Annex No. 5 to Ordinance No. 21/2019

COURSE/MODULE SYLLABUS FOR UNIVERSITY COURSES/PhD STUDIES

1.	Course/module name in Polish and English		
	Deformation of sediments and sedimentary rocks/ Deformacja osadów i skał osadowych		
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		
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: 12		
	Seminars: 12		
	Teaching methods:		
	Multimedia lecture, individual work, group work, presentation, discussion.		
12.	Name, title/degree of the teacher/instructor		
	Coordinator: dr Stanisław Burliga		
	Lecturer: dr Stanisław Burliga		
	Seminar instructor: dr Stanisław Burliga		
13.	Course/module prerequisites, in terms of knowledge, skills, social competences		
	Overall knowledge in geology.		
14.	Course objectives		
	The purpose of the lecture is to introduce to the methods of recognition, description, analysis and interpretation of syn- and post-sedimentary deformation structures in		

	sediments and sedimentary rocks. The seminar focuses on discussion on selected issues related to sediment and sedimentary rock deformation, based on presentation prepared by individual students after thorough studies of relevant papers.		
15.	Course content		
	Lecture:		
	Introduction to sedimentary rock and deformation analyses. Soft-sediment deformation. Diagenesis and deformation. Climatic controls on sediment deformation. Dissolution- precipitation processes and their effects. Shale- and evaporite- related deformation in sediments. Structural analysis of sedimentary complexes.		
	Classes:		
	Analysis and discussion of selected case studies on sediment and sedimentary rock deformation. Examples of presentations: deformation related to drying out of sediments; seismites. Diagenetic deformation of sediments		
16.	Intended learning outcomes	Symbols of learning outcomes for particular	
	W_1 Knows the bases of distinguishing, classification and description of sedimentary and tectonic structures; the geological processes influencing the origin, evolution and post-sedimentary alteration and deformation; is familiar with the bases of structural analysis in sediments and sedimentary rocks	fields of studies K2_W01, K2_W02, K2_W03, K2_W04, K2_W08, K2_W09	
	U_1 Is able to describe, critically analyse and interpret deformational structures in sediments and sedimentary rocks, as well as to acquire, analyse, interpret, present and discuss relevant published papers	K2_U02, K2_U03, K2_U04, K2_U05, K2_U06, K2_U07, K2_U08	
	K_1 Realizes the need of the self-education in the area of progres in uderstanding geological processes related to sediements and sedimentary rocks. Critically evaluates published data and is capable to present them to an audience and attend in discussion, as well as to write an essay on the paper study results.	K2_K01, K2_K02, K2_K03, K2_K04, K2_K07	
17.	Required and recommended reading (sources, studies, manuals, etc.)		
	Recommended reading		
	Leeder, M. 2011. Sedimentology and Sedimentary Basins: From Turbulence to Tectonics. Wiley-Blackwell, 769 pp. Davis, G.H., Reynolds, S.J. 1996. Structural Geology of rocks and regions. John Wiley & Sons 776 pp. Hsu, K.J., 2007. Physics of Sedimentology: Textbook and Reference. Springer-Verlag, 240 pp.		
18.	Assessment methods for the intended learning outcomes: - individual semester paper: K2_W01, K2_W02, K2_W03, K2_W04, K2_W08, K2_W09, K2_U02, K2_U03, K2_U04, K2_U05, K2_U06, K2_U07, K2_U08.		
	- oral presentation: K2_U02, K2_U03, K2_U04, K2_U05, K2_U06, K2_U07, K2_U08, K2_K01, K2_K02, K2_K03, K2_K04, K2_K07.		

19.	Credit requirements for individual components of the course/module: - semester paper (individual) – above 50% of credit points - presentation (individual) – above 50% of credit points - preparing and implementing a project (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: - lecture: 12 - seminar: 12 - tutorial: 12	36		
	student's own work (including group-work) such as: - preparing final presentation: 10 - preparing final paper: 4	14		
	Total number of hours	50		
	Number of ECTS credits	2		