## COURSE/MODULE SYLLABUS FOR UNIVERSITY COURSES/PhD STUDIES

| 1.  | Course/module name in Polish and English  |  |  |
|-----|---|--|--|
|     | Selected Problems of Economic Geology/ Wybrane problemy geologii gospodarczej   |  |  |
| 2.  | Discipline  |  |  |
|     | Earth and Environmental Science   |  |  |
| 3.  | Language of instruction   |  |  |
|     | English   |  |  |
| 4.  | Teaching unit   |  |  |
|     | Faculty of Earth Science and Environmental Management, Institute of Geological Sciences, Department of Economic Geology |  |  |
| 5.  | . Course/module code  |  |  |
|     | USOS  |  |  |
| 6.  | Type of course/module (mandatory or optional)   |  |  |
|     | optional  |  |  |
| 7.  | Field of studies (major, if applicable)   |  |  |
|     | Geology   |  |  |
| 8.  | Level of higher education (undergraduate (I cycle), Master's (II cycle), 5 year uniform Master's studies)               |  |  |
|     | Master's (II cycle)   |  |  |
| 9.  | Year of studies (if applicable)   |  |  |
|     | I or II   |  |  |
| 10. | Semester (winter or summer)   |  |  |
|     | Winter or summer  |  |  |
| 11. | Form of classes and number of hours   |  |  |
|     | Lectures: 28  |  |  |
|     | Teaching methods:   |  |  |
|     | Multimedia lecture  |  |  |
| 12. | Name, title/degree of the teacher/instructor  |  |  |
|     | Coordinator: prof. dr hab. Andrzej Solecki  |  |  |
|     | Lecturer: prof. dr hab. Andrzej Solecki   |  |  |
| 13. | Course/module prerequisites, in terms of knowledge, skills, social competences  |  |  |
|     | B.Sc. level geological knowledge  |  |  |
| 14. | Course objectives   |  |  |
|     | Getting familiar with genesis and economy of mineral deposits   |  |  |
| 15. | Course content  |  |  |
|     |   |  |  |

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Types of mineral resources and their genesis. Role of magmatic processes. Origin of hydrothermal waters and their role. VHMS and SEDEX mineral deposits. Porphyry copper deposist. Metallogeny of granites. Mineral deposits of platform areas. Banded Iron Formation. Mineral deposits related to weathering. Political and Economic Aspects of Mineral Deposits.

Intended learning outcomes Symbols of learning outcomes for particular fields of studies: W 1 Has deepened knowledge about K2 W01 selected types of deposits. K2\_W08 W\_2 Knows the possibilities of their development. U 1 Is able to assess the opportunities and K2\_U02, K2\_U03 risks associated with the management of mineral resources. K 1 Can critically analyse the information K2 K04 provided to him. Is aware of problems related to the management of mineral

17. Required and recommended reading (sources, studies, manuals, etc.)

Required reading

resources materials.

Evans A.M. 1997: An Introduction to Economic Geology and Its Environmental Impact. pp. 396.

Recommended reading

Roberts R.G., Sheahan P.A. (1994) - Ore deposit models. Geoscience Canada. Osika R., 1990: Geology of Poland-Mineral deposits Vol. 6. Warszawa Wydawnictwa Geologiczne pp. 314 Economics of the Mineral Industries, William A. Vogely, Editor, 4th Edition, 1985

Hutchison C.S. 1983: Economic Deposits and their tectonic Setting. MacMillan Education. pp. 365

- 18. Assessment methods for the intended learning outcomes:
  - semester paper: K2\_W01, K2\_W08, K2\_U02, K2\_U03, K2\_K04.
- 19. Credit requirements for individual components of the course/module:
  - semester paper (individual or group).
- 20. Total student effort

| form of student activities                        | number of hours for the implementation of activities |  |  |
|---|--|--|--|
| classes (according to the plan of studies) with a |  |  |  |
| teacher/instructor:                               | 28   |  |  |
| - lectures: 28                                    | 20   |  |  |
| student's own work (including group-work) such    |  |  |  |
| as:   | 25   |  |  |
| - reading the suggested literature: 10            |  |  |  |
| - writing a class report: 15                      |  |  |  |
| Total number of hours                             | 53   |  |  |
| Number of ECTS credits                            | 2  |  |  |