

# Global Petroleum & Gas Market Economics

## Module 3, 2019

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### Course information

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**Course Website:** <https://my.nes.ru/>

**Instructor's Office Hours:**

**Class Time:**

**Room Number:**

**TAs:** -

### Course description

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The objective of the course is to provide the student with the fundamental knowledge and applied skills necessary to develop of economic rationales for making informed operation and strategic decisions in global Oil & Gas markets. The students will:

- know the basic sources of the information, appropriate tools and international best practices for analysis and forecasting in the volatile and uncertain market environment;
- be able to develop up-to-date economic models of the global and national Oil & Gas markets;
- develop the solid competence of working in team and excellent command of their business-communication abilities;
- practice to solve the most actual tasks of Research, Strategy and Planning Departments at Investment Banks (IB) and Oil & Gas industry.

### Course requirements, grading, and attendance policies

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**Prerequisites:** Micro- and macroeconomics, Statistics, Econometrics

**Teaching and Work Forms:** 2 lectures or 1 lecture + 1 workshop every week. Workshops will be devoted to the individual or group presentation of the student's independent researches.

Grading policy: the Grade will come via following criteria:	max	threshold
• Attendance	14%	8%
• Presentation	10%	6%
• Homeworks	36%	22%
• Final exam	40%	24%

## **Global Petroleum & Gas Market Economics**

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1. Global oil Supply:
  - Course overview, grading, sources of information, basic definitions
  - Oil production cost curve
  - Investment and oil production
  - USA shale-oil industry analysis
2. Global oil demand:
  - Growth of global economy and oil consumption
  - GDP oil intensity and demand-side technology improvement
  - Seasonality of individual countries
  - Structure of oil demand by consuming industries
  - Workshop on oil supply
3. Global oil supply-demand balance
  - Oil market balance
  - Inventory accumulation (USA, OPEC, Global)
  - Commercial vs. strategic reserves
  - Key factors of the surplus and deficit formation at the modern market
  - Workshop on global economy and oil demand
4. Oil price formation
  - Oil price formation on ICE and market participants
  - Price basis and parity calculations
  - FX influence on oil prices
  - Price forecast and its accuracy in the short- and long-term
  - Workshop on global automotive industry
5. Oil transportation and refining:
  - Oil trade and transportation
  - Refining industry
  - Petrochemical industry
  - Workshop on OPEC:
    - history, strategy and prospects
    - winners and losers of oil price swing
6. Global oil & gas industry:
  - Key indicators of the global Oil & Gas industry
  - Oligopoly competition in the market
  - Workshop on strategy: Global players vs. Russian champions
7. Future of energy markets:
  - Workshop: Scenario planning and strategy analysis
8. Final exam

### **Description of course methodology**

The course will mix conventional lecturing with more interactive techniques, such as class discussions, discussions of cases, student presentations, research papers, etc.

## **Course materials**

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### **Required textbooks and materials**

There will be no base textbook. The course will be predominantly based on papers, presentations, data tables, provided before and during the course. Basic sources of information on international oil and gas markets are the following:

[International Energy Agency \(IEA\)](#)  
[U.S. Energy Information Administration \(EIA\)](#)  
[Organization of the Petroleum Exporting Countries \(OPEC\)](#)  
[Joint Organisations Data Initiative \(JODI\)](#)  
[BP Energy Economics](#)  
[Shell: Future of Energy](#)  
[IMF Primary Commodity Prices](#)  
[IHS](#)  
[Wood Mackenzie](#)  
[Rystad Energy](#)  
[Energy Strategy of Russia for the period up to 2030](#)

### **Additional materials**

[Daniel Yergin, The Prize: The Epic Quest for Oil, Money, and Power, Dec 2008, 928 p.](#)  
[ARGUS](#)  
[Oil on the Bloomberg](#)  
[Platts](#)  
[Baker Hughes Drilling Rigs monitoring](#)  
[Intercontinental Exchange](#)  
[ЦДУ ТЭК](#)

IB reports: GS, Citi, MS, ML, DB, Barclays, UBS, etc.

## **Academic integrity policy**

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Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.