FACULTY OF
EARTH SCIENCE
AND ENGINEERING

INTRODUCTION TO ENGLISH GEOPHYSICAL LITERATURE

MS in Earth Science Engineering, Geophysical and Geological Engineering specialization

First semester 2020/2021

COURSE COMMUNICATION DOCUMENT

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

Course datasheet

Course title: Optional subject - Group II Introduction to English Geophysical Literature **Responsible professor**: Norbert Péter Szabó Dr., PhD, dr. habil., university full professor Armand Abordán Dr., assistant lecturer	**Code**: MFGFT730041 **Responsible Institute/Department**: Institute of Geophysics and Geoinformatics / Department of Geophysics
Semester: third	**Pre-requisites** *(if any)*: -
Number of Contact Hours per Week: 0 lec. + 2 lab.	**Type of Assessment** (exam. / pr. mark. / other): pr. mark
Credits: 2	**Type of Program**: full time **Program and Specializations**: MS in Earth Science Engineering, Geophysical and Geological Engineering specialization
Study goals: Under the optional subject, MSc students of geosciences will be acquainted with the terminology of geophysics in English and will be instructed to find out in the literature. **Competencies to be developed**: Knowledge: T1, T3, T4, T5, T9 Ability: K1, K2, K3, K5, K6, K7, K11, K12, K13 Attitude: A1, A2, A3, A4, A5, A7 Autonomy and responsibility: F1, F2, F3, F4, F5	
Course content: Classification of applied geophysical methods. Overview of the main topics of applied geophysics based on English literature. Acquiring the terminology of geophysics using books and book chapters. Acquiring the terminology of geophysics using articles published in scientific journals. Acquiring the terminology of geophysics using conference proceedings and extended abstracts. Rules for writing scientific papers in English. 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. Practicing of delivering lectures in a simulated conference. Practice answering professional questions. Study of geophysical encyclopedias in English.	
Type of assessment: Attendance at lectures is regulated by the university code of education and examination. One assignment (making an individual paper) during the semester is the requirement of signature. **Grading scale**: > 86 %: excellent, 71-85 %: good, 61-70 %: medium, 46-60 %: satisfactory, <45 %: unsatisfactory.	

Compulsory and recommended literature resources:

- Lowrie W., 2007: Fundamentals of Geophysics. Second Edition. Cambridge University Press.
- Telford W. M., Geldart L. P., Sheriff R. E., 1990: Applied geophysics. Second edition. Cambridge University Press.
- Kearey P., Brooks M., Hill I., 2002: An Introduction to Geophysical Exploration. Third edition. Blackwell Science Ltd.
- Ellis D. V., Singer J. M., 2007: Well logging for earth scientists. 2nd edition. Springer.
- Sheriff R. E., 2002: Encyclopedic Dictionary of Applied Geophysics. Fourth edition. Society of Exploration Geophysicists.
- Selected publications in professional journals: Acta Geodaetica et Geophysica, Geophysics, Petrophysics, Journal of Applied Geophysics, Acta Geophysica, Hydrogeology Journal, Mathematical Geosciences etc.

Course schedule

Week	Seminar
September 10.	Classification of applied geophysics methods. An overview of geophysical research methods based on international literature (Kearey et al., 2002).
September 17.	Presentation of the most prestigious domestic and international English impact factor journals. Professional journals (Q1-Q4 and D1 ranked geophysical journals).
September 24.	Studying an applied geophysical encyclopedia in English and practicing professional terminology (Sheriff, 2002).
October1.	Rules for writing a professional article. The formal requirements of paper submission for Hydrogeology Journal and Mathematical Geosciences.
October 8.	Analysis of an original paper selected from the journal Acta Geodaetica et Geophysica.
October 15.	Analysis of an original paper selected from the journal Geophysics.
October 22.	Analysis of an original paper selected from the journal Mathematical Geosciences.
October 29.	No education
November 5.	Description of the tasks related to the written assignment. Choosing a topic to create a stand-alone article. Self-conducted task: abstract writing. Checking, analyzing, and repairing the abstract.
November 12.	Rules for preparing an oral conference presentation.
November 19.	Rules for preparing a poster presentation.
November 26.	Presentation of the students' professional results (BSc thesis, TDK thesis etc.) in the form of a conference presentation.
December 3.	Simulated conference. Exercises on answering to professional questions.
December 10.	Submission of the written assignment (stand-alone article).

Sample of Assignment

Individually written English-language article in geophysics 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.