# NEPR 208, Introduction to Computational Neuroscience
# 1st Year Neuroscience Core, 2022

April 18 - May 6, M W F 1:30 PM – 3:30 PM Lectures are in virtual limbo

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This module will introduce students to computational and theoretical approaches in neuroscience. Emphasis will be on specific questions and how those questions can be answered with computational methods.

Monday and Wednesday classes will be lectures on Friday students will work on and discuss problems sets.

Website: https://druckmann-lab.github.io/nepr208

## Week 1, April 18 – 22

April 18. Introduction and the Perceptron model (Druckmann)
April 20. Neural oscillations, computational approaches and insights (Huguenard)
April 22. Work on Problem set 1 in class.

## Week 2, April 25 – April 29

April 25. Analysis of single neuron encoding (Druckmann)
April 27. Analysis of population activity (Druckmann).
April 29. Work on Problem set 2 in class.

## Week 3, May 2 - 6

May 2. Adaptation and synaptic plasticity (Baccus)
May 4. The Hopfield model of context dependent memory (Druckmann)
May 6. Work on Problem set 3 in class.