# ADAPTIVE BRAIN AND BEHAVIOR

### What is it?

The Adaptive Brain and Behavior (ABB) minor will help students bridge learning between natural sciences, social science, and the humanities at the nexus of neurophysiology, behavior, and social environment. It offers a trans-disciplinary approach to promoting wellbeing, resilience, and the optimization of development by supporting learning opportunities (classes, modules, and experiential learning) that emphasize the interdependent nature of brain, behavior, and context (social and environmental).





## Why do it?

In addition to meeting Pathways requirements, students completing the ABB minor benefit from having a multidisciplinary perspective on factors that impact health, wellbeing and resilience, and a deeper understanding of the neurobiological underpinnings of thoughts, beliefs, behaviors, and social influences.

## Who is it

This minor is valuable to any student interested in how the brain and related influence neurobiological systems individual development, as well as families, communities. schools. and social-systemic factors. The ABB minor will be professionally relevant to students preparing for a wide variety of disciplines including, but not limited to, biomedical engineering, teaching, counseling, therapy, economics, medicine, and other allied health professions.

## Pathways Core Concepts\*

- 1a Advanced Discourse
- 2 Critical Thinking in the Humanities
- 3 Reasoning in the Social Sciences
- 4 Reasoning in the Natural Sciences
- 7 Critical Analysis of Identity and Equity in the United States

# Pathways Integrative Concepts

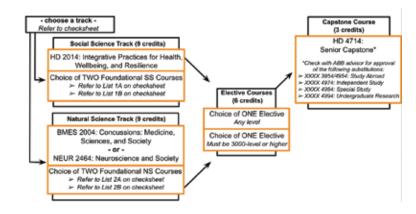
Ethical Reasoning
Intercultural and Global Awareness

\*At least three of these core concepts will be completed, but concepts will vary depending on elective choices.

# **ADAPTIVE BRAIN AND BEHAVIOR**

### Requirements

The 18-hour minor in Adaptive Brain and Behavior includes a 3-hour introductory gateway course, 6 hours of foundational courses, 6 hours of elective courses, and a 3-hour capstone.



#### Required courses

HD 2014: Integrative Health Practices -or- BMES 2004: Concussions: Medicine, Science, and Society -or- NEUR 2464: Neuroscience in Society

HD 4714: Senior Capston

#### **Elective courses**

Based on their majors and personal career goals, students select 6 credit hours of elective courses from a list. One course must be 3000-level or higher. Courses selected as gateways or foundational courses cannot double count as electives for the minor. For a complete list of elective courses, consult the checksheet at https://registrar.vt.edu/graduation-multi-brief/index1.html.



- Learn how social and environmental contexts can have direct impacts on physical brain development.
- Understand how health behaviors, such as dietary choices and habits of physical activity, can directly alter brain structure and chemical composition.
- Consider the ways in which behavior change is influenced by both individual motivations and contextual factors.
- Explore issues that are global in nature and central to questions of identity, equity, and ethical considerations.

www.pathways.prov.vt.edu/minors

Contact: Dr. Matthew Komelski (komelski@vt.edu)

