

Code	BENG540
Name	Neuron Dynamics
Hour per week	3 (3 + 0)
Credit	3
ECTS	10
Level/Year	Graduate / anytime
Semester	Fall
Type	Elective
Prerequisites	-
Content	Simple neuron model, Hodgkin-Huxley models and biophysical modeling. Two-dimensional models and phase plane analysis. Two-dimensional models. Variability of spike trains and the neural code. Noise models, noisy neurons and coding. Estimating neuron models for coding and decoding.