

2016-2017 Assessment Update for:

School of Psychology: Bachelor's of Science

School of Psychology: BS in Psychology

Program Purpose

The mission for the undergraduate degree in Psychology is to promote Psychology as a science and to prepare the undergraduate, through foundational courses and baccalaureate level courses and experiences, for advanced education in professional schools and in graduate psychology programs.

Responsibility and Implementation Process

In 2016-2017, we initiated a significant review and redesign of our process for evaluating student learning outcomes for our undergraduate Psychology majors. This involved creating a new faculty “working group” which met for 4 hours to clarify our program goals and design a new assessment plan. During two regular faculty meetings, we shared the proposed plan with the full faculty to collect their input. We also had our plan reviewed by an expert in educational evaluation and made adjustments based on her recommendations.

Our Assessment Plan and specific learning targets are informed by the excellent *American Psychological Association Guidelines (2.0, 2013)* for performance by undergraduate Psychology Majors. This year’s report includes the new Assessment Plan, the results of our first year of learning outcome data, and improvements to the plan for 2017-2018.

2016-2017 Faculty Working Group: R. Engle, R. Catrambone, C. Hertzog, E. Schumacher, J. Singleton, D. Spieler, C. Stanzione

The undergraduate coordinator is responsible for:

- Implementing and overseeing the evaluation data collection process
- Convening the faculty for a regular report and discussion of student progress toward our program goals
- Sharing (de-identified) student learning outcome data with our students to convey our learning goals and expectations
- Implementing curriculum changes that may result from this faculty-guided process.

The School Chair is responsible for making budgetary or personnel changes that may need to occur in response to the ongoing assessment results.

Operational Objectives

In 2016-2017, the operational objectives for the undergraduate program in the School of Psychology, include:

One content-focused student learning goal

- (1) Describe key concepts, principles, and overarching themes in psychology

Three skills-based student learning goals

- (2.1) Use scientific reasoning to apply principles of research design
- (2.2) Use scientific reasoning to interpret data characterizing psychological phenomena
- (2.3) Demonstrate psychology information literacy in a written format

One undergraduate program organizational goal

- (3) Improve our School's evaluation methods for measuring and monitoring student learning outcomes in the undergraduate program

The attached Table outlines the specific learning goals, the results for 2016-2017, and improvements to be implemented for 2017-2018.

Update Author (5/23/2017):

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| College: Sciences School: Psychology | Degree Program: Bachelor of Science in Psychology Year: 2016- 2017 | | | |
| Student Learning Outcomes | Implementation/ Action Steps | Assessment Criteria and Evaluation Methods | Assessment Results (Findings) | Use of Results (Modifications, Improvements, Accomplishments) |
| (1) Describe key concepts, principles, and overarching themes in psychology | 1.1 Through foundational courses, students will use basic psychological terminology, concepts, and theories in psychology to explain behavior and mental processes | <p><u>METHOD 1:</u> We see the merits of an “exit exam” on Content Knowledge such as ETS’ Major Field Test in Psychology (140 MC item test with national comparative data). In Spring 2017, we piloted this exam with our graduating seniors.</p> <p><u>METHOD 2:</u> All Psychology majors complete a Capstone Experience in their last year of the program. Either it is a stand-alone course (PSYC 4031) or they design and conduct a Senior Research Thesis (PSYC 4600+4601). We have established a standard grading rubric for the Faculty supervisors of these Capstone experiences.</p> <p><u>Senior Thesis and Capstone Rubric</u> (adapted from Haggerty et al, 2011) includes 5 categories, rating scale 1-6: 1 (unsatisfactory), 3 (marginal), 4 (satisfactory), 6 (outstanding) 5 categories: Research Question,</p> | <p><u>METHOD 1 RESULTS:</u> 10 out of 12 graduating seniors voluntarily completed the ETS two-hour exam. Out of 10 students, 6 scored above the 90th percentile; 3 scored between 80-89th percentile; 1 was in the 43rd percentile. Scheduling conflicts prevented us from getting 100% of our graduating seniors.</p> <p>Spring 2017: Implement Rubric for Capstone and Senior Thesis</p> <p><u>METHOD 2 RESULTS:</u> SPRING 2017: 6 Senior Theses, 12 Capstone students Rubric Maximum Score is 30 (5 categ. X 6 pts). 20 points = Satisfactory (Avg=4) 25 points = Very Good (Avg=5) 30 points = Outstanding (Avg=6)</p> <p>SENIOR THESIS RESULTS: 30, 26, 25, 24, 23, 21 Average: 24.8</p> <p>CAPSTONE RESULTS (12 students, divided into 3 groups): Average: 23.2</p> <p>100% of our Senior Thesis students produced at</p> | <p>We are pleased that 9 out of 10 Spring 2017 seniors scored above the 80th percentile on a nationally normed test of Psychology for Undergraduates.</p> <p>In the coming year, we will look at the ETS results in more detail, including how our students performed on specific content areas, and whether we can pull specific test items that align with our research design and data analysis learning objectives.</p> <p>We will also set up more testing times in Fall 2017 and Spring 2018 to try to reduce schedule conflicts.</p> <p>We are pleased that all of our Senior Thesis and Capstone students produced at least a Satisfactory product. We would like to see more Senior Thesis students in the Very Good/Outstanding (averaging 5 or 6 on the rating scale). We will discuss this at Fall faculty meeting. As we evaluate a few more cohorts, we will also be able to determine</p> |

