BRAIN AND COGNITIVE SCIENCES
COURSE 9

CONTACT:

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DESCRIPTION

Students majoring in brain and cognitive sciences aspire to answer fundamental questions concerning intelligent processes, brain organization, and the neural and computational processes that underlie behavior. MIT's department focuses on four themes: molecular and cellular neuroscience, systems neuroscience, cognitive science, and computation. Several members of the department's faculty are affiliated with two major research centers: the Picower Institute for Learning and Memory and the McGovern Institute for Brain Research. Individuals majoring in brain and cognitive sciences will often pursue careers in the sciences, computer fields, health professions, law, and education.

INSIDE COURSE 9

9   Brain and Cognitive Sciences
6-9   Computation and Cognition

INTRODUCTORY CLASSES

9.00   **Introduction to Psychological Science**
         A survey of the scientific study of human nature, including how the mind works, and how the brain supports the mind. Topics include the mental and neural bases of perception, emotion, learning, memory, cognition, child development, personality, psychopathology, and social interaction. Consideration of how such knowledge relates to debates about nature and nurture, free will, consciousness, human differences, self, and society.

9.01   **Introduction to Neuroscience**
         Introduction to the mammalian nervous system, with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory systems, control of movement, learning and memory, and diseases of the brain.

COURSE 9-FRIENDLY LABS

McGovern Institute for Brain Research

The Picower Institute for Learning and Memory

Center for Brains, Minds, and Machines

Harvard-MIT Health Sciences and Technology (HST)

Stanley Center for Psychiatric Research at Broad Institute

GET INVOLVED WITH COURSE 9

Brain and Cognitive Sciences Society

Brain Trust

SKILLS

Data analysis, often utilizing computer software

Strong interpersonal and communication abilities

Technical writing and research proposal abilities

Ability to work in interdisciplinary teams

POSSIBLE FUTURE POSITIONS

- **Clinical psychology researcher:** Conduct research projects involving human and animal subjects to gain insight on many different things related to behavior
- **Laboratory research assistant:** Help biological and medical scientists conduct laboratory tests and experiments, maintain laboratory instruments and equipment, and analyze experimental data and interpret results

CAREER INDUSTRY EXAMPLES

Education	Consumer manufacturing	Industrial manufacturing
Computer software	Health and medicine	Pharmaceuticals
Consulting	Human factors engineering	Research

SAMPLE EMPLOYERS

5am Solutions	Goldin Associates	Northeast Dermatology Associates
Athenahealth	Google	Shamanuti Skincare
Brain Power LLC	Journal of Medical Insights	Teach for America
Gavornik Lab	Navigant	