Zał. nr 4 do ZW

FACULTY OF PURE AND APPLIED MATHEMATICS

Name in Polish: SEMINARIUM – modelowanie matematyczne w przemyśle
Name in English: Seminar – mathematical modelling in industry
Main field of study (if applicable): Applied Mathematics
Specialization (if applicable): Mathematics for Industry and Commerce
Level and form of studies: ~~1st/~~ 2nd* level, full-time / ~~part-time~~*
Kind of subject: obligatory / ~~optional~~ / ~~university-wide~~*
Subject code MAT1367
Group of courses ~~YES~~ / NO*

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)					30
Number of hours of total student workload (CNPS)					60
Form of crediting					~~Examination~~ / crediting with grade*
For group of courses mark (X) final course					
Number of ECTS points					2
including number of ECTS points for practical (P) classes					2
including number of ECTS points for direct teacher-student contact (BK) classes					1

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Student has an advanced knowledge and skills in the field of calculus, functional analysis and the theory of differentia equations.
2. She has got a thorough knowledge and skills in the field of probability, mathematical statistics and the theory of stochastic processes.

SUBJECT OBJECTIVES

C1 Learning about achievements and new methods used in various applications of mathematics.

*delete as inapplicable

SUBJECT EDUCATIONAL EFFECTS

Relating to knowledge:

PEK_W01 knows fundamental models and methods used in various applications of mathematics

PEK_W02 knows the theoretical and technical fundamentals of stochastic modeling

Relating to skills:

PEK_U01 can build basic mathematical models, used in various disciplines

Relating to social competences:

PEK_K01 can use the scientific literature (also in foreign languages), including finding source information and browse through articles

Form of classes - seminar		**Number of hours**
Se1	Mathematical modeling in economical, technological, physical and biological sciences.	30
	Total hours	**30**

TEACHING TOOLS USED

1. Problem Seminar, presentation, problem lecture, informative lecture
2. Student's self-work – preparation for the seminar

EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding (at semester end)	Educational effect number	Way of evaluating educational effect achievement
F1	PEK_W01 PEK_W02 PEK_U01 PEK_K01	Evaluation of the presentation, informative or problem lecture prepared by the student
P=F1		

PRIMARY AND SECONDARY LITERATURE

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

Prof. dr hab. Aleksander Weron (Aleksander.Weron@pwr.wroc.pl)
Dr hab. Marcin Magdziarz (Marcin.Magdziarz@pwr.wroc.pl)

MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
SEMINAR – MATHEMATICAL MODELLING IN INDUSTRY MAT1367
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY
APPLIED MATHEMATICS
AND SPECIALIZATION **MATHEMATICS FOR INDUSTRY AND COMMERCE**

Subject educational effect	**Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)**	**Subject objectives****	**Programme content****	**Teaching tool number****
PEK_W01 (knowledge)	K2MIC_W03	C1	Se1	1, 2
PEK_W02	K2MIC_W09, K2MIC_W20, K2MIC_W21, K2MIC_W22	C1	Se1	1, 2
PEK_U01 (skills)	K2MIC_U15	C1	Se1	1, 2
PEK_K01 (competences)	K2MIC_K06	C1	Se1	1, 2

** - from the table above