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| | | <p>Method/Development, Method/Implementation, Conclusions/Implications, Writing</p> | <p>least a satisfactory Senior Thesis. 50% averaged at least 5 points (Very Good) on the ratings. One student had a score of 30 (Outstanding "6" in all 5 categories) The Capstone Projects were rated between Satisfactory (4) and Very Good (5)</p> | <p>our satisfaction with the rubric itself.</p> |
| <p>(2.1) Use scientific reasoning to apply principles of research design</p> | <p>Our students build their ability to apply principles of research design through nearly all of their courses and Capstone experience. Students will:</p> <p>2.1.1 Describe the fundamental principles of research design</p> <p>2.1.2 Evaluate the effectiveness of specific research methods in addressing a research question</p> <p>2.1.3 Apply knowledge of research skills necessary to be an informed consumer of research or critic regarding unsupported claims about behavior</p> | <p>METHOD 1: The specific skills outlined in 2.1.1, 2.1.2, and 2.1.3 are assessed by embedding 2 questions each that will appear together as 6 questions on the final exam in the following advanced courses typically taken in 3rd or 4th year: PSYC 4011 Cognitive Psychology, PSYC 4041 Sensation & Perception, and PSYC 4025 Learning & Memory. All Majors will take at least one of these advanced courses before graduation. Instructors of these three courses will work with the Instructor for PSYC 2015 (Research Methods) to coordinate similarity in the depth of how these skills are demonstrated within these three Psychology Domains.</p> <p>After Final Exams, Instructors of the 3 core courses will submit aggregated and de-identified performance scores for all psychology majors on these 6 items, according to an agreed-upon scoring rubric.</p> | <p>METHOD 1 RESULTS: Spring 2017: Process Planning</p> <p>METHOD 2 RESULTS: SPRING 2017: 6 Senior Theses, 12 Capstone students</p> <p>Student Ratings for Methodology/Development Category (1-6, see above): Senior Thesis Results: 6, 5, 5, 5, 4</p> | <p>Fall 2017: Working Group develops Embedded Questions Implementation during Final Exams Fall 2017</p> <p>METHOD 2: 100% of the 6 Senior Theses rated Satisfactory or higher in Methodology/Development (Research Design); 90% scored a 5 or higher. Capstone Projects averaged nearly "Very Good" (4.7) As we evaluate a few more cohorts, we will also</p> |

