

Detailed course description/Syllabus

Faculty: Economics and International Relations

Programme: International Business Studies

I. General information

Name of the cours	Managerial Economics
Name of the course in English	Managerial Economics
Language of instruction	English
Code/Specialization	WE-ST1-MG-Ib-12/13Z-MANA International Business
rofile of the course	General Academic
Course category	elective
Type of studies	undergraduate

Number of semesters/semester no.	1/5				
Number of hours	<table> <tr> <td>Full-time:</td><td>Lectures: 15 Tutorials: 15</td></tr> <tr> <td>Part-time:</td><td>Lectures: 9 Tutorials: 9</td></tr> </table>	Full-time:	Lectures: 15 Tutorials: 15	Part-time:	Lectures: 9 Tutorials: 9
Full-time:	Lectures: 15 Tutorials: 15				
Part-time:	Lectures: 9 Tutorials: 9				
Number of ECTS	Full time: 3 Part time: 4				

II. Preliminary requirements

No.	Description
1	Undergraduate courses in Microeconomics, Mathematics and Statistics completed.
2	...

III. Objectives of the Course

Code	Description
C1	Learning how to identify and measure relationships between objectives in managerial processes on the one hand and factors which influence their level on the other.
C2	Acquiring ability to select a relevant mathematical model and to adapt it to specific managerial processes.
C3	Getting command of basic methods of optimization of managerial decisions with the use of spreadsheets.
C4	Understanding multi-aspect character of managerial decisions as well as the necessity of working in an interdisciplinary environment.

IV. Learning outcomes

Code	Category	Description	KEK
E1	W	Knows how to identify basic cause-effect structures, objectives and restrictions in processes of management.	WE-ST1-MG-W01-12/13Z
E2	U	Knows how to build and solve mathematical models, serving optimization of the course of managerial processes.	WE-ST1-MG-U03-12/13Z
E3	K	Understands the necessity of interdisciplinary approach in optimization of managerial processes.	WE-ST1-MG-K03-12/13Z

V. Course contents

Lectures

Code	Description	D (15)	Z (9)
W1	Subject, scope and methodology of Managerial Economics. Optimal decision making with the use of marginal analysis. Nonlinear production models. Substitution of inputs and optimal technique of production. Relationships between prices, supply and demand.	5	3
W2	Linear programming models. Optimal product mix. Diet model. Transportation model and its extensions.	5	3
W3	Binary, integer and mixed optimization models. Games, cooperation and competition. Elements of network programming. Interdisciplinary character of Managerial Economics.	5	3

Tutorials

Code	Description	D (15)	Z (9)
C1	Fitting models to data with the use of spreadsheets. Making optimal decisions for specific managerial situations with the use of their mathematical models.	5	3
C2	Finding optimal decisions for specific linear programming models, using the geometric method, method of basic solutions, simplex algorithm, transportation algorithm, Hungarian method and spreadsheets.	5	3
C3	Games against nature. Cooperation vs. competition in games. Critical Path Method.	5	3

VI. Methods of teaching

Code	Description
N1	Lecture
N3	Presentation
N4	Discussion
N6	Simulation
N7	Case study
N9	Blackboard problem solving
N11	E-learning

VII. Means of assessment

Tutorials' assessment

Code	Description
F1	Test

Lectures' assessment (final course grade)

Code	Description
P2	Written examination

VIII. Assessment criteria

Learning outcome **E1** weight: 40%

Not achieved required outcome (grade 2.0)	Has not learned basic material, commits serious mistakes while formulating problems covered in the course.
Achieved the outcome to a satisfactory degree (grade 3.0)	Can formulate the model and its solution in the context of the managerial problem under consideration, but commits serious mistakes while doing so.
Achieved the outcome to a good degree (grade 4.0)	Can formulate correctly the model and its solution in the context of the managerial problem under consideration, and commits only minor mistakes while doing so.
Achieved the outcome to a very good degree (grade 5.0)	Can formulate correctly the model and its solution in the context of the managerial problem under consideration, and commits no mistakes while doing so.
Achieved the outcome to an exceptional degree (grade 5.5)	Not only can formulate correctly the model in the context of the managerial problem under consideration, as well as commits no mistakes while doing so, but also exhibits exceptional creativity and ability to go beyond the material covered in the course.

