Undergraduate Minor in Mind-Brain Studies

Researchers seeking to understand relationships between mind and brain are increasingly turning to methods and theoretical perspectives from a broad range of disciplines, including psychology, biology, computer science, economics, anthropology, philosophy, and linguistics. This new, multidisciplinary new field of study has already yielded exciting discoveries and more are anticipated in the future. The undergraduate minor in Mind-Brain Studies provides an ideal means whereby students majoring in Anthropology, Philosophy, Psychology, and Speech & Hearing can augment their curricula to participate in this new field at the cutting edge of mind-brain research.

- Students can enroll in the Minor now (for Fall semester, 2010).
- Students will need to fill out a “Declaration of Major / Minor” form.
- For more information, contact:
  - Dr. Tad Zawidzki (Philosophy) or Dr. John Philbeck (Psychology)
  - tad.zawidzki@gmail.com    philbeck@gwu.edu

**CURRICULUM**

**Required Courses**

Phil 153 - Mind, brain, and artificial intelligence
Investigation of the nature of mind from a variety of perspectives, including neuroscience, cognitive psychology, and artificial intelligence, as well as traditional philosophy of mind. Possible additional topics include consciousness, mental disorders, animal minds, and the nature and meaning of dreams. Saidel, Zawidzki.

Psych 122 - Cognitive Neuroscience
How the structure and functions of the brain are related to cognitive processes and their associated behaviors. The biological bases of behavior and mental activity. Research and case studies by cognitive psychologists, neuroscientists, psychiatrists, and linguists, focusing on how the brain affects pattern recognition, attention, short-term and long-term memory processes, and language. Shomstein.

**Electives**

Students must choose 4 courses from this set, with the restriction that the complete set of courses taken for the minor can include a maximum of two courses from any one department.

Anth 5 - The Biological Bases of Human Behavior
Human behavior from an evolutionary perspective, including issues such as communication, intelligence, reproductive behavior, parental behavior, aggression, and cooperation, and drawing on an understanding of the behavior and biology of the nonhuman primates. Bernstein, Richmond.

Anth 144 - Evolution of the Human Brain
Exploration of how the human brain is distinctive in its organization, function, and development as compared with other species. Links between the evolution of psychological specializations and their neural substrates in humans are also discussed. Sherwood.

Anth 161 - Language, Culture, and Cognition
The role of language and culture in the organization of human experience. Beginning with debates about linguistic relativity, the course explores the way language use shapes cognition and practice in a variety of cultures and social contexts. Dent, Kuipers.

Anth 163 - Psycholinguistics
Language as species-specific property of the human mind. Psychological processes involved in the encoding and decoding of language; first and second language acquisition and bilingualism. Staff.
Phil 151 - Philosophy and Science
Analysis of the structure and meaning of science, including scientific progress and theory change, objectivity in science, the drive for a unified science, and ways science relates to everyday understandings of the world. Attention given to various sciences, including physics, biology, and neuroscience. Zawidzki.

Phil 152 - Theory of Knowledge
Inquiry into the basis and structure of knowledge, the problems of skepticism and justification, the relations between subjectivity and objectivity, and the contributions of reason, sense, experience, and language. Zawidzki.

Phil 721 – Mind, brain, and evolution I
Introduction to philosophy of mind, cognitive science, neural science, and evolutionary biology (Cross-listed as Anth and Sphr 721). Sherwood, Subiaul, Zawidzki.

Phil 722 – Mind, brain, and evolution II
Readings in Philosophy, Speech & Hearing Science, and Anthropology, focusing on the intersection of mind, brain and evolution. (Cross-listed as Anth and Sphr 722). Sherwood, Subiaul, Zawidzki.

Psych 14 - Cognitive Psychology
Introduction to the study of cognition; review of data and theories on the topics of perception, attention, memory, language, reasoning, and decision making. Dopkins, Philbeck.

Psych 118 - Neuropsychology
Analysis of neural processes underlying behavior. Basic structure and functions of the nervous system, with emphasis on sensory processes, learning and memory, motivation, and emotion. Rothblat.

Psych 121 - Memory and Cognition
An examination of the psychological processes underlying human memory and cognition. Topics cover theoretical and experimental issues involving a range of cognitive function from attention and pattern recognition to learning and memory. Sohn.

Psych 124 - Visual Perception
An overview of human perception, ranging from the detection of simple stimuli to the identification of objects and events. Perceptions of color, motion, and spatial layout. Research methodology, biological foundations, and theoretical issues. Philbeck.

Psych 203 - Learning, Memory, and Cognition
Current conceptions of learning, memory, and cognition; the research upon which these conceptions are based; applications to practical contexts. Dopkins.

Psych 204 - Biological Basis of Behavior
Introduction to the structure and function of the nervous system. Topics include neural communication, sensory processes, memory, neuroendocrinology of sex differences and stress, psychiatric and neurodegenerative disorders. Rothblat.

Sphr 71 - Foundations of human communication.
An introduction to the fundamental principles of the biology of speech, hearing and language, language structure and use, and human communicative interaction. Emphasis on the cognitive, linguistic and evolutionary foundations of language and communication. Moody, Richards.

Sphr 104 - Speech and Language Disorders
Survey of the nature and causes of developmental and acquired disorders of speech and language. Emphasis on prevention and effective communication with persons having a speech-language impairment. Williamson.

Sphr 106 - Anatomy and Physiology for Speech and Hearing II
Anatomy of the ear; physiology of hearing; anatomy of the brain and spinal cord; physiology of the nervous system. Brewer, Schulz.

Sphr 131 - Language Acquisition and Development
Theories of language acquisition; development of language from birth through adolescence; emphasis on development of semantics, syntax, morphology, and pragmatics; multicultural issues in language development. Bland-Stewart.

Sphr 291 – Selected Topics in Speech: Language Pathology: Autism
Theory and data of autism. Subiaul