



FACULTY OF  
EARTH SCIENCE  
AND ENGINEERING

# **INTRODUCTION TO GEOPHYSICAL SCIENTIFIC LITERATURE**

MSc in Petroleum Geoengineering

First semester 2020/2021

**COURSE COMMUNICATION DOCUMENT**

**University of Miskolc  
Faculty of Earth Science and Engineering  
Institute of Geophysics and Geoinformatics**

## Course datasheet

<b>Course Title: Introduction to geophysical literature (Optional courses I.)</b>	<b>Credits: 2</b>
Type (lec. / sem. / lab. / consult.) and Number of Contact Hours per Week: <b>sem. 2</b>	
Neptun code: MFGFT710008	
<p><b>Type of Assessment</b> (exam. / pr. mark. / other): <b>pr. mark</b>          Attendance at lectures is regulated by the university code of education and examination. Writing one article at the end of the term (50 %). Making one powerpoint presentation on an assigned topic (50 %).</p> <p><b>Grading limits:</b>          &gt;86 %: excellent (5), 71-85 %: good (4), 61-70 %: medium (3), 51-60 %: satisfactory (2), &lt;50 %: unsatisfactory (1).</p>	
Position in Curriculum (which semester): <b>first</b>	
Pre-requisites ( <i>if any</i> ):	
<b>Course Description:</b>	
<p><b>Acquired store of learning:</b>  <u>Study goals:</u> The course provides as a guide to orientate in geophysical literature and make acquaintance with geophysical terminology.  <u>Course content:</u> Classification of applied geophysical methods. Applied geophysical exploration and data processing methods are studied and analyzed by technical encyclopedias, book chapters, articles of scientific (impact factor) journals and conference proceedings. Acquiring the terminology of geophysics using papers, books. Learning the rules of scientific paper writing. Formal and professional requirements of scientific (ranked, impact factor) journals. Professional analysis of journal papers. Professional analysis of conference papers. Making an oral conference presentation. Making a poster presentation. Preparing conference speeches. Practicing the communication with English-speaking professionals. Practicing of delivering lectures in a simulated conference. Practice answering professional questions. Study of geophysical encyclopedias in English.  <u>Education method:</u> Continuous dialogue between the instructor and students. Translation exercises, reading, delivering presentation in a simulated conference, contributions. Meeting with English-speaking lecturers and professionals staying at the university.</p> <p><b>Competencies to evolve:</b>          T1, T5, T8, T12, K1, K2, K3, K5, K6, K7, K8, K9, K10, K11, A2, A3, A4, A5, A6, A7, A8, A9, F1, F2, F3, F4, F5</p>	
The 3-5 most important compulsory, or recommended <b>literature resources:</b>	
<ul style="list-style-type: none"> <li>• Kearey P., Brooks M., Hill I., 2002: An Introduction to Geophysical Exploration. Third edition. Blackwell Science Ltd.</li> <li>• Lowrie W., 2007: Fundamentals of Geophysics. 2<sup>nd</sup> edition. Cambridge University Press.</li> <li>• Telford W. M., Geldart L. P., Sheriff R. E., 1990: Applied geophysics. Second edition. Cambridge University Press.</li> <li>• Ellis D. V., Singer J. M., 2007: Well logging for earth scientists. 2<sup>nd</sup> edition. Springer.</li> <li>• Sheriff R. E., 2002: Encyclopedic Dictionary of Applied Geophysics. Fourth edition. Society of Exploration Geophysicists.</li> </ul>	

- Selected papers from scientific journals: Geophysics, Petrophysics, Mathematical Geosciences, Journal of Petroleum Science and Engineering etc.

**Responsible Instructor** (*name, position, scientific degree*):

**Norbert Péter Szabó Dr.**, university full professor, PhD, Dr. habil.

**Armand Abordán Dr.**, assistant lecturer

## Course schedule

Date	Seminar
September 10.	Classification of applied geophysics methods. An overview of geophysical exploration methods based on international literature (Kearey et al., 2002).
September 17.	Presentation of the most prestigious domestic and international English-language (impact factor) journals. Ranking of scientific journals (Q1-Q4 and D1-ranked geophysical journals). Studying an applied geophysical encyclopedia in English and practicing professional terminology (Sheriff, 2002).
September 24.	Description of the rules of writing articles. Presentation of the Petrophysics journal's formal requirements.
October 1.	Analysis of an English-language article selected from Geophysics.
October 8.	Analysis of an English-language article selected from Petrophysics.
October 15.	Analysis of an English-language article selected from Journal of Petroleum Science and Engineering.
October 22.	Analysis of English-language articles freely chosen by students.
October 29.	No education
November 5.	Rules for making oral conference presentations.
November 12.	Rules for making poster conference presentations.
November 19.	Description of the assignment related to delivering a conference (powerpoint) presentation.
November 26.	Presentation of the students' professional results (BSc thesis, scientific student - TDK - thesis etc.) in the form of a conference presentation.
December 3.	Simulated conference. Practicing how to answer the questions of the audience.
December 10.	Submission of the articles written by the students.

## ***Sample of Assignment***

Individually written English-language article in geophysics, petrophysics or other geosciences. The main chapters of the article are as follows:

1. Title, personal data and affiliation.
2. Abstract up to 200 words.
3. Chapters written on the applied method(s).
4. Chapters written on the results.
5. Discussion.
6. Conclusions.
7. List of references.