

FACULTY:	Institute of Technology and Education
FIELD OF STUDY:	Materials Science and Engineering
COURSE TITLE:	Differential and Integral Calculus
LECTURER'S NAME:	dr Piotr Koziol, assistant professor
E-MAIL ADDRESS OF THE LECTURER:	piotr.koziol@wbiis.tu.koszalin.pl
ECTS POINTS FOR THE COURSE:	4
ACADEMIC YEAR:	2014/2015
SEMESTER: (W – winter, S – summer)	W
HOURS IN SEMESTER:	30+15=45
LEVEL OF THE COURSE: (1 st cycle, 2 nd cycle, 3 rd cycle)	1 st cycle
TEACHING METHOD: (lecture, laboratory, group tutorials, seminar, other-what type?)	Lectures (30h), Classes (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:	Functions and their properties, infinite sequences of real numbers, derivative of function and related theorems, extremes, monotonicity and convexity of functions, indefinite and definite integrals, properties and applications of integrals, techniques of integral calculus.
ADDITIONAL INFORMATION:	Required knowledge – fundamentals of real numbers theory and basic properties of transformations in real domain, operations on sets.
RECOMMENDED LITERATURE	Schaum's Outline Series: <ol style="list-style-type: none"> 1. Precalculus <i>by</i> Fred Safier 2. Calculus <i>by</i> Frank Ayres and Elliott Mendelson 3. Advanced Calculus <i>by</i> Robert Wrede and Murray Spiegel 4. Trigonometry <i>by</i> Robert Moyer and Frank Ayres 5. Vector Analysis <i>by</i> Murray Spiegel, Seymour Lipschutz and Dennis Spellman 6. Mathematical Handbook of Formulas and Tables <i>by</i> Seymour Lipschutz, Murray Spiegel and John Liu