Title:	**Ordinary Differential Equations**
Lecture hours:	30
Study period: (summer/winter)	winter or summer
Number of credits:	30
Assessment methods:	classroom assessment, written test
Language of instruction:	English
Prerequisites:	basics of Calculus
Course content:	The notion of ordinary differential equation (ODE) and its solution; graphical interpretation of solution (direction field); theorems on existence and uniqueness of solutions of first order ODE; separation of variables method; first order linear ODE; integrating factors; envelopes as singular solutions; linear ODE of higher rank.
Learning outcomes:	By the end of the course students should know: the notion of ordinary differential equation (ODE) and its solution (in various settings); graphical interpretation of a solution, theorems on existence and uniqueness of solutions of first and higher order ODE. Should be able to: solve ODEs of various types, discuss the question of uniqueness under some initial conditions and a structure of general solution.
Name of lecturer:	Dr Piotr Sworowski
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Literature:	James C. Robinson, An Introduction to Ordinary Differential Equations, Cambridge University Press, 2004