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| | | <p><u>METHOD 2:</u> All Psychology majors complete a Capstone Experience in their last year of the program. Either it is a stand-alone course (PSYC 4031) or they design and conduct a Senior Research Thesis (PSYC 4600+4601). We use a standard grading rubric for the Faculty supervisors of these Capstone experiences that evaluates learning objective 2.1.</p> | <p>Capstone Results (12 students average): 4.7</p> | <p>be able to determine our satisfaction with the rubric itself.</p> |
| <p>(2.2) Use scientific reasoning to interpret data characterizing psychological phenomena</p> | <p>2.2.1 Develop plausible behavioral explanations that rely on scientific reasoning and evidence rather than anecdotes or pseudo-science.</p> <p>2.2.2 Interpret complex statistical findings and graphs in the context of their statistical significance, including the influence of effect size, and explain these findings using common language.</p> <p>2.2.3 Observe and participate in ongoing laboratory research activity to experience how psychological data are collected, analyzed, and interpreted. (See METHOD 3 ONLY)</p> | <p><u>METHOD 1:</u> Specific Assessment of the skills outlined in 2.1.1, 2.1.2, by designing 2 questions each that will appear together as 4 questions on the final exam in the following advanced courses typically taken in 3rd or 4th year: PSYC 4011 Cognitive Psychology, PSYC 4041 Sensation & Perception, and PSYC 4025 Learning & Memory. All Majors will take at least one of these advanced courses before graduation. Instructors of these three courses will work with the Instructor for PSYC 2020 (Research Statistics) to coordinate similarity in the depth of how these skills are demonstrated within these three Psychology Domains.</p> <p>After Final Exams, Instructors of the 3 core courses will</p> | <p><u>METHOD 1 RESULTS:</u> Spring 2017: Process Planning</p> <p><u>METHOD 2 RESULTS:</u> SPRING 2017: 6 Senior Theses, 12 Capstone students</p> | <p>Fall 2017: Working Group develops Embedded Questions, Implementation during Final Exams Fall 2017</p> <p><u>METHOD 2:</u> 100% of the 6 Senior Theses were Satisfactory (“8”) or higher in Methodology/Implement</p> |

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| | | <p>submit aggregated and de-identified performance scores for all psychology majors on these 4 items, according to an agreed-upon scoring rubric.</p> <p>METHOD 2: All Psychology majors complete a Capstone Experience in their last year of the program. Either it is a stand-alone course (PSYC 4031) or they design and conduct a Senior Research Thesis (PSYC 4600+4601). We will establish a standard grading rubric for the Faculty supervisors of these Capstone experiences that evaluates learning objective 2.2.</p> <p>METHOD 3: All Psychology majors are strongly encouraged to gain hands-on research experience through undergraduate research assistantships in our Faculty’s research labs. We aim to have 80% of our graduating seniors participate in an undergraduate research experience (including Senior Research Thesis) in a Psychology laboratory.</p> | <p>Combined Student Ratings for 2 categories (12 maximum points; 8 is Satisfactory): Methodology/Implementation Conclusions/Implications Category (1-6, see above):</p> <p>Senior Thesis Results: 12, 10, 9, 9, 9, 8</p> <p>Capstone Results (12 students Average): 4.3</p> <p>METHOD 3 RESULTS: In Spring 2017, 24 of our 97 majors are enrolled in PSYC 2699/PSYC 4699 Undergraduate Research Experience. In Fall 2016, 29 of our 97 majors were enrolled in PSYC 2699/PSYC 4699 Undergraduate Research Experience.</p> <p>Of the 12 graduating seniors in Spring 2017, 100% were enrolled in a Psychology undergraduate research experience at least once. For Fall 2016, out of 8 graduating, the percentage was 100%</p> | <p>ation + Conclusions/Implications (Interpreting Data); Only 2 out of the 6 students averaged a 5 or higher. Capstone Projects averaged closer to “Satisfactory” (4.3)</p> <p>These findings will be discussed with our faculty group to determine how to strengthen the data interpretation skills of our students.</p> <p>METHOD 3: We aimed to have 80% of our students participate in research (beyond Senior Capstone) before they graduate, and the results show that 100% of Fall 2016 and Spring 2017 students have done so.</p> <p>We also set up an online listing of all undergraduate research assistant openings in Psychology labs to continue promoting lab placements.</p> |
| (2.3) Demonstrat | 2.3.1 Read and summarize complex ideas accurately, | METHOD 1: All Psychology majors complete a Capstone | METHOD 1 RESULTS: | METHOD 1: 5 out of the 6 Thesis earned a Satisfactory or higher |

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| <p>e psychology information literacy in a written format</p> | <p>including the future directions, from psychological sources and research</p> <p>2.3.2 Construct arguments clearly and concisely using evidence-based psychological concepts and theories from appropriate information sources</p> <p>2.3.3 Employ APA writing style and clear, grammatical for communicating Psychological Findings to a professional audience</p> | <p>Experience in their last year of the program. Either it is a stand-alone project-based course (PSYC 4031) or they design and conduct a two semester Senior Research Thesis (PSYC 4600+4601). For students in Capstone, their final written product will be evaluated by the Capstone and Lab Instructors (2 evaluators) according to a standard grading rubric that includes performance expectations for 2.3.1, and 2.3.2 and 2.3.3.</p> <p>Students completing a Senior Research Thesis will have their final written work evaluated by their Research advisor and a second faculty reader. The grading rubric evaluates the students' writing.</p> | <p>SPRING 2017: 6 Senior Theses, 12 Capstone students</p> <p>Student Ratings for Writing Category (1-6, see above): Senior Thesis Results: 6, 6, 5, 5, 4, 3 Capstone Results (12 Students Average): 5</p> | <p>rating for Writing, with a majority getting 5 or 6 rating. One thesis was deemed "marginal" (3) in writing. Capstone Projects had strong writing evaluations (Avg=5).</p> |
| <p>(3.3) Improve our School's evaluation methods for measuring and monitoring student learning outcomes in the undergraduate program</p> | <p>In 2016-2017 we ramped up our assessment plan to evaluate the quality of our undergraduate program and whether we are meeting the learning goals we set out for our undergraduate majors.</p> <p>3.3.1 Establish a working group of Psychology Faculty to establish and monitor key learning goals for our students</p> <p>3.3.2 Coordinate key instructional</p> | <p><u>METHOD 1:</u> Our faculty working group has met several times to discuss learning goals and developed this document and implementation plan. We also received feedback from faculty who are more expert in OATS documentation and have incorporated it here.</p> <p><u>METHOD 2:</u> The undergraduate coordinator will convene relevant faculty to develop the Embedded Questions for specific assessment of (1) and (2) learning goals.</p> | <p><u>METHOD 1 RESULTS:</u> Spring 2017: Process Planning Completed</p> <p><u>METHOD 2 RESULTS:</u> Planned for Fall 2017: Working Group develops Embedded Questions, Implementation during Final Exams Fall 2017</p> <p><u>METHOD 3 RESULTS:</u> Spring 2017: Convened Faculty Working Group and developed Capstone/Thesis Rubrics</p> | <p>The School of Psychology has invested significant time and attention to evaluating student learning outcomes this year. It is a healthy process that has sparked good discussion amongst our faculty. We have our first set of results and look forward to continuing this process, revising, and communicating our results and expectations to faculty and students.</p> |

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| | <p>faculty to work together to generate core knowledge assessments embedded within Research Methods, Research Statistics, and the 3 core advanced courses (Cognitive Psychology, Learning & Memory, Sensation & Perception)</p> | <p><u>METHOD 3:</u> The undergraduate coordinator will convene relevant faculty to develop assessment rubrics for Capstone and Senior Thesis projects</p> <p><u>METHOD 4:</u> The undergraduate coordinator will organize procedures for submitting and aggregating the data each semester.</p> | <p>(adapted from Haggerty et al, 2011)</p> <p><u>METHOD 4 RESULTS:</u> The undergraduate coordinator set up a DropBox site for organizing files related to OATS monitoring and faculty sharing of materials such as Rubrics, etc.</p> | |
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Submitted 5/24/17 by Jenny Singleton, Associate Chair, School of Psychology