

Title <b>(Meteorologia i klimatologia)</b>	Code <b>1010134291010130432</b>
Field <b>Environmental Engineering Extramural First-cycle studies</b>	Year / Semester <b>5 / 9</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>3</b> Classes: -    Laboratory: -    Projects / seminars: -	Number of credits <b>3</b>
	Language <b>polish</b>

**Lecturer:**

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**Status of the course in the study program:**

Core course.

**Assumptions and objectives of the course:**

Acquaintance with structure of atmosphere and processes taking place within it, which are investigated by meteorology (especially pollution of atmosphere) and climatology.

**Contents of the course (course description):**

Structure and composition of atmosphere. Weather and climate creating processes. Solar radiation and climate of Earth. Atmospheric circulation (in global and local scale). Thermo-dynamic equilibrium in atmosphere. Extremal stages of atmosphere and their effects. Thermo-dynamic equilibrium in atmosphere. Genesis of rainfalls. Classification of rainfalls. Rainfall measurement as an area of meteorology. Time and special distribution of rainfalls. Formula for rainfall distribution computation. IDF curves. Zjawiska fizyczne zachodzące w atmosferze ziemskiej ? parowanie, kondensacja, opady, mechanizmy ruchów mas powietrza. Problems of atmosphere pollution. Weight of meteorological factors in dispersion and allocation of air pollution. Global problems of atmosphere and climate degradation. Specification of local climate variations. Processes forming climate of Poland, variability of spatial climatic conditions in Poland.

**Introductory courses and the required pre-knowledge:**

Physics

**Courses form and teaching methods:**

Lectures

**Form and terms of complete the course - requirements and assessment methods:**

Written tests

**Basic Bibliography:**

**Additional Bibliography:**