**Major Assessment Report Template**

Please either download this document and provide a response to each question in the appropriate section or cut and paste all six questions into a word document and provide a response for each one. E-mail your assessment report(s) to the Director of Assessment, Dr. Melissa Jordine ([mjordine@csufresno.edu](mailto:mjordine@csufresno.edu)). Please complete a separate report for each B.A/B.S. and M.A/M.S. program offered by the department.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Department and Degree: Psychology, General Experimental Master’s Degree**  **Assessment Coordinator: Martin Shapiro**   1. **What learning outcome(s) did you assess this year?** List all program outcomes you assessed (if you assessed an outcome not listed on your department SOAP, please indicate explain). Do not describe the measures or benchmarks in this section. Also, please only describe major assessment activities in this report. No GE assessment was required for the 2016-2017 academic year.  |  |  | | --- | --- | | Learning Outcome Goal 2.1:  Learning Outcome Goal 2.2 | Students can apply the appropriate use of various research designs for addressing different types of questions and hypotheses.  Students can evaluate the appropriateness of conclusions presented in disseminated research relevant to psychology. | | Learning Outcome Goal 2.3 | Students can use the library, databases, and the internet to locate relevant research, theory, and information necessary to plan, conduct, and interpret results of research studies. | | Learning Outcome Goal 2.5: | Students can enter and analyze data using a statistical computer package and interpret basic descriptive and inferential statistics. | | Learning Outcome Goal 2.6: | Students can apply the scientific method and statistical techniques in research (e.g., thesis). | | Learning Outcome Goal 3.1:  Learning Outcome Goal 3.2:  Learning Outcome Goal 4.1: | Students can evaluate the logic and data of research.  Students can defend arguments, compare perspectives and  theories, differentiate assumptions and facts and  develop hypotheses based on research literature.  Students can produce well-organized papers and essays  without grammatical errors. | |
| 1. **What assignment or survey did you use to assess the outcomes and what method (criteria or rubric) did you use to evaluate the assignment?** If the assignment (activity, survey, etc.) does not correspond to the activities indicated in the timeline on the SOAP, please indicate why. Please clearly indicate how the assignment/survey is able to measure a specific outcome. If after evaluating the assessment you concluded that the measure was not clearly aligned or did not adequately measure the outcome please discuss this in your report. Please include the benchmark or standard for student performance in your assessment report (if it is stated in your SOAP then this information can just be copied into the report). An example of an expectation or standard would be “On outcome 2.3 we expected at least 80% of students to achieve a score of 3 or above on the rubric.”   Embedded Questions  To assess Learning outcome goals 2.1 and 3.1, we used embedded questions in the final exam given in Measurement, Research Design, and Statistics (Psychology 244A), a course required for all first-year graduate students. The ‘Selecting Statistics’ questions were worth 6 points and ask students to read a number of research scenarios and select the appropriate statistic to evaluate the results. This question addresses Learning Outcome Goal 2.1. The ‘Interpreting SPSS Output’ questions were worth 9 points and asked students to inspect an SPSS output and answer a number of questions regarding the substantive meaning of the output. The “table” questions were worth 6 points and asked students to create APA-style tables or figures to represent the results of a data set. This question addresses Learning Outcome 3.1. Although no standards for these assessments are outlined in the current SOAP, it is expected that more than 75% of students will get each of these questions correct.  Thesis Evaluation Rubric  To assess learning outcomes 2.2, 2.3, 2.6, 3.2, and 4.1, we used a thesis evaluation rubric that is filled out by all members of a thesis committee upon successful defense of that thesis. The rubric asks raters to rank the various components of the thesis (i.e., Introduction, Literature Review, Method, Results, Discussion and Mechanics) on a 4-point scale (1 = Inadequate; 2 = Adequate; 3 = Good; 4 = Excellent). Learning Outcome 2.2 and 2.3 were assessed by thesis evaluation rubric questions 1 & 2 (pertaining to the Introduction and Literature Reviews, respectively). Learning Outcome 4 is assessed by thesis evaluation rubric question 2.6 (pertaining to the Method section). Learning Outcome 3.2 is assessed by thesis evaluation rubric questions 4 and 5 (pertaining to the Results and Discussion sections, respectively). Learning Outcome 4.1 is assessed by thesis evaluation rubric question 6 (pertaining to the overall mechanics of writing throughout the thesis). Although no standards for these assessments are outlined in the current SOAP, it is expected that all theses will be rated with 3s or 4s on each of the thesis rubric questions.  Entering and Analyzing Data  To evaluate Learning Outcome Goal 2.5, students were given a statistical competency exam where they were given ten completed questionnaires that had demographic and personality questions. The students were then asked to score and aggregate the results, enter data into a spreadsheet, and analyze the data using SPSS. From these results, students were asked to answer ten true or false questions. |
| 1. **What did you discover from the data?** Discuss the student performance in relation to your standards or expectations. Be sure to clearly indicate how many students did (or did not) meet the standard for each outcome measured. Where possible, indicate the relative strengths and weaknesses in student performance on the outcome(s).   Embedded Questions  Learning Outcomes 1&2: The final exam for Psych. 244 included twelve (0.5 points each) embedded items testing students' ability to identify the correct statistical test to use to answer various research questions (n = 25). The mean number correct was 5.42 (90.33%) with a standard deviation of 0.53 (8.90%). The final exam also included nine items (1 point each) testing students' ability to read and interpret SPSS output. The mean number correct was 8.24 (91.5%) with a standard deviation of 0.61 (7.6%). These means are generally in line with the previous year’s values though there was a 2.5% improvement in the scores on stats and a 12% improvement on interpretation. Students were also asked to create tables or figures from two datasets (3 points each). The mean score was 4.52 (75.3%) with a standard deviation of 1.18 (19.8%), and these scores were almost identical to the previous year. Students from all three subspecialties: General Experimental (GE), Applied Behavioral Analysis (ABA) and Educational Specialist (Ed.S) School Psychology, participated in these embedded questions. A repeated-measures ANOVA found that, unlike the previous year, there was an overall difference between the three programs, F(2, 22) = 4.77, p = 0.006, and there was a program X problems-type interaction, F(4, 44) = 3.74, p = 0.01. A posthoc analysis found that student in the Ed.S program performed better overall than the students in the general experimental program as well as the students in the ABA program. The GE and ABA students did not differ from each other. This difference was exaggerated in the problems where students had to create tables (Figure 1).  