UC San Diego - WASC Exhibit 7.1
Inventory of Educational Effectiveness Indicators

Academic Program	(2) What are these learning outcomes? Where are they published? (Please specify)	(3) Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination)	(4) Who interprets the evidence? What is the process?	(5) How are the findings used?

Department: *Cognitive Science*
 	
 Major:
 B.A./B.S. in Cognitive Science
 B.S. in Cognitive Science/Clinical Aspects of Cognition
 B.S. in Cognitive Science/Computation
 B.S. in Cognitive Science/Human Cognition
 B.S. in Cognitive Science/Human Computer Interaction
 B.S. in Cognitive Science/Neuroscience
 	
 (1) Have formal learning outcomes been developed?
 Yes
 	
 (6) Date of last Academic Senate Review?
 2014-15
	Cognitive Science is a discipline that seeks to understand the mind by bringing together methods and discoveries from psychology, philosophy, neuroscience, linguistics, computer science and anthropology. Our academic program consists of multidisciplinary training and a way of thinking that creates an integrated cognitive science. We require our students to attain competencies in several areas: neuroscience, psychology, natural computation, and human-computer interface.
	
	 Students graduating with a degree should be able to:
	
	 1. Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in cognitive science.
	
	   a. Understand the experimental study of cognition with a focus on sensation and perception
	
	   b. Understand the neuroscience behind mind and body relationships
	
	   c. Understand the fundamentals of natural computation and computer programming relevant to cognitive science phenomena and applications
	
	   d. Understand that cognition extends beyond the boundaries of the person to include the environment, artifacts, social interactions, and culture.
	
	 2. Demonstrate how to effectively integrate principles from several of the major domains of knowledge in cognitive science
	
	 3. Understand and apply basic research methods in cognitive science, including research design, data analysis, and interpretation.
	
	 4. Use critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to cognition, brain processes, and computational models of such.
	
	 5. Demonstrate information competence and the ability to use computers and other technology to study cognition and the brain.
	
	 6. Be able to communicate effectively in a variety of formats.
		Data/Evidence:
		
		 • *Lower division requirements that impart breadth in cognitive science by providing a foundation in mathematics, neurobiology, sensation and perception, experimental design and interpretation of studies, as well as fundamentals of computer programming needed for modeling cognitive processes.*
		
		 • *Minimum of 48 units of upper division courses in the major*
		
		 • *Required upper division courses in fundamental cognitive phenomena, distributed cognition, cognitive ethnography and design, cognitive neuroscience, modeling and data analysis, and natural computation*
		
		 • *Three additional electives for the BA and six for the BS degree*
		
		 • *Five optional areas of specialization for the BS degree, with 4 of the required 6 electives in the chosen area*
		
		 • *Outcome (1) is met by successfully completing COGS1, COGS8, COGS10, COGS14, COGS18, Math 10ABC, Math 11 or Math 20ABCDEF*
		
		 • *Outcome (1a) is met by successfully completing the series COGS101ABC*
		
		 • *Outcome (1b) is met by successfully completing the series COGS107ABC*
		
		 • *Outcome (1c) is met by successfully completing COGS109, COGS118AB*
		
		 • *Outcome (1d) is met by successfully completing the series COGS102ABC*
		
		 • *Outcome (2) is met by successfully completing hands-on Independent Research courses, term papers, study proposals, project-based courses, writing-based courses, group research projects, comparative cognition studies, field observation/studies, patient case studies, Honors Program, Instructional Assistantships, internships, and study abroad program*
		
		 • *Outcome (3) is met by successfully completing COGS14, Independent Research courses, Honors Program*
			• *Undergraduate Affairs Committee, Undergraduate Coordinator, and Faculty Undergraduate Advisor oversee requirements, which are endorsed by full faculty*
			
			 • *Faculty Undergraduate Advisor along with Undergraduate Coordinator act on all requests/petitions for variation of requirements*
			
			 • *Undergraduate Council Program Review Committee*
			
			 • *5-year ACS Review*
				• *ACS collects annual data from all departments and publishes outcomes*
				
				 • *Internally the department adjusts requirements and course sequences for the major*
				
				 • *Individual course instructors use feedback to modify their courses*

Department: *Cognitive Science* **Major:** *Cognitive Science (continued)*	7. *Have realistic ideas about how to implement their knowledge, skills, and values in occupational pursuits in a variety of settings.* **Learning outcomes published:** *Undergraduate Webpage – Resources:* *http://www.cogsci.ucsd.edu/undergraduate-study/resources/* • *Course syllabi* • *Class websites*	• *Outcome (4) is met by successfully completing project-based courses, Independent Research courses, Honors Program, term papers, study proposals, writing-based courses, field studies, patient case studies* • *Outcome (5) is met by successfully completing COGS3, COGS10, COGS109, COGS118AB* • *Outcome (6) is met by successfully completing group research projects, Honors Program, Independent Research courses, writing-based courses, field studies* • *Outcome (7) is met by the number of students pursuing higher education, satisfaction with major, involvement in Independent Research courses, field studies* • *Each year data will be collected to assess: extent of student-faculty interaction, availability of faculty, feedback to students, support in terms of TA/IA availability, resources available to students outside of classroom* • *Each year data are collected in the UC Undergraduate Experience Survey and Post Baccalaureate Survey. Cognitive Science exceeded other majors in how often students "worked on research project under direction of faculty" (17.9% vs 7.1 %). Over 90% of cognitive science undergraduates felt satisfied to very satisfied with faculty instruction, while 84% of students felt somewhat to satisfied with advising by faculty on academic matters (compared to 79% in other majors). Approximately 80% aspired to obtain a Masters or Doctorate degree.*		