

COGNITIVE SCIENCE (CGS)

College of Letters & Science

CGS 001 – Introduction to Cognitive Science (4 units)

Course Description: Introduction to the interdisciplinary cognitive scientific approach to the study of mind, drawing concepts and methods from psychology, philosophy, linguistics, artificial intelligence, and other disciplines.

Learning Activities: Lecture/Discussion 4 hour(s).

Enrollment Restriction(s): Pass One open to Cognitive Science majors only.

Cross Listing: PHI 010.

Grade Mode: Letter.

General Education: Science & Engineering (SE); Scientific Literacy (SL).

CGS 098 – Directed Group Study (0.5-5 units)

Course Description: Directed group study in cognitive science.

Prerequisite(s): Consent of instructor.

Learning Activities: Variable 1-15 hour(s).

Repeat Credit: May be repeated when topic differs.

Grade Mode: Pass/No Pass only.

CGS 099 – Special Study for Lower Division Students (1-5 units)

Course Description: Special study for lower division students.

Prerequisite(s): Consent of instructor.

Learning Activities: Variable 3-15 hour(s).

Repeat Credit: May be repeated.

Grade Mode: Pass/No Pass only.

CGS 107 – Neuroeconomics/Reinforcement Learning & Decision Making (4 units)

Course Description: Theoretical and empirical approaches to neuroeconomics (neuroscience of decision making) from psychology, neuroscience, economics, and computer science. Neuroscience of judgment and decision making, behavioral economics, and reinforcement learning.

Prerequisite(s): (PSC 100 or PSC 100Y or PSC 135 or ECN 100A or ECN 100AV or ARE 100A or NPB 162 or NPB 163); (STA 013 or STA 013Y or STA 100 or PSC 103A); or consent of instructor.

Learning Activities: Lecture 3 hour(s), Term Paper.

Cross Listing: ECN 107, PSC 133.

Grade Mode: Letter.

General Education: Social Sciences (SS); Scientific Literacy (SL).

CGS 134 – Computational Cognitive Neuroscience (4 units)

Course Description: Explorations of how brain secretes mind, via computer simulations that are manipulated and probed to investigate how neurons produce perception, attention, memory, language, and cognitive control.

Prerequisite(s): (PSC 001 or PSC 001Y or PSC 001V); PSC 100 or PSC 101 or PSC 135 recommended.

Learning Activities: Lecture 3 hour(s), Laboratory 2 hour(s).

Cross Listing: PSC 134.

Grade Mode: Letter.

CGS 138 – Consciousness & Cognition (4 units)

Course Description: Current theoretical and empirical evidence in the study of cognition and consciousness. Theories of consciousness, psychological and neural basis of conscious and unconscious processes such as attention, intentionality, and dreams.

Prerequisite(s): (PSC 001 or PSC 001Y or PSC 001V); (PSC 041 or PSC 041V); (PSC 100 or PSC 100Y or PSC 135).

Learning Activities: Lecture 4 hour(s).

Cross Listing: PSC 138.

Grade Mode: Letter.

CGS 190 – Seminar in Cognitive Science (4 units)

Course Description: Intensive treatment of a special topic or problem related to cognitive science.

Prerequisite(s): Consent of instructor.

Learning Activities: Seminar 3 hour(s), Extensive Writing/Discussion.

Repeat Credit: May be repeated when topic differs.

Grade Mode: Letter.

CGS 192 – Fieldwork in Cognitive Science (1-5 units)

Course Description: Supervised internship off and on campus, in community and institutional settings.

Prerequisite(s): Consent of instructor.

Learning Activities: Fieldwork 3-15 hour(s).

Repeat Credit: May be repeated 12 unit(s).

Grade Mode: Pass/No Pass only.

CGS 194HA – Special Study for Honors Students (3 units)

Course Description: Directed research. Supervised reading, research and writing leading to submission of a Senior Honors thesis under the direction of faculty sponsor.

Prerequisite(s): Consent of instructor. Senior standing in Cognitive Science; qualifications for admission into college honors program.

Learning Activities: Independent Study 9 hour(s).

Grade Mode: Letter.

CGS 194HB – Special Study for Honors Students (3 units)

Course Description: Directed research. Supervised reading, research and writing leading to submission of a Senior Honors thesis under the direction of faculty sponsor.

Prerequisite(s): Consent of instructor. Senior standing in Cognitive Science; qualifications for admission into college honors program.

Learning Activities: Independent Study 9 hour(s).

Grade Mode: Letter.

CGS 198 – Directed Group Study (0.5-5 units)

Course Description: Directed group study in cognitive science.

Prerequisite(s): Consent of instructor.

Learning Activities: Variable 1-15 hour(s).

Repeat Credit: May be repeated when topic differs.

Grade Mode: Pass/No Pass only.

CGS 199 – Special Study for Advanced Undergraduates (1-5 units)

Course Description: Special study for advanced undergraduates.

Prerequisite(s): Consent of instructor.

Learning Activities: Variable.

Repeat Credit: May be repeated.

Grade Mode: Pass/No Pass only.