Module description (syllabus): Statystyka gospodarcza

Module title:	**Statystyka gospodarcza**	ECTS	4
Module title translation:	Business statistics		
Module for study direction:	**Ekonomia**		

Module language: **angielski**		Study level: **2**
Study cycle: **stacjonarne**	Module status: **kierunkowy - do wyboru**	Semester number: **3** semestr zimowy
Academic Year from which module description is valid :	**2019/2020**	Catalogue number: **EKR-E-2S-3-18-KF-2019-EN**

Person in charge of the module:	**Katarzyna Czech, dr**
Teachers responsible for classes:	
Unit responsible for the module:	**Katedra Ekonometrii i Statystyki**
Faculty in charge:	**Wydział Ekonomiczny**
Objectives of the module:	a. Framing and formulating management decision problems, b. Carrying out statistical analysis and interpreting the obtained output, c. Demonstrating knowledge of underlying principles, computational methods, and applications of analysis of variance and regression analysis d. The application of statistical methods to other disciplines such as Economics, Finance, Management, **Lectures** The course provides practical knowledge of the use of statistical models and techniques in solving business problems. The aim of the course is to make inferences about certain characteristics of the population based on information contained in a random sample. The course includes examples from Accounting, Economics, Finance, Logistics, Marketing and Management. Course content: an introduction to elementary statistics, solving business problems by using the statistical methods (e. g. elementary descriptive statistics, hypothesis testing, confidence intervals, correlation, simple regression, multiple regression), decision making process in the face of uncertainty. **Classes** Solving business problems by using statistical methods in Excel: elementary descriptive statistics, hypothesis testing, confidence intervals, correlation, simple regression, multiple regression. At the end of the computer classes students build their own econometric models that describe the relationship between chosen variables.
Teaching forms and number of hours:	a. lectures - no of hours: full time study: 10, part-time study. 0 b. classes - no of hours: full time study: 20, part-time study. 0
Teaching methods:	discussion, research project, consultation with the lecturer, lectures, individual student projects
Initial requirements and formal prerequisities:	mathematics, informatics

Learning outcomes:	**Knowledge - knows and understands:** 1. Students can estimate descriptive statistics and know their practical applications 2. Students can test hypothesis and build regression models	**Skills - can:** 3. Students have practical knowledge of the use of statistical models and techniques in solving business problems 4. Studens can frame research problem, find empirical data and choose appropriate method to analyse them	**Competences - is ready for:** 5. Students are able to verbalize ideas, listen to one another and present their project's results

Assessement methods:	evaluation of the presentation during the class (effects: 5), evaluation of the work done as part of the student's own work (effects: 1,2,3), assessment of the project work (effects: 1,2,3,4)
Formal documentation of the learning outcome:	tests, exams projects, individual student's projects
Elements of the final grade and their weights:	evaluation of the presentation during the class - 15%, evaluation of the work done as part of the student's own work - 50%, assessment of the project work - 35%
Place of teaching:	computer lab

Teaching materials (obligatory and additional):
1. Andy Field, Discovering Statistics Using SPSS, Sage Publications Ltd., 2005 2. Bowers David, Statistics for Economics and Business, Palgrave Macmillan, 1991 3. Berenson M. L. et al., Basic Business Statistics. Student Value Edition, Pearson, 2011.|
Remarks: Semester: winter (maximum number of students per semester: 16-18)+, ver-lw

Quantitative indicators describing the module:	
Estimated total number of student work hours (contact and own work) necessary to achieve the learning outcomes assumed for the module - on this basis, complete the ECTS field:	**100/0**
The total number of ECTS points which the student receives in module requiring direct participation of academic teachers or other persons:	**1.6/0 ECTS**

Table of compliance of the directional learning outcomes with the effects of the module			
Outcome category	Learning outcomes for module:	Reference to effects for the study program for the direction of study	The impact of classes on the directional effect*)
Knowledge	1.Students can estimate descriptive statistics and know their practical applications	EK2_KW03	2
	2.Students can test hypothesis and build regression models	EK2_KW01, EK2_KW03	2
Skills	3.Students have practical knowledge of the use of statistical models and techniques in solving business problems	EK2_KU02, EK2_KU03	3
	4.Studens can frame research problem, find empirical data and choose appropriate method to analyse them	EK2_KU02	2
Competences	5. Students are able to verbalize ideas, listen to one another and present their project's results	EK2_KK01	2

*) 3 - advanced and detailed, 2 - significant, 1 - basic