Syllabus Mapping:

Physiological Psychology

Introduction Overview & Major Issues

JoVE Science Education

- An Introduction to Neurophysiology
- An Introduction to Behavioral Neuroscience

Nerve Cells and Nerve Impulses

JoVE Core Chapter 18: Nervous System

- CH 18 Nervous System

JoVE Journal:

- Immunostaining to Visualize Murine Enteric Nervous System Development
- Three-dimensional Tissue Engineered Aligned Astrocyte Networks to Recapitulate Developmental Mechanisms and Facilitate Nervous System Regeneration
- A Drosophila In Vivo Injury Model for Studying Neuroregeneration in the Peripheral and Central Nervous System

Synapses

JoVE Core Chapter 18: Nervous System

- 18.6 The Synapse
- 18.5 Neuron Structure

JoVE Core Chapter 06: Cell Signaling

- 6.7 Synaptic Signaling

Anatomy & Research Methods

JoVE Science Education

- An Introduction to Neuroanatomy
• Cranial Nerves Exam I (I-VI)
• Cranial Nerves Exam II (VII-XII)
• Sensory Exam
• Histological Staining of Neural Tissue
• fMRI: Functional Magnetic Resonance Imaging
• Neuronal Transfection Methods
• Explant Culture of Neural Tissue
• SciEd Collection: Experimental Psychology

Genetics, Evolution, Development and Plasticity

JoVE Science Education
• SciEd Collection: Genetics
• SciEd Collection: Developmental Biology
• Genetics of Organisms - Concept
• Hardy-Weinberg & Genetic Drift
• Long-term Potentiation
• Long-term Depression
• Natural Selection

Vision, Other Sensory Systems

JoVE Science Education
• SciEd Collection: Sensation & Perception

JoVE Core Chapter 19: Sensory Systems
• Sensory Systems

Movement

JoVE Core Chapter 20: Musculoskeletal System
• Musculoskeletal System

The Biology of Learning and Memory
Cognitive Functions

JoVE Science Education

• **An Introduction to Learning and Memory**
• **Learning and Memory: The Remember-Know Task**
• **Incidental Encoding**
• **Motor Learning in Mirror Drawing**
• **Spatial Memory Tests using Mazes**

JoVE Journal

• **Measuring Neural Mechanisms Underlying Sleep-Dependent Memory Consolidation During Naps in Early Childhood**
• **A Cognitive Paradigm to Investigate Interference in Working Memory by Distractions and Interruptions**
• **Vagus Nerve Stimulation as a Tool to Induce Plasticity in Pathways Relevant for Extinction Learning**