COURSE DESCRIPTION CARD

NOTE: If the course includes lectures and classes, the Course Description Card applies to both types of instruction.

1. Course title:
in Polish / in English
Zarządzanie operacyjne / Operations management

2. Course code:
Number of ECTS credits: 5
Course completion mode: Z
Course commenced / Year 2019/20

3. Major: Informatics and Econometrics

4. Department of major coordinator: Informatics

5. Name of course instructor:
Lecture … prof. dr hab. Maciej Nowak
Classes… prof. dr hab. Maciej Nowak
Lab classes …
Examiner prof. dr hab. Maciej Nowak

6. Department of course instructor: Operations Research

7. Number of contact hours with students:

Type of instruction	Full-time study	Part-time study
lectures	15	
classes	15	
foreign language classes		
lab classes		
seminars		
e-learning		
other		
Total hours	30	
examination (hours)		

8. Course timeframe - no. of semesters: … 1

Course commencement / Year …

Course commencement / Semester …winter

9. Level of tertiary education: …Bachelor

10. Course status
☐ Compulsory for the major…
☐ Compulsory for the specialization …
☐ Elective …X

11. Course prerequisites
Compulsory: –
Recommended: –

12. Course objectives:

a) to supply students with a basic knowledge of operations management,
b) to point on directions and means of applications of quantitative approach to decision problems in operations management,
c) to enable students to get basic competencies in managing operations in production and service organizations,
d) to enable students to get ability to model and solve decision problems in operations management,
e) to familiarise students with innovations in operations management, international achievements in this area, as well as with the principles of their use at professional level, including elements of social responsibility and integrity.

13. Teaching and learning methods:

A. Direct student-instructor contact:

No.	Teaching methods	Description	Number of hours	
			Full-time study	Part-time study
1.	Lecture	lecture with the aid of computer & overhead projector	15	
2.	Classes	problems and tests solving	15	
…				
Total			AS: 30	AN:

B. Self-study:

No.	Learning methods	Description	Number of hours	
			Full-time study	Part-time study
1.	literature study	self-study	40	
2.	problems and tests solving	self-study	25	
3.	solving cases	self-study	30	
Total			BS: 95	BN:

Total AS+BS = 125…….
Examination (E) = …….
Total AS+BS+E= 125…….

Total AN+BN = …….
Examination (E) =…….
Total AN+BN+E = …….

14. Key words: operations management, process design, production planning, quantitative methods in management

15. Course content:

1. Main ideas of operations management
   a. Operations in the organization
   b. The activities of operations management
   c. The strategic role and objectives of operations
   d. Operations strategy
2. Designing operations
   a. Design of goods and services
   b. Managing quality
   c. Process strategy
   d. Capacity planning
   e. Layout strategy
3. Managing operations
   a. Aggregate planning

    b. Materials Requirements Planning (MRP) and Enterprise Resource Planning (ERP)
    c. Short-term scheduling
4. Innovations in operations management, international achievements in this area, principles of their use at professional level, including elements of social responsibility and integrity.
    …..

16. Course learning outcomes as related to the learning outcomes of the major and methods for assessing student attainment

Intended learning outcomes of the major / Symbols	Intended learning outcomes of the course	Methods for assessing student learning outcomes	Documentation
	Knowledge		
IiE1_W01# IiE1_W04#	1. Student has a basic knowledge of modelling operations processes in organizations 2. Student is familiar with methods and tools for modelling decision-making processes used in operations management …	Written tests verifying students' knowledge of concepts and methods presented during lectures.	The list of tests with answers and scores used.
	Skills		
IiE1_U01# IiE1_U02#	1. Student is able to analyze processes in organization and to identify the relations between them and various areas of organization's activity. 2. Student has basic skills in applying quantitative methods for solving operations management problems. …	Presentation of the solutions of exercises and cases	Paper and electronic documentation of students' works
	Social competences		
IiE1_K01#	1. Student is aware of her/his level of knowledge and skills in operations management, understands the need for continuous training of professional and personal development. …	Presentation of the solutions of cases	Paper and electronic documentation of students' works

17. Method for determining the final course grade:

No.	Methods for awarding credits and course completion requirements	Description	Percentage of the final course grade*
1.	Written Exam	Test with open and close questions	50
2.	Home activity	Reports and homework	25
3.	Classes activity	Problems and tests solving	25

* If students are required to obtain both a class grade and an exam grade, the class grade constitutes at least 30% of the final course grade.

18. Reading list

Mandatory readings:

1. Heizer J., Render B., Operations management, Pearson, 2014.
2. Slack N., Chambers S., Johnson R., Operations Management, Pearson, 2013.
3. Krajewski L., Ritzman L., Malhotra M., Operations Management, Pearson, 2007.
4. Bozarth C., Handfield R.B., Introduction to Operations and Supply Chain Management,

Pearson, 2016.

Suggested readings:

1. Vollman T.E., Berry W.L., Whybark D.C., Jacobs F.R., Manufacturing Planning and Control for Supply Chain Management, McGraw Hill, 2011.
2. Chapman S.N., The Fundamentals of Production Planning and Control, Pearson, 2006.
3. Stadtler H., Kilger Ch. (eds.), Supply Chain Management and Advanced Planning, Springer, 2008.
4. Waters D., Operations management: producing goods & services, Addison-Wesley, 2001.

19. Language of instruction: English

20. Course instructors' recommendations: