The following courses satisfy degree requirements for the Cognitive Science major. Also, an Advanced Course Search tab in ISIS allows you to look up focal area courses using POS Tags starting with “COGS…” If you believe a course qualifies to be added to one of these lists, contact Sarah Ciotola, Academic Program Coordinator (sciotol3@jhu.edu). Please provide a course description and a syllabus, if available.

### Required for All Cognitive Science Majors: AS.050.101 Cognition

#### Math

For Option A (“Any two of the following”)

- AS.110.106 OR AS.110.108 Calculus I
- AS.110.107 OR AS.110.109 Calculus II
- AS.110.201 Linear Algebra
  - OR AS.110.212 Honors Linear Algebra
  - OR EN.550.291 Linear Algebra & Differential Eq.
- AS.150.118 Introduction to Formal Logic
- AS.150.420 Mathematical Logic I
- EN.550.171 Discrete Mathematics

For Option B (“All three required: Statistics sequence”)

*Default math option if Area A (below) is one of your focal areas*

- EN.550.111 Statistical Analysis I
- EN.550.112 Statistical Analysis II
- AS.200.207 Research Methods in Experimental Psychology

#### Courses by Focal Area

### Area A: Cognitive Psychology & Cognitive Neuropsychology

- AS.050.102 Language and Mind
- AS.050.105 Intro to Cognitive Neuropsychology
- AS.050.128 Born to Talk: Lang. in the Human Mind (Freshmen Seminar)
- AS.050.206 Bilingualism
- AS.050.312 Cog. Neuroimaging Meth./High-Level Vision
- AS.050.332 Developmental Cognitive Neuroscience
- AS.200.101 Introduction to Psychology
- AS.200.132 Introduction to Developmental Psychology
- AS.200.316 Thought and Perception
- AS.376.371 Topics in Music Cognition

### Area B: Linguistics

- AS.050.102 Language & Mind
- AS.050.128 Born to Talk: Language in the Human Mind (Freshmen Seminar)
- AS.050.206 Bilingualism
- AS.050.317 Semantics

### Area C: Computational Approaches to Cognition

- AS.050.373 Neural Network Modeling of Learning, Language & Cognition
- AS.250.205 Introduction to Computing
- EN.500.200 Computing for Engineers and Scientists
- EN.520.414 Image Processing & Analysis
- EN.600.108 Introduction to Programming Lab (1 credit)
- EN.600.112 Intro Programming for Scientists & Engineers
- EN.600.226 Data Structures
- EN.600.233 Computer System Fundamentals
- EN.600.271 Automata & Computation Theory (EN.600.471)
- EN.600.335 Artificial Intelligence (EN.600.435)
- EN.600.363 Intro to Algorithms (EN.600.463)
- EN.600.461 Computer Vision
- EN.600.475 Introduction to Machine Learning

### Area C contd: At most, one of the following courses:

- EN.600.107 Intro to Programming in JAVA
- EN.600.120 Intermediate Programming

### Area D: Philosophy of Mind

- AS.150.245 Introduction to Philosophy of Mind
- AS.150.476 Philosophy and Cognitive Science
- AS.200.316 Thought and Perception

### Area E: Neuroscience

- AS.050.105 Intro to Cognitive Neuropsychology
- AS.050.332 Developmental Cognitive Neuroscience
- AS.080.105 An Introduction to Neuroscience
- AS.080.250 Neuroscience Laboratory
- AS.080.305 The Nervous System I
- AS.080.308 Neuroeconomics
- AS.050.312 Cog. Neuroimaging Meth./High-Level Vision
- AS.080.330 Brain Injury & Recovery
- AS.080.345 Great Discoveries in Neuroscience
- AS.080.355 Visual System
- AS.080.360 Diseases & Disorders of the Nervous Syst.
- AS.200.380 Neurobiology of Human Cognition

### Additional

**AS.050.318 (080.400) Practicum in Lang Disorders** (2 credits)

This course provides the opportunity to learn about adult aphasias, language disorders which are one of the most common consequences of stroke. You will receive training in supportive communication techniques and work as a communication partner with an individual with aphasia for two hours per week. Three class meetings for orientation and reading assignments will be held on campus; training and practicum will be conducted at a local aphasia support center. Transportation required. Student must have and A or better in AS.050.203, AS.080.203, AS.050.105, OR AS.050.311; have junior or senior status; and hold a 3.5 GPA or better. Instructor’s permission required. Additional information found on the Neuroscience Department website: krieger.jhu.edu/neuroscience/practicums/language.

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**Posted 3/30/15**