

SYLLABUS

Subject Survey Seminar

TEACHER Dr hab. Józef Drewniak

COURSE DESCRIPTION

Summary and review of graduated courses: Lebesgue measure and integral. Holomorphic functions. Function sequences and series. Fourier series. Function spaces. Linear functionals in Banach spaces. Hilbert spaces. Topological spaces and continuous mappings. Compactness and connectivity. Topology in function spaces.

ECTS

6

LEARNING OUTCOMES

Repetition of material before final exam.

GRADING POLICY

Reports (paper and speech).

TIMETABLE

2h x 15 weeks = 30 hours (1 semester)

TEXTBOOK AND REQUIRED MATERIALS

1. R. Engelking, General topology, Heldermann, Berlin 1989.
2. W. Rudin, Real and complex analysis, McGraw Hill, New York 1987.
3. W. Rudin, Functional analysis, McGraw Hill, New York 1991.

PREREQUISITES:

Real and complex analysis, functional analysis, general topology