

## COURSE MODULE OUTLINE

### General information

|                                                                                                                                                                                                                                                                           |                                                                                                           |                              |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|-----------------|
| <b>SCHOOL</b>                                                                                                                                                                                                                                                             | Social Sciences                                                                                           |                              |                 |
| <b>PROGRAM COURSE</b>                                                                                                                                                                                                                                                     | Supply Chain Management                                                                                   |                              |                 |
| <b>LEVEL OF STUDY</b>                                                                                                                                                                                                                                                     | Postgraduate                                                                                              |                              |                 |
| <b>COURSE UNIT CODE</b>                                                                                                                                                                                                                                                   | SCM21                                                                                                     |                              | 2 <sup>nd</sup> |
| <b>COURSE TITLE</b>                                                                                                                                                                                                                                                       | Oil and Gas Dynamics                                                                                      |                              |                 |
| <b>INDEPENDENT TEACHING ACTIVITIES</b><br><i>in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits</i> |                                                                                                           | <b>WEEKLY TEACHING HOURS</b> | <b>CREDITS</b>  |
| 21-22 hours per week*13 weeks                                                                                                                                                                                                                                             |                                                                                                           | 273-286                      | 10ECTS          |
| Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4                                                                                                                                                 |                                                                                                           |                              |                 |
| <b>COURSE TYPE</b><br>Compulsory,<br>Optional,<br>Optional mandatory                                                                                                                                                                                                      | Compulsory                                                                                                |                              |                 |
| <b>PREREQUISITE COURSES:</b>                                                                                                                                                                                                                                              | No                                                                                                        |                              |                 |
| <b>LANGUAGE OF INSTRUCTION AND EXAMS:</b>                                                                                                                                                                                                                                 | English                                                                                                   |                              |                 |
| <b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>                                                                                                                                                                                                                          | No                                                                                                        |                              |                 |
| <b>COURSE WEBSITE (URL)</b>                                                                                                                                                                                                                                               | <a href="https://courses.eap.gr/course/view.php?id=419">https://courses.eap.gr/course/view.php?id=419</a> |                              |                 |

### (2) LEARNING OUTCOMES

#### **Learning Outcomes**

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:

#### **APPENDIX A**

- Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.
- Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and

#### **APPENDIX B**

- Guidelines for writing Learning Outcomes

Upon the successful completion of the module students will be able to:

- Understand the dynamics of the oil market
- Analyse the relationship between supply and demand of oil and its products
- Be aware of the main trades of oil and products and the geopolitical challenges
- Understand current and future challenges the oil and gas market is faced with (technology, environment, economic, financial, etc)
- Master scenario design and analysis for the oil and gas markets

### **General Competences**

*Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?*

*Search for, analysis and synthesis of data and information by the use of appropriate technologies,*

*Adapting to new situations*

*Decision-making*

*Individual/Independent work*

*Group/Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*social Introduction of innovative research*

*Project planning and management*

*Respect for diversity and multiculturalism*

*Environmental awareness*

*Social, professional and ethical responsibility and*

*sensitivity to gender issues*

*Critical thinking*

*Development of free, creative and inductive thinking*

*.....*

*(Other .....citizenship, spiritual freedom, awareness, altruism etc.) .....*

- Production of free, creative and inductive thinking
- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Working independently
- Decision-making
- Project planning and management
- Respect for the natural environment
- Criticism and self-criticism
- Decision making

### **(3) COURSE CONTENT**

The module focuses on the oil market and its dynamics. It outlines the structure of the oil and gas supply chain, from mining to the final consumer, highlighting the strategic challenges supply chain executives face at strategic and tactical level via practical examples and case studies. The module applies supply chain theory in practice.

