

Concentration in Mind, Brain and Behavior

A number of concentration options exist at Brown for students interested in the study of mind, brain, and behavior. These options should not be thought of as reflecting distinct areas of study, but rather should be viewed as varying along a continuum with different concentrations placing relatively more or less emphasis on mind, brain, behavior, or language. There can therefore be considerable course overlap among the different concentrations, and students may be able to accommodate their academic interests and goals through several different routes. Students should discuss their interests with the different concentration advisors in order to determine which route seems the most appropriate.

The *cognitive science concentration* places the greatest emphasis on the *human mind*, and focuses primarily on understanding such mental abilities as perception, action, speech, memory, thinking, and language using scientific methods of experimentation and computational modeling. Students choosing this concentration often have ancillary interests either in philosophy of mind or in artificial intelligence, and will be well prepared for careers in the sciences, computer fields, health professions, law, and education.

The *psychology concentration* places the greatest emphasis on understanding *human and animal behavior* at several different levels of analysis, including biological and neural, evolutionary, cognitive, developmental, and social. Students choosing this concentration are often interested in clinical and mental health issues, and will be well prepared careers in medicine, law, education, business administration, as well as both clinical and experimental psychology.

The *cognitive neuroscience concentration* places the greatest emphasis on the *intersection between mind and brain*, and focuses primarily on understanding how cognitive functions arise from brain function using such methodological approaches as the experimental investigation of brain-damaged patients, functional brain imaging, and computational modeling. By definition, this concentration is an integrative area of study that draws heavily upon courses from several participating departments.

The *behavioral decision sciences concentration* places the greatest emphasis on *human, institutions and nations decision making*. It addresses normative questions about rationality, such as what constitutes the best judgments and decisions; and prescriptive questions, such as how the process of decision making can be improved to make actual decisions closer to optimal ones. Students who study behavioral decision sciences have an interest in a variety of more traditional disciplines including psychology, cognitive science, economics, philosophy, computer science, and neuroscience. They will be well prepared for jobs in a multitude of fields, including business management, technology, and governmental work.

The *neuroscience concentration* places the greatest emphasis on the *brain*, focusing primarily on topics in neurobiology such as anatomy, physiology, biochemistry, molecular biology, and neural development. Students choosing this concentration will also take courses in chemistry, physics and mathematics in addition to biology, and will be well prepared for graduate programs in biology and neurobiology as well as for medical school.