Annex No. 5
to Ordinance No.
21/2019

COURSE/MODULE SYLLABUS FOR UNIVERSITY COURSES/PhD STUDIES

1.	Course/module name in Polish and English Geodynamics - selected issues/ Geodynamika - wybrane zagadnienia
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 Structural Geology and Geological Mapping
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/II
10.	Semester *(winter or summer)* winter/summer
11.	Form of classes and number of hours Lectures: 26 Teaching methods: Multimedia lecture, presentation.
12.	Name, title/degree of the teacher/instructor Coordinator: dr hab. Jurand Wojewoda Lecturer: dr hab. Jurand Wojewoda
13.	Course/module prerequisites, in terms of knowledge, skills, social competences General knowledge in the field of physics, physical geology, tectonics, structural geology, sedimentology, hydrology and geomorphology.
14.	Course objectives The lectures are aimed at acquainting students with selected methods for assessing geokinematic and geodynamic activity of the lithosphere, in particular the area of the

	Sudetes Mountains	
15.	Course content Lectures: Geodynamics and geokinematics (definitions, the scope of the conceptual, methodological categorization - the physical, stochastic, phenomenological). Indicators of geokinematics and geodynamics (geodetic, geological, archaeological and geomorphological). The global monitoring system of geokinematics and geodynamics.	
16.	Intended learning outcomes	Symbols of learning outcomes for particular fields of studies:
	W_01 The student has knowledge about kinematic indicators of lithosphere (geodetic, geological and geomorphological). Has knowledge about the relationship between kinematics and geodynamics in relation to geological processes.	K2_W01, K2_W03, K2_W04, K2_W05, K2_W07, K2_W09, K2_W010
	W_02. The student knows examples of geokinematics and geodynamics in the historical geology scale.	K2_W01, K2_W03, K2_W04, K2_W05, K2_W07, K2_W09, K2_W010
	W_03 The student knows modern measuring tools and planetary measurement systems (concept of vertical, the concept of equipotential surface, vibrations own, tides, spiral waves, events).	K2_W01, K2_W03, K2_W04, K2_W05, K2_W07, K2_W09, K2_W010
	W_04. The student knows the world's geodynamic monitoring systems; the student knows the Polish geodynamic monitoring system.	K2_W01, K2_W03, K2_W04, K2_W05, K2_W07, K2_W09, K2_W010
	U_01 Student is able to interpret geometric anomalies of spatial and kinematic phenomena (measurement).	K2_U01, K2_U02, K2_U03, K2_U04, K2_U05, K2_U06
	U_02 The student can combine instrumental measurement effects with the spatial structure of a rock mass.	K2_U01, K2_U02, K2_U03, K2_U04, K2_U05, K2_U06
17.	Required and recommended reading *(sources, studies, manuals, etc.)* Required reading Pilqer, R., 2003. Geokinematics. Springer Verlag, 280 pp. Schumm, S.A., Dumont, J.F. & Holbrook, J.M., 2006. Active Tectonics and Alluvial Rivers. Cambridge University Press, 290 pp. ISBN: 0521890586 Turcotte, D.L., Schubert, G., 1982. Geodynamics – Applicatons of Continuum Physics to Geological Problems. John Willey & Sons, New York, 450 pp. Recommended reading Allen, P.A., Allen, J.R.L., 1990. Basin Analysis: Pronciples & Applications. Blackwell Science, Oxford, 451 pp. Artiuszkow, E.W., 1979. Geodynamika. Wydawnictwo Nauka, Moskwa, 327 pp. Dadlez, R., Jaroszewski, W., 1994. Tektonika. PWN, 743 pp. Kaczorowski, M., Wojewoda, J., 2011. Neotectonic activity interpreted from a long water-	

<table>
<tr><td></td><td colspan="2">tube tiltmeter record at the SRC geodynamic laboratory in Książ, Central Sudetes, SW Poland. Acta Geodynamica et Geomaterialia, 8, 3: 1- 13.
Wojewoda, J., 2013. Wybrane wskaźniki aktywności geokinematycznej i geodynamicznej. http://www.jw.ing.uni.wroc.pl/</td></tr>
<tr><td>18.</td><td colspan="2">Assessment methods for the intended learning outcomes:
- writing a class report: K2_W01, K2_W03, K2_W04, K2_W05, K2_W07, K2_W09, K2_W010, K2_U01, K2_U02, K2_U03, K2_U04, K2_U05, K2_U06.</td></tr>
<tr><td>19.</td><td colspan="2">Credit requirements for individual components of the course/module:
- writing a class report
- monitoring attendance and progress on the course subject matter</td></tr>
<tr><td>20.</td><td colspan="2">Total student effort</td></tr>
<tr><td></td><td>form of student activities</td><td>number of hours for the implementation of activities</td></tr>
<tr><td></td><td>classes (according to the plan of studies) with a teacher/instructor:
- lectures: 26</td><td>26</td></tr>
<tr><td></td><td>student's own work (including group-work) such as:
- being prepared for classes: 5
- reading the suggested literature:10
- writing a class report: 9</td><td>24</td></tr>
<tr><td></td><td>Total number of hours</td><td>50</td></tr>
<tr><td></td><td>Number of ECTS credits</td><td>2</td></tr>
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