

Level: bachelor				
Course title: Molecular Physics				
Status: elective				
ECTS: 6				
Requirements: -				
Learning objectives: Study of the basic laws of behaviour of many molecules. Explanation of the physical properties of the aggregate state of matter, especially gases and liquids, and phase transitions between them. The introduction of the concept of molecular transport.				
Learning outcomes: Mastering the basic concepts of the molecular structure of matter and the forces of intermolecular interaction.				
Syllabus <i>Theoretical instruction:</i> Real gasses and vapours. Intermolecular forces. Molecular phenomena in liquids. Phase transitions and phase equilibria. Case study. <i>Practical instruction:</i> Selected experimental exercises in molecular physics that follow the content of lectures. Coefficient of viscosity. The determination of the latent heat of evaporation. Temperature dependence of vapour pressure. The determination of the coefficient of surface tension. The water anomaly. Seminar.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 1	Other forms of teaching:	Student research: 1	