1. GENERAL INFORMATION				
1.1. Course teacher	Associate Professor Tomislav Kurevija, PhD		1.6. Year of the study	II.
1.2. Name of the course	Crude oil and derivatives market and trading		1.7. ECTS credits	4
1.3. Associate teachers	Teaching Assistant Marija Macenić, PhD		1.8. Type of instruction (number of hours L + E + S + e-learning)	30L+15E+10S+5e-learning
1.4. Study programme (undergraduate, graduate, integrated)	graduate		1.9. Expected enrolment in the course	10
1.5. Status of the course	☐ mandatory	☒ elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	level 2, 8,3% on line
2. COUSE DESCRIPTION				
2.1. Course objectives	Elaborate functioning of world petroleum and petroleum derivatives markets and influence of different macroeconomic, monetary and geopolitical indicators on forming the petroleum prices and its volatility. Understanding of oil price forecast on world's trade markets, by applying technical and fundamental analysis.			
2.2. Enrolment requirements and/or entry competences required for the course	-			
2.3. Learning outcomes at the level of the programme to which the course contributes	Independently solve complex engineering problems in petroleum engineering and geoenergy engineering; Compare specific procedures and processes in petroleum engineering and geoenergy engineering; Supervise projects in petroleum engineering and geoenergy engineering; Appraise energy company's business; Analyse energy markets.			
2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes)	Analyse parameters impacting crude oil/petroleum and petroleum derivatives prices; Differentiate various forms of petroleum trading according to the type of transaction; Comprehend importance of maritime transport costs within the economy of petroleum supply chain; Apply loss protection techniques and market risk management, available to prevent petroleum price volatility; Predict petroleum and petroleum derivatives market development by understanding basic technical and fundamental analysis of petroleum and petroleum derivatives prices.			
2.5. Course content (syllabus)	Fundamental relations of petroleum demand and supply; Energy resources, supply and demand of energy in the world; Petroleum producing countries, OPEC, international petroleum companies – limitations and market strategies; Fundamentals of petroleum maritime transport and its role in forming the price; Market stakeholders and fixing the freight rate, lease contracts, risk control and environmental protection; Physical crude oil trading; Main petroleum markets and referent crude oils; Petroleum and petroleum derivatives price forming, from the aspect of refinery stakeholders; Various types of contracts and trading: long-			

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	term, spot and forward markets; The role of Price Reporting Agencies (PRAs) in the market; Petroleum derivatives trading and main terms of purchase and sale agreements; Futures and options contracts in petroleum trading; Functioning of NYMEX and ICE exchange. Volatility concept; Loss protection and managing market risk, with aspect on long- and short-term hedging; Arbitration principle, fundamental spot prices and impact on forward energy stock prices and energy assets. Effects of crack and spark spread; Petroleum and petroleum derivatives option markets; Call and put option for crude oil; Option trading strategies and energy swaps; Market structure (contango and backwardation); Technical and fundamental analysis of predicting crude oil market trends and connected energy shares; Technical analysis tools: indicators, price curve and traded volume; Using charts in technical analysis: Candlestick charts, Bollinger bands, tunnel option; Indicator use in technical analysis, part I: zero-line oscillators – Momentum, ROC, PPO, MACD; Indicator use in technical analysis, part II: "up" and "down" oscillators – RSI, CCI, Williams, %R, K%D; Petroleum and petroleum derivatives trading with broker demo account – real time trading; Impact of macroeconomic, geopolitical and monetary indicators on petroleum price forming.

2.6. Format of instruction:	☒ lectures ☒ seminars and workshops ☒ exercises ☐ online in entirety ☒ partial e-learning ☐ field work	☒ independent assignments ☒ multimedia and the internet ☐ laboratory ☒ work with mentor ☐ (other)	2.7. Comments:	-
2.8. Student responsibilities	Active participation in lecture, preparation and presentation of the seminar paper, taking the oral exams.			

2.9. Monitoring student work	Class attendance	YES		Research		NO	Oral exam	YES	
	Experimental work		NO	Report		NO			
	Essay		NO	Seminar paper	YES				
	Preliminary exam		NO	Practical work		NO			
	Project		NO	Written exam		NO	ECTS credits (total)	4	

2.10. Required literature (available in the library and/or via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	James, T. (2008.): *Energy markets: Price risk Management and Trading*, John Wiley& Sons.	NO	YES
	Gkanoutas-Leventis, A. (2017.):*Spikes and Shocks: The Financialisation of the Oil Market*, Springer.	NO	YES
	Yoshino, N. (2016.): *Monetary Policy and the Oil Market*, Springer.	NO	YES
	Dicker, D. (2011.): *Oil's endless bid: Taming the Unreliable price of oil*, John Wiley & Sons.	NO	YES
2.11. Optional literature	-		

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2.12. Other (as the proposer wishes to add)	-

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