Syllabus	
Course code	
Course name	**Econometrics**
Course version	1
A. The location of the course in the study system	
Level of education	2
Degree level	-
A form of study	Erasmus Exchange
Field of study	Management Engineering
Profile of study	general academic
Specialization	-
Unit administrating course	Faculty of Management
Unit implementing course	Faculty of Management
Course coordinator	Rządkowski Grzegorz, PhD
B. General characteristics of the course	
Block	General
Group of courses	-
Level of the course	-
Course status	elective
Course language	English
Semester	-
Academic year	2018/19
Prerequisities	Basic knowledge in the field of mathematics (calculus, extrema of functions of several variables, linear algebra, matrices), descriptive statistics and mathematical statistics as well as knowledge of the Excel spreadsheet.
The minimum number of students	from 25 students, up to the limit of seats in the room (exercise) no limits for students (lecture)
C. Learning outcomes and teaching methods	
Aim of the course	The aim of the course is to discuss issues related to the building, estimation and verification of econometric models. Emphasis will be placed on the practical application of econometrics by using empirical data. The classes will use Excel spreadsheet and program GRETL.
Assessment methods	**A. Lectures:** *1. Formative assessment:* attendance at the lecture, student activity *2. Summative assessment:* evaluation of the results of the exam **B. Exercises**: *1. Formative assessment:* assessment of the results of team work performed by students during project preparation *2. Summative assessment:* evaluation of the results of team work during the presentation of the project **E.Overall grade:** Final grade: 40% exam, 30% project, 30% workshops
Learning outcomes	See Table 1

Form of classes and weekly dimension (number of hours per semester)	lectures 20 exercises 20 laboratories 0 projects 0
The course content	**A. Lecture, B.Exercise:** 1. Econometrics as a scientific discipline and its place in the economy 2. Covariance, variance and correlation 3. Simple linear regression, least squares method 4. Classical linear regression model for multiple explanatory variables, F test and Student's t-tests 5. Spreadsheet, functions used in econometrics and statistical tool Regression 6. Program GRETL and its application to building of econometric models 7. Dummy variables 8. Model verification, testing of statistical hypotheses 9. Heteroscedasticity, White test 10. Non-linear models 11. Autoregressive models 12. Time series 13. Presentations 14. Final exam
Learning outcomes	See Table 1
Exam	E
Literature	*Obligatory:* 1. Dougherty, Ch., 2017. *Introduction to Econometrics*. Oxford: Oxford University Press. *Supplementary:* 1. New Cambridge statistical tables 2. Presentations (pdf files), Excel files, GRETL files
Course website	www.olaf.wz.pw.edu.pl
D. The student workload	
Number of ECTS credits	4 ECTS
Total hours of student work related to the learning outcomes achievement (description):	4 ECTS: 20 h Lecture + 20h Exercise + 5h Participation in subject consultation +5h Studying literature + 5h Performing homework + 10h Preparing to the exam + 5h project preparations + 20h project self-research + 10h preparing to the presentation = 100h
The number of ECTS credits for courses that require the direct participation of teachers	1,8 ECTS: 20 h Lecture + 20h Exercise + 5h Participation in subject consultation = 45h
The number of ECTS credits that the student obtains during the practical classes	3,6 ECTS: 20h Exercise + 5h Participation in subject consultation +5h Studying literature + 5h Performing homework + 10h Preparing to the exam + 5h project preparations + 20h project self-research + 10h preparing to the presentation = 80h
E. Additional Information	
Remarks	-
Date of last update	-

Table 1

General academic profile			
Subject effects		Reference to the 2nd degree of PRK characteristics	Reference to the 1st degree of PRK characteristics
Knowledge			
Effect:	Student has advanced knowledge in the field of statistical research, analysis of: structure, interdependencies, dynamics; the purpose and methods of econometrics, model classification, stages of econometric modeling.	I.P7S_WG.o	P7U_W
Effect code:	I2_W01		
Verification:	Solving tasks during workshops, Final exam		
Effect:			
Effect code:			
Verification:			
Abilities			
Effect:	Student can acquire statistical data, construct and verify econometric models and interpret results.	I.P7S_UW.o	P7U_U
Effect code:	I2_U06		
Verification:	Preparation and evaluation of the project, Final exam		
Effect:			
Effect code:			
Verification:			
Social Competence			
Effect:	Student has the ability to organize tasks according to their importance from the point of view of the goal	I.P7S_KK	P7U_U
Effect code:	I2_K02		
Verification:	Preparation and evaluation of the project		
Effect:			
Effect code:			
Verification:			