**ETM 501**

**Energy: Economy and Politics**

**Fall 2020-2021**

**Course Syllabus**

**October 2nd, 2020, v1**

**Instructors**

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**Course objective**

The course aims to provide a big-picture view to help students understand the interdependencies between economics, international politics, business and environment, regarding energy-related issues.

**Learning Outcomes**

Upon successful completion of this course, students are expected to be able to:

* Categorize primary energy sources along with their worldwide distribution, supply-demand relations and associated production technologies.
* Discuss the relative advantages and disadvantages (in terms of investment requirements, environmental impact and political risks) of using traditional fossil fuels (oil, natural gas, coal), renewable energy sources (hydro, solar, wind, biomass) and nuclear energy.
* Explain the dynamics of energy supply chains and energy markets with particular focus on electricity as the most usable form of energy.
* Demonstrate substantive knowledge of how energy relates to social, political, and economic aspects of contemporary life on a national, regional or global basis.
* Demonstrate familiarity with sources and databases to obtain reliable information on energy reserves, production, transmission, and distribution.
* Analyze how energy security and the geopolitics of energy affect national and EU policies as well as international relations.
* Explain how economic and non-economic factors affect energy markets and prices of primary energy as well as power.

**Course Policies**

* Attendance (physical or online) is mandatory and will be recorded.
* Partial (not full) lecture slide sets will be available at SuCourse+.

**Evaluation Policy**

* Course grading will be based in-class contribution, quiz and assignments.
* Assignments will be posted to SuCourse+.
* Grades will be announced via SuCourse+.

**Course Material and References**

There is no main textbook for the course. Instead, we will use various reading material including book chapters, white papers and reports. Below, we list a number of sample reading material and resources. Additional readings will be posted at SUCourse from time to time.

* The Quest (Book): Energy, Security, and the Remaking of the Modern World. D. Yergin. 2012. (highly recommended. Turkish version title: Enerjinin Geleceği, 2 cilt)
* The Prize: The Epic Quest for Oil, Money and Power: D. Yergin. 1990. Turkish version title: Petrol. Iş Bankası Yayınları.
* IEA World Energy Outlook Reports

[www.worldenergyoutlook.org/](http://www.worldenergyoutlook.org/)

* IEA Technology Roadmaps

[www.iea.org/roadmaps/](http://www.iea.org/roadmaps/)

* BP Statistical Review of World Energy Reports

[www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html](http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html)

* BP Energy Outlook

[www.bp.com/en/global/corporate/energy-economics/energy-outlook.html](http://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html)

* International Renewable Energy Agency, IRENA

www.irena.org

* World Energy Council publications

www.worldenergy.org/publications/

* The Economist Journal: Articles and Special Reports on Energy

www.economist.com/topics/energy-industry

* McKinsey consulting:

[www.mckinsey.com/industries/electric-power-and-natural-gas/how-we-help-clients](http://www.mckinsey.com/industries/electric-power-and-natural-gas/how-we-help-clients)

* Deloitte consulting:

www2.deloitte.com/global/en/industries/energy-resources-industrials.html

* US Energy Information Administration (EIA) – Energy Explained webpage

<https://www.eia.gov/energyexplained/>

* The Oxford Institute for Energy Studies

[www.oxfordenergy.org](http://www.oxfordenergy.org)

* GTM research

www.greentechmedia.com/research

* The World Nuclear Industry Status Reports
* Sustainable energy without the hot air. D. J. MacKay. Free pdf book.

[www.withouthotair.com/](http://www.withouthotair.com/)

* The Prize (Book): The Epic Quest for Oil, Money & Power. D. Yergin. 2009. (focused on the history of oil industry)(Turkish version title: Petrol)
* The Boom (Book): How Fracking Ignited the American Energy Revolution and Changed the World. Russell Gold. 2015.
* Oil 101 (Book). Morgen Downey. 2009.
* IICEC (Sabanci University Istanbul International Center for Energy and Climate)

iicec.sabanciuniv.edu/

* Shura Energy Transition Center

www.shura.org.tr/eng/

* The Global Politics of Energy. Campbell and Price
* Ahmet O. Evin, Energy and Turkey’s Neighborhood: Post Soviet Transformations and Transatlantic Interests
* Ahmet O. Evin, Turkey’s Energy Policy and the EU’s Energy Demand
* Ahmet O. Evin, The Future of the EU's Gas Dependence on Russia
* Jamestown Foundation, Eurasia Daily Monitor

[www.jamestown.org/programs/edm/](http://www.jamestown.org/programs/edm/)

**Course Schedule**

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| **ETM 501**  **Energy: Economy and Politics** | | | | |
| **Date and Time**  *(Sat. 13.00-15.45,*  *Tue 19.00-21.45)* | | | **Topic** | **Instructor** |
| **Week-1** | 3 Oct. | Saturday | Introduction: Energy & Electricity | Murat Kaya |
| 6 Oct. | Tuesday | Oil-1 | Murat Kaya |
| **Week-2** | 10 Oct. | Saturday | Oil-2 | Murat Kaya |
| 13 Oct. | Tuesday | Natural Gas | Murat Kaya |
| **Week-3** | 17 Oct. | Saturday | Coal & Nuclear | Murat Kaya |
| 20 Oct. | Tuesday | Renewables-1 | Murat Kaya |
| **Week-4** | 24 Oct. | Saturday | Renewables-2 | Murat Kaya |
| 27 Oct. | Tuesday | The Geopolitics of Energy Yesterday and Today | Ahmet Evin |
| **Week-5** | 31 Oct. | Saturday | Domination and Dependence: the U.S. and Middle East | Ahmet Evin |
| 3 Nov. | Tuesday | Emerging Actors: China, India, Africa | Ahmet Evin |
| **Week-6** | 7 Nov. | Saturday | Russia and Eurasia | Ahmet Evin |
| 10 Nov. | Tuesday | Response to Climate Change: the EU and Others | Ahmet Evin |
| **Week-7** | 14 Nov. | Saturday | The Covid Crisis: New Realities or Back to Old Habits? | Ahmet Evin |
| 17 Nov. | Tuesday | Turkey’s Energy Challenge | Ahmet Evin |