SYLLABUS

SUBJECT MONOGRAPHIC LECTURE

TEACHER ANNA MUREŃKO

COURSE DESCRIPTION
The aim of the course is to provide student with knowledge of mean value theorems.
The subjects discusses the following topic.
1. Mean value theorems for:
   a) real functions
   b) real valued functions on the plane,
   c) vector valued functions on the reals,
   d) vector valued functions on the plane,
   e) functions on the complex plane.
2. Symmetric derivative and Dini derivatives.
3. Mean value theorems for symmetrically differentiable functions.
4. Mean value theorems for nondifferentiable functions.

ECTS
6

LEARNING OUTCOMES
The course ends in an written exam. Students who fail the written exam take an oral exam.

GRADING POLICY
The amount of the received points
(90% - 100%] of all possible points corresponds to the grade 5 (A)
(80% - 90%]   of all possible points corresponds to the grade 4.5 (B)
(70% - 80%]   of all possible points corresponds to the grade 4 (C)
(60% - 70%]   of all possible points corresponds to the grade 3.5 (D)
(50% - 60%]   of all possible points corresponds to the grade 3 (E)
[0% - 50%]   of all possible points corresponds to the grade 2 (F)

TIMETABLE
The two-hours lectures will take place once a week.

TEXTBOOK AND REQUIRED MATERIALS
P. Sahoo, T. Riedel, Mean value theorems and functional equations, World Scientific,
Singapore-New Jersey-London-Hong Kong 1998.

PREREQUISITES:
Basic knowledge of mathematical analysis.