Learning outcome **E2** weight: 40%

Not achieved required outcome (grade 2.0)	Has not learned basic material, commits serious mistakes while solving problems covered in the course.
Achieved the outcome to a satisfactory degree (grade 3.0)	Can solve the model in the context of the managerial problem under consideration, but commits serious mistakes while doing so, and/or the solution is incomplete.
Achieved the outcome to a good degree (grade 4.0)	Can correctly solve the model in the context of the managerial problem under

	consideration, and commits only minor mistakes while doing so.
Achieved the outcome to a very good degree (grade 5.0)	Can correctly solve the model in the context of the managerial problem under consideration, and commits no mistakes while doing so.
Achieved the outcome to an exceptional degree (grade 5.5)	Not only can correctly solve the model of the managerial problem under consideration, as well as commits no mistakes while doing so, but also exhibits exceptional creativity and ability to go beyond the material covered in the course.

Learning outcome **E3** weight: 20%

Not achieved required outcome (grade 2.0)	Has not learned basic material, cannot interpret the model and its solution in the context of the managerial problem under consideration.
Achieved the outcome to a satisfactory degree (grade 3.0)	Can interpret the model and its solution in the context of the managerial problem under consideration, but commits serious mistakes while doing so.
Achieved the outcome to a good degree (grade 4.0)	Can interpret correctly the model and its solution in the context of the managerial problem under consideration, and commits only minor mistakes while doing so.
Achieved the outcome to a very good degree (grade 5.0)	Can interpret correctly the model and its solution in the context of the managerial problem under consideration, and commits no mistakes while doing so.
Achieved the outcome to an exceptional degree (grade 5.5)	Not only can interpret correctly the model and its solution in the context of the managerial problem under consideration, as well as commits no mistakes while doing so, but also exhibits exceptional creativity and ability to go beyond the material covered in the course.

Learning outcome **E4** weight:

Not achieved required outcome (grade 2.0)	...
Achieved the outcome to a satisfactory degree (grade 3.0)	...
Achieved the outcome to a good degree (grade 4.0)	...
Achieved the outcome to a very good degree (grade 5.0)	...
Achieved the outcome to an exceptional degree (grade 5.5)	...

Student may be awarded a positive final grade from the course provided that they achieve all learning outcomes at least to a satisfactory degree. The final grade is calculated according to the following formula:

$40\% * \text{learning outcome } \mathbf{E1} + 40\% * \text{learning outcome } \mathbf{E2} + 20\% * \text{learning outcome } \mathbf{E3}$

IX. Student workload

Type of activity	Number of hours	
	full-time	part-time
Contact hours with the teacher as set in the programme of study	30	18
Contact hours with the teacher during office hours (e.g. presentations, projects)	5	10
Contact hours with the teacher during tests and examinations	5	5
Preparation for classes (reading, preparing homework etc.)	20	40
Information gathering, preparation of results	0	0
Preparation of a report, project, paper, presentation, discussion	0	0
Preparation for a test, examination	15	27
Total	75	100
Number of ECTS	3	4

X. Course implementation matrix

Learning outcomes	KEK	Objectives of the course	Course contents	Methods of teaching	Means of assessment
E1	WE-ST1-MG-W01-12/13Z	C1	W1 W2 W3 C1 C2 C3	N1 N3 N4 N6 N7 N9 N11	F1 P2
E2	WE-ST1-MG-U03-12/13Z	C2 C3	W1 W2 W3 C1 C2 C3	N1 N3 N4 N6 N7 N9 N11	F1 P2
E3	WE-ST1-MG-K03-12/13Z	C4	W2 W1 W3 C1 C2 C3	N1 N3 N4 N6 N7 N9 N11	F1 P2

XI. References

Primary references

No.	Description
1	Samuelson, Wiliam F., Marks, Stephen G., "Managerial Economics", The Dryden Press
2	...

Further references

No.	Description
1	Stevenson W. J., Ozgur C., Introduction to Management Science with Spreadsheets", McGraw-Hill

XII. Information on teachers

Person responsible for the course

Dr Janusz Jaworski
...

Teachers

No.	Teacher
1	Dr Janusz Jaworski
2	...