COGNITIVE NEUROSCIENCE

Overview and Contact Information

Cognitive neuroscience is the study of mind as it is manifested in the human brain. Cognitive neuroscientists combine psychophysical and brain imaging techniques such as functional magnetic resonance imaging (fMRI) and event-related potentials (ERPs) to examine the brain function underlying cognitive abilities in human beings.

The program of study for the Five College Certificate in Cognitive Neuroscience is designed to offer students the opportunity to deepen their understanding of cognitive neuroscience, through both theoretical and empirical training. The certificate program includes courses in research techniques, basic scientific foundations, neuroscience, philosophy, and cognition, combined with independent research. It brings together several related disciplines, each of which provides a different focus on mind-brain issues.

The certificate encourages students to follow a program distinct from, and yet complementary to, majors such as neuroscience and behavior, philosophy, or psychology.

See Also

- Neuroscience and Behavior (http://catalog.mtholyoke.edu/areas-study/neuroscience-behavior/)

Contact Information

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Mara Breen, Professor, Psychology and Education

http://www.fivecolleges.edu/cogneuro/

Requirements for the Certificate

A minimum of six courses:

Code	Title	Credits
Areas of Study: at least one approved course in each of six areas of study: [1]		
	Overview of cognitive science	
	Scientific foundations (physics, computer science, chemistry, and biology)	
	Research methods, design, and analysis	
	Philosophy of mind	
	Neuroscience (neuroanatomy and neurophysiology)	
	Advanced topics	
Independent Research: at least one semester of independent research through a thesis, course project, or special study [2]		
Total Courses		**6-7**

1. Approved courses for the certificate are listed on the certificate's website (https://www.fivecolleges.edu/cogneuro/courses).
2. The course project may be completed in conjunction with one of the classes listed under the Research Methods area. An advisor-approved summer research project would also meet the research requirement.