

YEAR

2021-2022

COURSE TITLE

Energy in a Globalised World: Economics, Politics and Policies

ACADEMIC ASSISTANT

MURAVSKA Vladimira

COURSE PROFESSOR(S)

HENDERSON James

ADMINISTRATIVE OFFICER

COURSE TYPE

Compulsory Core Course

MAJOR(S)

Not applicable

ECTS CREDITS

4

SEMESTER	TEACHING HOURS	INDIVIDUAL & GROUP STUDY TIME	TUTORIAL(S)	COEFFICIENT	LANGUAGE(S)
1	20	80		1	EN

COURSE OBJECTIVE

A broad understanding of the global energy economy and the challenges of the energy transition. An understanding of the geo-political implications for different states and governments as they adjust their long-term strategies as producers or consumers of hydrocarbons, with resulting changes in questions over energy security. A sense of how companies are also adapting their strategies, with an opportunity to get proactively involved in discussion over various case studies. A more detailed understanding of how to create and use a discounted cashflow model to make strategic investment decisions. An ability to discuss the major assumptions and to assess various future scenarios for strategic planning purposes, in order to understand how company managements make key decisions.

COURSE LEARNING OUTCOMES

- Understanding of the key factors driving the global energy economy
- Knowledge of key strategy drivers for countries and companies involved in the energy economy
- Understanding of the impact of the energy transition
- Ability to create a cashflow model and understand its workings
- Ability to use the results of a cashflow model to make investment decisions
- Understanding of how companies make strategic decisions and how they interact with governments to resolve key issues
- Understanding of political drivers in the energy sector and how governments respond to external and internal pressures

RECOMMENDED PREPARATION

Students could usefully read some or all of the following. I would suggest the first two and then extracts of interest from the following three.

BP Statistical Review of World Energy and associated speeches to be found at <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>

BP Energy Outlook at <https://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html>

ExxonMobil Energy Outlook found at 2020 at <https://corporate.exxonmobil.com/Energy-and-innovation/Outlook-for-Energy>

Overview of IEA's World Energy Outlook at <https://www.iea.org/reports/world-energy-outlook-2020?mode=overview>

Global Energy: Issues, Potentials and Policy Implications, Ekins, Bradshaw and Watson, Oxford University Press

Handbook of the International Political Economy of Energy and Natural Resources, edited by Goldthau, Keating and Kuzemko, Edward Elgar

Basic cashflow modelling techniques. See

<https://corporatefinanceinstitute.com/resources/knowledge/valuation/dcf-formula-guide/> and <https://training-nyc.com/learn/financial-modeling/dcf-modeling> as examples

Understand basic use of an Excel spreadsheet – see <https://www.youtube.com/watch?v=rwbho0CgEAE> for a good beginners tutorial

TEACHING METHOD(S)

Online lectures with interactive content followed by on site lectures using slides and Excel spreadsheet to discuss and create DCF model (knowledge of Excel is important).

ASSESSMENT METHOD AND CRITERIA

One short essay on corporate or country strategy during the energy transition (length to be determined) and a set of questions based on a discounted cashflow model.

COURSE CONTENTS

The first 8 lectures will be relatively short (75 mins) and will be taught online. Lectures 9-12 will be taught in person (COVID 19 restrictions allowing) and will last 2.5 hours (with a 15 min break) to allow for more detailed analysis using an Excel spreadsheet. I summarize the topics to be covered here, but lectures may run over into each other depending on the pace required to allow full understanding. There will be at least 15 mins for Q&A in the first 8 lectures and plenty of time throughout lectures 9-12 for discussion and explanation.

Lecture 1&2: Discussion of current trends in the global energy market, including a short-term focus on the impact of the COVID-19 pandemic.

Lecture 3&4: Discussion of the impact of the energy transition, its major drivers and its impact on traditional energy sectors such as oil and gas. A particular focus on the electricity sector and the impact of renewable energy.

Lecture 5&6: State actors and the impact of geo-politics in the energy sector. Detailed discussion of developments in the US, Russia, the Middle East and China and their impact on the global energy economy and global geo-politics.

Lecture 7&8: Key energy companies and their developing strategies. How are International Oil Companies, National Oil Companies and smaller players adapting to the energy transition. Is there a future for multinational oil companies and if not what will replace them? How are electricity companies developing and what companies are emerging with new technologies for the energy transition?

COURSE MATERIALS (readings and other learning resources/tools)

See above in recommended preparation.