Faculty of Economics and Management, University of Bialystok
Stationary Studies Management

Academic Year 2018/2019

Course: **Econometrics 1**	ECTS Points: 8
Course Code:	
Language: English	
Course description: educational content – elective, optional course	
Lecturer: PhD Paweł Jamróz	
Semester: **winter**/summer	Number of hours: 30 Lecture: Classes: 30
Courses to be completed before enrollment to the course: *Descriptive statistics*	
Substantive content	

Classes	Number of Hours
Introduction to Linear Programming.	1
Graphical Linear Programming Solution and Selected Applications.	5
The Simplex Method and Sensitivity Analysis (Using the Excel Solver).	6
Duality and Post-Optimal Analysis.	2
Transportation Model and Its Variants.	6
Deterministic Dynamic Programming.	3
Decision Analysis and Games.	4
Nonlinear Programming Algorithms.	3

Aim of the course:

This course aims to provide students with a range of important skills, which are of both academic and vocational value, as they form an essential part of the intellectual training for an economist. These skills will be also be useful for a variety of other careers , as the analysis of data is central to many professions. In particular, the course aims to give students an awareness of the empirical approach to economics and the value that this can add to decision - making for consumers, firms and governments.

Teaching methods:
Class discussion and students presentations, with solving tasks.

Literature:

1. Hamdy A. Taha, *Operations research: an introduction*, Pearson Education, New Jersey 2007.
2. Wayne L. Winston, *Operations Research. Applications and Algorithms*, Thomson Learning, Toronto 2004.
3. Frederick S. Hillier, Gerald J. Lieberman, *Introduction to Operations Research*, McGraw-Hill, Boston 2010.
4. Maddala G.S., *Introduction to econometrics*, Jogn Wiley & Sons, Chichester 2001.

Forms and conditions of credit:

Final group project.