

FACULTY:	<b>Institute of Technology and Education</b>
FIELD OF STUDY:	Materials Science and Engineering
COURSE TITLE:	<b>Fundamentals of composite technology</b>
LECTURER'S NAME:	dr hab. Kazimierz Reszka, University Professor
E-MAIL ADDRESS OF THE LECTURER:	kazimierz.reszka@tu.koszalin.pl
ECTS POINTS FOR THE COURSE:	4
ACADEMIC YEAR:	2014/2015
SEMESTER: (W – winter, S – summer)	W/S
HOURS IN SEMESTER:	30+15=45
LEVEL OF THE COURSE: (1 <sup>st</sup> cycle, 2 <sup>nd</sup> cycle, 3 <sup>rd</sup> cycle)	1 <sup>st</sup> cycle
TEACHING METHOD: (lecture, laboratory, group tutorials, seminar, other-what type?)	Lectures (30h), Exercises (15h)
LANGUAGE OF INSTRUCTION:	English
ASSESSMENT METOD: (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?)	Written exam, class test
COURSE CONTENT:	The course covers the following topics: Term and concept of composite. Joining and bonding between components of composites, adhesive processes and diffusive. The role of matrix, composites with organic matrix, hot - and chemical- setting. Metal- and intermetallic -matrix composites. Ceramics- matrix, having large surface development. Hybrid composites. Composites reinforced by continuous and short fibers as well as fabric. Composites reinforced by fibers with directional and andirectional orientation, structural composites and laminates. Structural anisomorphism as a strength of chemical uniform composite. Methods of investigation significant properties of composites
ADDITIONAL INFORMATION:	Required knowledge: chemical and physical properties of materials
RECOMMENDED LITERATURE	Bryan Harris, Engineering Composite Materials, IM. London 1999