

FACULTY:	Faculty of Technology and Education
FIELD OF STUDY:	Materials Science and Engineering
COURSE TITLE:	Physics I
LECTURER'S NAME:	dr Łukasz Szparaga
E-MAIL ADDRESS OF THE LECTURER:	lukasz.szparaga@tu.koszalin.pl
ECTS POINTS FOR THE COURSE:	5
ACADEMIC YEAR:	2015/2016
SEMESTER: (W – winter, S – summer)	W
HOURS IN SEMESTER:	30+30=60
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 (30h)
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: vectors in physics, motion mathematical description, Newton's Laws, force and motion, work and energy definition, kinetic and potential energy , conservation of energy, center of mass and momentum, rigid body theory, gravitation-solar system, fluids, harmonic oscillator, mechanical waves.
ADDITIONAL INFORMATION:	Required knowledge – basic mathematical calculus.
RECOMMENDED LITERATURE	<i>Fundamentals of Physics</i> by David Halliday, Robert Resnick, and Jearl Walker.