Cognitive Science Program

2018 Spring Courses Professor Barbara Malt, Director (bcm0@lehigh.edu)

Major and minor declarations forms are available in The Office of Interdisciplinary Programs, Williams Hall, Suite 101 or online https://cogsci.cas2.lehigh.edu/

INTRODUCTORY COURSE

COGS 007-10 Introduction to Cognitive Science (SS) 4 credits 11326 Professor Malt M, W; 2:35 - 3:50 p.m.

ELECTIVE COURSES

ANTH 012-10 Human Evolution and Prehistory (NS) 4 credits 13119 Professor Mickel M,W; 11:10 - 12:25 p.m.

CSE 017-10 Programming and Data Structures (MA) 3 credits

PHIL, MATH 114-10 Symbolic Logic (MA) 4 credits 11860 Professor Schmidt M, W, F; 12:10 - 1:00 p.m.

COGS 161 Supervised Research 2-4 credits

COGS, PSYC 176-10 Cognitive Neuroscience (NS) 4 credits 11756 Professor Arrington T, R; 1:10 - 2:25 p.m.

CSE 198 Foundations of Discrete Structures and Algorithms 3 credits

PHIL 220-10 Ways of Knowing (HU) 4 credits 14153 Professor Bickhard M, W; 1:10 - 2:25 p.m.

STS, CSE, EMC 252-10 Computers, the Internet, and Society (Writing Intensive) 3 credits 10531 Professor Baumer T, R; 2:35 - 3:50 p.m.

<u>BIOS 276-10 Central Nervous System and Behavior</u> (NS) 3 credits **12670** Professor Burger M, W; 8:45 - 10:00 a.m.

<u>CSE 318-10 Introduction to the Theory of Computation</u> 3 credits 13094 Professor Munoz-Avila T, R; 10:45 - 12:00 p.m.

<u>CSE 326-10</u> Fundamentals of Machine Learning 3 credits 14112 Professor Zhang M, W: 2:35 - 3:50 p.m.

COGS, CSE 327-010 Artificial Intelligence Theory and Practice 3 credits 11386 Professor Hefflin T, R; 1:10 - 2:25 p.m.

PSYC, HMS 344-10 Health Care Reasoning and Decision Making (SS) 4 credits 14232 Professor Marsh M. W: 8:45 - 10:00 a.m.

PSYC 347-10 Cognitive Neuroscience of Memory (SS) 4 credits 14072 Professor Hupbach T, R; 1:10 -2:25 p.m.

COGS 361 Independent Research 2-4 credits

BIOS 366-10 Diseases of the Nervous System 3 credits 13994 Professor Miwa W; 1:10 - 4:00 p.m.

BIOS 386-10 Genes and the Brain (NS) 3 credits 14344 Professor Miwa R; 1:10 - 4:00 p.m.

COGS, PSYC 397-10 Music, Computing, and Psychology (SS) 4 credits 13615

Seminar examining key papers and concepts from the fields of music psychology and music computing. Development of music processing and programming skills is part of the course, enabling a fuller exploration of the intersection of the two fields. We will be addressing questions such as: Why is music cognition important to psychology as a whole? How might computing and psychology combine to widen participation in music, and to what end? Prerequisite: Psyc 001 or Cogs 007 Professor Collins R; 1:10 - 4:00 p.m.

COLLATERAL COURSES

CSE 002 Fundamentals of Programming 2 credits

MATH 021 Calculus I 4 credits

MATH 051 Survey of Calculus 4 credits

SENIOR PROJECT

COGS 301 Senior Project in Cognitive Science: Proposal 1-3 credits

COGS 302 Senior Project in Cognitive Science: Thesis 1-3 credits

COGS 391 Honors Thesis in Cognitive Science: Proposal 1-4 credits

COGS 392 Honors Thesis in Cognitive Science: Project Execution and Thesis
1-4 credits