

# Syllabus

## 1. Program information

1.1. Institution	ACADEMY OF ECONOMIC STUDIES
1.2. Faculty	Business Administration in Foreign Languages
1.3. Departments	Business Administration
1.4. Field of study	Business Administration
1.5. Cycle studies	Master Studies
1.6. Education type	Full-time
1.7. Study program	Entrepreneurship and Business Administration in Energy
1.8. Language study	English
1.9. Academic year	2017-2018

## 2. Course information

2.1. Name	<b>Energy Trading</b>								
2.2. Code	<b>17.0252IF2.1-0001</b>								
2.3. Year of studies	<b>2</b>	2.4. Semester	<b>1</b>	2.5. Assessment type	<b>Exam</b>	2.6. Course type	<b>O</b>	2.7. Number of ECTS	<b>6</b>
2.8. Instructors	C(C)	<b>Asociat dr. MORARU DAN</b>					dan.moraru33@gmail.com		

## 3. Total estimated time

3.1. Number of weeks	14.00
3.2. Number of hours per week	3.00 of which
	C(C) 2.00
	S(S) 1.00
3.3. Total hours from curriculum	42.00 of which
	C(C) 28.00
	S(S) 14.00
3.4. Total hours of study per semester (ECTS*25)	150.00
3.5. Total hours of individual study	108.00
<i>Time distribution for individual study</i>	
Study the textbook, course support, bibliography and notes	40.00
Further reading in the library, on the online platforms and field	32.00
Preparing seminars, labs, homework, portfolios and essays	32.00
Tutoring	1.00
Examinations	1.00
Other activities	2.00

## 4. Prerequisites

4.1. About curriculum	Energy Market Entrepreneurship and business development in the energy
4.2. About skills	

## 5. Requirements

C(C)	Classroom with computer and projector
S(S)	Classroom with computer and projector

## 6. Skills covered

	C6	The innovative use of information technology in applying the project management specific methods, techniques and instruments
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## 7. Course objectives

7.1. General objective	Understanding the development, structure, coordination of national and European legislation in the electricity supply industry and the way in which energy transactions are influenced by the ownership structure in the production, distribution, supply and trading in electricity settlement site in Romania. Induction of new modern and efficient perceptions on trading patterns in the energy producer by the understanding how efficient European producers operate with flexibility contracts, base-load, vanilla option, finance & hedging.
7.2. Specific objectives	Putting in value of production capacities in Romania through new models of electricity through tolling agreements, wheeling power models and Virtual Power Plant The ability to generate added value through structured finance transactions (Financial options, option valuation, spread options, swaps, cross commodity etc) Responsible and effective use of opportunities arising from liberalization paradigm (role of the state, measures of liberalization and deregulation, the role of regulation)

## 8. Course contents

8.1. C(C)		Teaching methods	Advices
1	Introductory elements of the development, structure, coordination and legislation in the electricity supply industry	Interactive methods using media	
2	Structure, operation and management of the electricity supply chain - how profit can shape market participants	Interactive methods using media	
3	Energy policies, priorities, shareholders, interests and influences	Interactive methods using media	
4	Financing energy trading business	Interactive methods using media	
5	Protecting energy trading business	Interactive methods using media	
6	The process of forecasting in production and trading	Interactive methods using media	
7	Models operating and wheeling power tolling	Interactive methods using media	
8	Energy demand - spatial load forecasting Supply of energy - the generation stack and merit order	Interactive methods using media	
9	Negotiating and trading contract and base load with electricity from cogeneration, nuclear and solar wind	Interactive methods using media	
10	Hedging through operations cross the DAM (DAM), base-load, export / import depending on time zone differences	Interactive methods using media	
11	The deficiencies of the trading environmental of State vs OTC trading or stock, index, and trading hubs	Interactive methods using media	
12	Training models for derivatives price for electricity	Interactive methods using media	
13	Energy Portfolio Management - prediction P & L through VAR , Delta, Gamma	Interactive methods using media	
14	Speculation vs hedging, hedging techniques, VAR	Interactive methods using media	

***Bibliography***

- Chris Harris, Electricity Markets: Pricing, Structures and Economics , The Wiley Finance Series
- Bob Shively & John Ferrare, Understanding Today's Electricity Business
- Steven Erera & Stewart Brown, Fundamentals of Trading Energy Futures and Options
- Stefano Fiorenzani, Samuelle Ravelli, Enrico Edoli, The Handbook of Energy Trading , The Wiley Finance Series
- Peter Brandt, Diary of a Professional Commodity Trader: Lessons from 21 Weeks of Real Trading

8.2. S(S)		Teaching methods	Advices
1	Discussions on the topics presented in class, questions, answers, clarifications, identifying opportunities, threats and risks	Interactive methods using media and case studies project	
2	Analysis of interests along the energy path from producer to distributor and supply measure up to consumer	Interactive methods using media and case studies project	
3	Why energy became more expensive. Aspects goals and interests.	Interactive methods using media and case studies project	
4	Examples of business financing electricity and optimizing the mix of private resources and funds raised	Interactive methods using media and case studies project	
5	Decision of action active on all markets to minimize the losses imbalances	Interactive methods using media and case studies project	
6	The forecast consumption to industrial consumers, PRE, reducing the losses associated with forecasts	Interactive methods using media and case studies project	
7	Objective reasons for occurrence wheeling and tolling. Subjective reasons for rejection of tolling's in Romania	Interactive methods using media and case studies project	
8	Formation energy prices and why the state fails to harmonize the interests of producers with consumers' interests	Interactive methods using media and case studies project	
9	Specifics energy prices from various sources of production	Interactive methods using media and case studies project	
10	Understanding the opportunities and risks of the various markets	Interactive methods using media and case studies project	
11	State influences the decision to impose trading conditions against the European trend	Interactive methods using media and case studies project	
12	Practical applications of forwards, swaps and options on futures	Interactive methods using media and case studies project	
13	Practical applications of VAR, Delta, Gamma, etc.	Interactive methods using media and case studies project	
14	Applications hedging internal and external market of energy	Interactive methods using media and case studies project	

### ***Bibliography***

- Chris Harris, Electricity Markets: Pricing, Structures and Economics , The Wiley Finance Series
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- Stefano Fiorenzani, Samuelle Ravelli, Enrico Edoli, The Handbook of Energy Trading, The Wiley Finance Series
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## **9. Course contents corroboration with the demands of epistemic community representatives, professional associations and representative employers**

The contents of the discipline was correlated with the requirements of the business environment in Romania, through a series of meetings and professional debates.

**10. Assessment**

Activity	Assessment criteria	Assessment methods	Percentage in the final grade
10.1. C(C)	Summative evaluation	Written examination	50.00
10.2. S(S)	Progressive evaluation	Case studies, homework	50.00
10.3. Final assessment			
10.4. Grading scale	Whole notes 1-10		
10.5. Minimum performance standard	50%		

Completion date,  
11/20/2017

Instructors,

Approval date of department

Director of department,