## TEACHING METHODS--ASSESSMENT

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--|
| <p><b>MODES OF DELIVERY</b><br/> <i>Face-to-face, in-class lecturing, distance teaching and distance learning etc.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Distance education with three Contact Sessions (Tutor-Student-Sessions-TSS) during the academic year on weekends.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |  |
| <p><b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY</b><br/> <i>Use of ICT in teaching, Laboratory Education, Communication with students</i></p>                                                                                                                                                                                                                                                                                                                                                                                        | <p>We use :<br/> Remote meetings tools (webex),<br/> Presentation software (e.g. power point),<br/> Specialized software in the subjects under study. Additionally, the students use office automation tools, web browsers and e-reader for digital books.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |  |
| <p><b>COURSE DESIGN</b><br/> <i>Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc.</i></p> <p><i>The study hours for each learning activity as well as the hours of selfdirected study are given following the principles of the ECTS.</i></p>                                                           | <p><b>Activity/Method</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><b>Semester workload</b></p> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>3 TTS *4 hours</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>12</p>                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>2 small educational activities *20 hours</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>40</p>                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>1 large educational activite 30</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>30</p>                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>Exam 2 hours</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>2</p>                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>Individual work and study</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>189-202</p>                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p><b>Total</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>273-286</p>                  |  |
| <p><b>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS</b><br/> <i>Detailed description of the evaluation procedures:</i></p> <p><i>Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other .....etc.</i></p> <p><i>Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students.</i></p> | <p>Two (2) Short Written Essays, with weighting factor to the class unit's final grade 10% each. One (1) Semester Essay with weighting factor to the class unit's final grade 20%. The right to participate in the final exams is secured if there is at least 50% of the sum of what is potentially excellent from all the essays collected and graded, that is 20 units overall out of 100, according to the weighting factors of the essays. The grade of the written assignments (short and semester) is activated only with a grade equal to, or above the base (<math>\geq 5</math>) in the final or repeated exams. All criteria are posted in each module's webpage, as well as in the programme's general page.</p> |                                 |  |

#### (4) SUGGESTED BIBLIOGRAPHY:

##### Reading material

1. Sanjib Chowdhury (2016). Optimization and Business Improvement Studies in Upstream Oil and Gas Industry. John Wiley & Sons, Inc. Online ISBN: 9781119246596 (DOI:10.1002/9781119246596)
2. Inkpen, A., Moffett, A. (2011). The global oil and gas industry: Management, strategy and finance. Pennwell Publications. ISBN: 978-1-59370-239-7. Available in Google Books: [https://books.google.gr/books?id=aNLafH\\_o3GcC&printsec=frontcover&dq=1\)+Inkpen,+A.,+Moffett,+A.+\(2011\).+The+global+oil+and+gas+industry:+Management,+strategy+and+finance.+Pennwell+Publications.+ISBN:+978-1-59370-239-7&hl=en&sa=X&ved=2ahUKEwj3m-bbjcjsAhUvzYUKHergB6oQ6AEwAXoECAIQAg#v=onepage&q&f=false](https://books.google.gr/books?id=aNLafH_o3GcC&printsec=frontcover&dq=1)+Inkpen,+A.,+Moffett,+A.+(2011).+The+global+oil+and+gas+industry:+Management,+strategy+and+finance.+Pennwell+Publications.+ISBN:+978-1-59370-239-7&hl=en&sa=X&ved=2ahUKEwj3m-bbjcjsAhUvzYUKHergB6oQ6AEwAXoECAIQAg#v=onepage&q&f=false)

##### Additional reading

1. Spreight, J. (2011) Petroleum technology, Economics and Politics. Wiley. ISBN 978-1-118-01299 (Available in google books: <https://books.google.gr/books?id=COUkeS1TDLUC&printsec=frontcover&dq=Petroleum+technology,+Economics+and+Politics&hl=en&sa=X&ved=2ahUKEwiQ3bybjsjsAhUQ2BoKHWjgCSEQ6AEwAHoECAEQAg#v=onepage&q=Petroleum%20technology%2C%20Economics%20and%20Politics&f=false>)
2. Stella Tsani (2020). Economic terms and local content policies for hydrocarbon exploration and production in Greece. Hellenic Hydrocarbon Resources Management (Available here: [https://www.google.com/url?q=https%3A%2F%2Fwww.greekhydrocarbons.gr%2Fnews\\_files%2Fhhrm\\_book\\_2020\\_eng.pdf&sa=D&sntz=1&usq=AFQjCNEHrhZcnJZfRE2AYB1AF1qaXA2Tg](https://www.google.com/url?q=https%3A%2F%2Fwww.greekhydrocarbons.gr%2Fnews_files%2Fhhrm_book_2020_eng.pdf&sa=D&sntz=1&usq=AFQjCNEHrhZcnJZfRE2AYB1AF1qaXA2Tg))
3. Tordo, S. (2010). Petroleum Exploration and Production Rights: Allocation Strategies and Design Issues. World Bank (Available here: <https://openknowledge.worldbank.org/handle/10986/5954> )
4. Tordo, S., Warner, M., Manzano, O., Anouti, Y. (2013). Local Content Policies in the Oil and Gas Sector. World Bank (Available here: <http://documents1.worldbank.org/curated/en/549241468326687019/pdf/Local-content-in-the-oil-and-gas-sector.pdf>)
5. Tsani, S., Overland I. (Eds.) The Sustainable Politics and Economics of Natural Resources. Edward Elgar Publishing. (2021).