

FACULTY:	Faculty of Technology and Education Department of Biomedical Engineering
FIELD OF STUDY:	Biomedical Engineering
ERASMUS COORDINATOR OF THE FACULTY:	Igor Maciejewski, DSc, PhD
E-MAIL ADDRESS OF THE COORDINATOR:	igor.maciejewski@tu.koszalin.pl
COURSE TITLE:	Sensors and Biosensors
LECTURER'S NAME:	Przemysław Ceynowa, Katarzyna Mitura
E-MAIL ADDRESS OF THE LECTURER:	przemyslaw.ceynowa@gmail.com mitura.katarzyna@gmail.com
ECTS POINTS FOR THE COURSE:	3
ACADEMIC YEAR:	2016/2017
SEMESTER: (W – winter, S – summer)	S
HOURS IN SEMESTER:	30
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?)	Laboratory (15+15)
LANGUAGE OF INSTRUCTION:	English and medical Latin
ASSESSMENT METHOD: (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?)	Written exam, practical exam with preparations
COURSE CONTENT:	This course broadly reviews the modern techniques and significant applications of sensors and biosensors. Each topic provides technical details beyond the level found in typical journal articles, and explores the application of sensors and biosensors to a significant problem in biomedical science, also providing a prospectus for the future. To acquaint students with the basics of operation and construction of modern diagnostic and therapeutic medical electronics system. To familiarize students with the principles of acquisition and processing of the broader class of biomedical signals, taking into account new trends in electronics and data processing methods.
ADDITIONAL INFORMATION:	General knowledge of the structure and functioning of the human body. Knowledge of physics, chemistry and electrochemistry in terms of biosensors. Basic knowledge of materials science.