**2015 Spring Course Offerings**

**Cognitive Science**

**Director:** Professor Pat O'Seaghdha

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**COGS 7-10 Introduction to Cognitive Science**  CRN 14363 4 credits (SS)
What is a mind? How is the mind related to the brain? Could we make an artificial mind? Issues concerning knowledge representation and intelligence in minds and computers as investigated by psychologists, philosophers, linguists, neuroscientists, and researchers in artificial intelligence. **Professor Brickhard**  M,W; 12:45 - 2:00 p.m.

**COGS 161-10 Supervised Research**  CRN 10641 2-4 credits (ND)
Research under the direct supervision of a faculty member in the cognitive science program. Students must arrange the particular project with a faculty member before enrolling. Prerequisite: consent of the program director. **Professor O'Seaghdha**

**COGS, PSYC 176-10 Mind and Brain**  CRN 16131 4 credits (NS)
Perception and cognitive neuroscience as the link between mental processes and their biological bases. Visual and auditory perception; the control of action; neuropsychological syndromes of perception, language, memory, and thought; neural network (connectionist) models of mental processes. Prerequisite: PSYC 1 or COGS 7. May not be taken pass/fail. *The accompanying recitation section for this course, PSYC 184, is recommended but optional. Professor Hupbach*  T,TR; 10:45 - 12:00 p.m.

**COGS, CSE 327-10 Artificial Intelligence Theory and Practice**  CRN 14803 3 credits (ND)
Introduction to the field of artificial intelligence: Problem solving, knowledge representation, reasoning, planning and machine learning. Use of AI systems or languages. Advanced topics such as natural language processing, vision, robotics, and uncertainty. Prerequisite: CSE 015, CSE 017, CSE 018 or CSE 002. **Professor Heflin**  T,TR; 1:10 - 2:25 p.m.

**COGS 361-10 Independent Research**  CRN 10643 2-4 credits (ND)
Independent research in cognitive science with a faculty advisor. Students must arrange the particular project with a faculty advisor before enrolling. Prerequisite: consent of the program director. **Professor O'Seaghdha**

**COGS 301-10 Senior Project in Cognitive Science: Proposal**  CRN 17348 3 credits (ND)
Senior year integration of the material from cognitive science begins with the proposal of a substantial review or research project spanning at least two cognitive science disciplines under the direction of a Cognitive Science faculty member. Prerequisite: consent of program director. **Professor O'Seaghdha**

**COGS 399-10 Senior Project in Cognitive Science: Thesis**  CRN 12100 3 credits (ND)
Research during senior year culminating in senior thesis advised by a member of the Cognitive Science faculty. Execution and written report of project proposed and approved in COGS 301. Theses submitted for honors will be evaluated by a committee of at least three cognitive science faculty. Prerequisite: COGS 301 and consent of the program director. **Professor O'Seaghdha**

**COGS 405-10 Individual Study in Cognitive Science**  CRN 17970 1-6 credits (ND)
Study of a topic not covered in regular course offerings. By arrangement with a consulting faculty member. May be repeated for credit. Prerequisite: Consent of the program director. **Professor O'Seaghdha**

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**Collateral Requirements**

**CSE 2 Fundamentals of Programming**  CRNs vary by section 2 credits (ND)
Meeting dates and times vary

**MATH 21 Calculus I**  CRNs vary by section 4 credits (MA)
Meeting dates and times vary

**MATH 51 Survey of Calculus I**  CRNs vary by section 4 credits (MA)
Meeting dates and times vary

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Revised 11.6.2014
Artificial Intelligence and Formal Models

**CSE 17 Programming & Data Structures** 3 credits (MA)
Section 10 - CRN 11252 Professor Hefflin M,W,F; 10:10 - 11:00 a.m.
Section 11 - CRN 18304 Professor Femister M,W,F; 9:10 - 10:00 a.m.

**PHIL, MATH 114-10 Symbolic Logic** CRN 16551 4 credits (MA)
Professor Schmidt M,W; 2:35 - 3:50 p.m.

**CSE, MATH 261-10 Discrete Structures** CRN 11260 3 credits (MA)
Professor Huang T,TR; 2:35 - 3:50 p.m.

**CSE 262-10 Programming Languages** CRN 11261 3 credits (ND)
Professor Tan M,W,F; 9:10 - 10:00 a.m.

**CSE 326-10 Pattern Recognition** CRN 18016 3 credits (ND)
Professor Baird T,TR; 9:20 - 10:35 a.m.

**PHIL, MATH 329-10 Computability Theory** CRN 19225 3, 4 credits (MA)
Professor Stanley T,TR; 9:20 - 10:35 a.m.

Cognition and Neuroscience

**BIOS 121-10 Comparative/Integrative Biology for BIOS Minors** CRN 17406 3 credits (NS)
Professor Itzkowitz M,W,F; 9:10 - 10:00 a.m.

**BIOS 276-10 Central Nervous Sys & Behavior** CRN 19241 3 credits (ND)
Professor Burger T,TR; 7:55 - 9:10 a.m.

**PSYC 395 Cognitive Neuroscience of Memory** CRN 19386 4 credits (NS)
Professor Hupbach T,TR; 2:35 - 3:50 p.m.

Language, Culture and Meaning

**COGS, ANTH, MLL 140-10 Introduction to Linguistics** CRN 19320 4 credits (SS)
Professor Lee W,F; 12:45 - 2:00 p.m.

**ANTH 376-10 Culture and the Individual** CRN 19505 4 credits
Professor Gatewood M,W,F; 11:10 - 12:00 p.m.

**PHIL 260-10 Philosophy of Language** CRN 19342 4 credits (HU)
Professor Bickhard M,W; 2:35 - 3:50 p.m.

**PSYC 320-10 Psychology of Language** CRN 18451 4 credits
Professor O'Seaghdha M,W; 2:35 - 3:50 p.m.

**PSYC, GS 365-10 Hum Devl Cross-Cultr Perspectv** CRN 18454 4 credits (SS)
Professor Nicolopoulou T, TR; 10:45 - 12:00 p.m.

Graduate Minor and Certificate Courses

**PHIL 260-10 Philosophy of Language** CRN 19342 4 credits
Professor Bickhard M,W; 2:35 - 3:50 p.m.

**SOC 461-10 Seminar: Culture and the Individual** CRN 11035 3 credits
Professor Gatewood M,W,F; 11:10 - 12:00 p.m.

**PSYC 406-10 Social Cognition** CRN 19392 3 credits
Professor Packer T; 4:10 - 7:00 p.m.
CSE 426-10 Pattern Recognition  CRN 18017  3 credits  
Professor Baird  T, TR; 9:20 - 10:35 a.m.

CSE 447-10 Data Mining  CRN 18771  3 credits  
Professor Davison  T, TR; 10:45 - 12:00 p.m.