

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 gain a multidisciplinary perspective on factors that **impact health, wellbeing and resilience, and have opportunities to learn valuable self-care and stress-management skills**. Students in ABB will benefit from a deeper understanding of the neurobiological underpinnings of thoughts, beliefs, behaviors and also learn how our social environments can impact brain development and biological functioning.



Who is it for?

This minor is valuable to any student interested in **how the brain and related neurobiological systems influence individual development, as well as families, schools, communities, and other 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

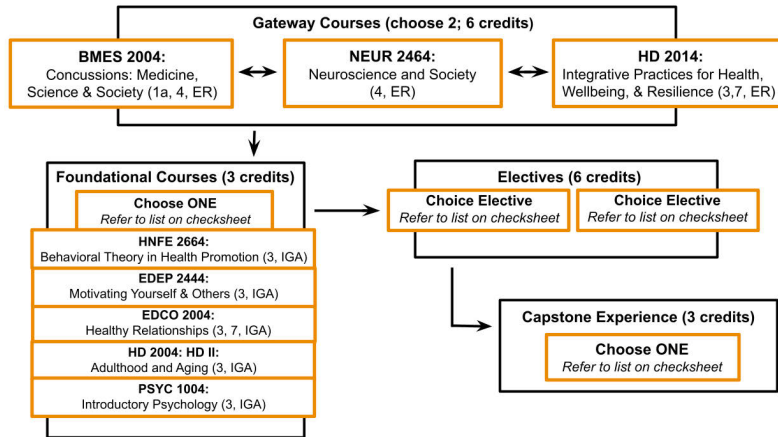
- Ethical Reasoning
- Intercultural and Global Awareness

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

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Requirements

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



Capstone Experiences

HD 4714: Senior Capstone -or- NEUR 4044: Neuroscience Senior Seminar -or- NEUR 3554:

Neuroscience Research and Practical Experience -or- NEUR 4594: Clinical Neuroscience in Practice

*Speak with an ABB Advisor if interested in substituting one of the above capstone experiences with a Study Abroad, Independent Study or Undergraduate Research Capstone experience

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://www.registrar.vt.edu/graduation-multi-brief/checksheets.html>



- Learn how social and environmental contexts can have direct impacts on physical brain development.
- Understand the multidimensional nature of self-care and how health behaviors, such as diet, physical activity, and mindfulness-based practices can directly alter brain health, structure, and function.
- 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

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PATHWAYS TO GENERAL EDUCATION