## **Mechanics**

<b>Unit Title</b>	Mechanics		
Level of Study	Undergraduate, introductory course		
Credit Value		ECTS Value	5
Home Department	General physics department		
Home Faculty	Physical faculty		
Unit Co-ordinator	Konstantin Gavrilov		
<b>Key Words</b>	Skills development, Reflection, Applied research		
Brief	This first course in the physics curriculum introduces classical		
Summary	mechanics. It gives a set of core concepts — space, time, mass, force, momentum, torque, and angular momentum — were introduced in classical mechanics in order to solve the most famous physics problem.		
Indicative	Kinematics		
Content	Newton's Laws		
	Momentum and Impulse Non-inertial reference frames		
	Kinetic Energy and Work		
	Potential Energy and Energy Conservation		
	Rotational Motion and Angular Momentum		
	Mechanical Oscillations		
	Forced Oscillations and Resonance		
	Introduction to Fluid Mechanics		