Figure 1. Average scores on the three types of problems for the Psych. 244 final exam questions divided by the three types of programs  Thesis Rubric Evaluation  For Learning Outcomes 3-6, 20 general experimental and ABA graduate student theses were evaluated using the rubric. Each thesis is associated with a committee of at least three members, each of whom is responsible for evaluating the thesis using the rubric. The department received 47 evaluations demonstrating an approximately 78% submission compliance rate for committee members. Figure 1 shows the averages score out four for each evaluated component.  Figure 1. This graph shows that the average score for each component of the thesis evaluation. One can see that the results were between good and excellent for each component.  The data are encouraging, both in terms of responses from committee members and in the distribution of responses. However, the Department would like to see improvement in the overall quality of the MA theses, with a particular emphasis on the Discussion. The Psychology Graduate Committee will address this issue, with a focus on how those components of the thesis might be improved. Also, there was a drop of 5% in compliance of graduate thesis committee, filling out the evaluation and greater effort and organization this year will hope to remedy that problem. |
| 1. **What changes did you make as a result of the data?** Describe how the information from the assessment activity was reviewed and what action was taken based on the analysis of the assessment data.   For the most part, our department and especially our graduate committee has been satisfied with the progress, knowledge, and skill our graduate students demonstrating during the progress of their master’s work as well as their culminating thesis work. That said, there are areas that could be improved.   * The graduate committee feels that great emphasis should be placed on writing a thesis in the style that reflects publications in experimental psychology. This style is more concise and direct with great emphasis on putting results into theoretical context. * We are implementing the following changes. The thesis proposal will remain a larger literature review, which not only demonstrates a comprehensive understanding of the literature related to the student’s thesis but also focuses on the argument for the necessity of the proposed work. This literature review will be condensed considerably to reflect a short introduction in journal articles. This will require us to modify the evaluation process in the coming year. * We also intend to create an online journal of just papers written by our students as their master’s thesis. |
| 1. **What assessment activities will you be conducting in the 2019-2020 AY?** List the outcomes and measures or assessment activities you will use to evaluate them. These activities should be the same as those indicated on your current SOAP timeline; if they are not please explain.  * The graduate committee is developing a rubric to evaluate the oral defenses of the master thesis. This was recommended as part of our department’s evaluation. The rubric will help to standardize defense procedures as well as provide quantitative data on our student’s ability to give oral presentations and demonstrate a clear understanding of the history, content, and results of their thesis. |
| 1. **What progress have you made on items from your last program review action plan?** Please provide a brief description of progress made on each item listed in the action plan. If no progress has been made on an action item, simply state “no progress.”   The following goals are listed in our 2014-2018 Action Plan:  *Track graduate student alumni career progress via a telephone survey of recent graduates.*  Data were collected from Psychology graduate student alumni in Fall 2014 via telephone survey. A total of 127 alumni were identified who graduated between Fall 2007 and Spring 2014. Unfortunately, only 24 alumni were successfully contacted (19% response rate); 14 were School Psychology graduates, 8 were General/Experimental graduates, and 2 were Applied Behavior Analysis graduates. All respondents (100%) were glad they chose to further their education at Fresno State, and 87.5% were currently employed full-time. Because the response rate and the overall sample was so low, data were examined by the Chair, but results were not presented to the faculty nor were results presented in a scientific venue.  *Revise our M.A. SOAP*  We revised our SOAP, clarifying and simplifying goals and learning outcomes, and, in parallel, modified our course structuring for the General/Experimental students, adding a “research data analyst” track, including coursework and practicum experiences. Those documents were approved by the department Spring, 2016, and approved by the College-level committee in Spring, 2017.  *Coordinate with the Division of Graduate Studies to allow student thesis format to more closely approximate scientific manuscript format.*  *Increased number of tenure-track faculty*  2017-2018: We were approved for a search for a new tenure-track faculty member specializing in neuroscience with a special interest in electroencephalography. Two new faculty in neuroscience have worked this past year with one faculty member, Dr. Chris Miller started in Fall Semester 2018, and the second, Dr. Ellen Woo started in January 2019. These two faculty members are enthusiastics and have already taken on undergraduate and graduate students. They have also started a neuroscience book club that meets every other week. That will contribute significantly to the success of our students.  For the past three years, we have had students involved in the Bridges to Doctorate program in collaboration with UC Merced. We had one student in 2017, one in 2018 and two this year (2019). This is an outstanding program providing funds and experience for students as well as a path to a Ph.D. program in experimental psychology.  **Additional Guidelines:** If you have not fully described the assignment then please attach a copy of the questions or assignment guidelines. If you are using a rubric and did not fully describe this rubric (or the criteria being used) then please attach a copy of the rubric. If you administered a survey please consider attaching a copy of the survey so that the Learning Assessment Team (LAT) can review the questions. |