



University of California, Santa Barbara  
Program Learning Outcomes

**B.S. in Biopsychology or B.S. in Psychological & Brain Sciences**

***Students graduating with a B.S. in Biopsychology or B.S. in Psychological & Brain Sciences should be able to:***

*1: Mastery of the knowledge base in psychological and brain sciences*

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- Demonstrate familiarity with the major issues, concepts, theoretical perspectives, empirical findings, and historical trends in the discipline.
- Understand the primary objectives and assumptions of psychology as a science, and recognize its relation to other disciplines.
- Demonstrate knowledge and understanding representing appropriate breadth across and depth within selected content areas of the discipline. For the BS degree, this includes breadth and depth in chemistry, physics, and biological sciences.

*2: Understanding and application of basic empirical research methods including research design, data analysis, and interpretation*

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- Understand the purpose, strengths and weaknesses, and appropriate use of basic research designs.
- Demonstrate knowledge of and familiarity with the methods associated with different sub-areas within the discipline.
- Exhibit mathematical and statistical literacy in using, conveying, and interpreting basic statistical results.
- Evaluate the appropriateness of inferences and generalizations made about and conclusions derived from psychological and brain research.
- Recognize the necessity of ethical behavior in the treatment of human and non-human participants in the design, data collection, interpretation, and reporting of research.

*3: Development and demonstration of critical thinking skills*

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- Use scientific principles to identify, articulate, analyze, and evaluate solutions to problems.
- Evaluate critically the merit of claims on the basis of scientific evidence, including distinguishing among speculations, assumptions, and evidence.

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**Program Learning Outcomes, continued**

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*4: Demonstration of competency in oral and written communication*

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- Demonstrate effective written communication skills in a variety of formats (e.g. instructions, reports, essays) aimed at both scientific and non-scientific audiences.
- Use the disciplines' professional writing conventions (e.g. APA format) to describe and convey empirical research.
- Demonstrate effective oral communication skills in a variety of formats (e.g. discussion, debate, lecture) aimed at both scientific and non-scientific audiences.