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| **Assurance of Student Learning Report****2020-2021** |
| *Ogden College of Science and Engineering* | *Department of Psychological Sciences* |
| *BS in Psychological Science, Ref# 747 and 747E* |
| *Program director: Andrew Mienaltowski, PhD (andrew.mienaltowski@wku.edu)* |

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| ***Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages.*** |
| **Student Learning Outcome 1:** Develop a working knowledge of psychology's content domains. |
| **Instrument 1** | Assess student learning within Developmental Processes Foundation category across learning objectives for courses using standardized assessment |
| **Instrument 2** | Assess student learning within Learning and Cognition Foundation category across learning objectives for courses using standardized assessment |
| **Instrument 3** | Assess student learning within Individual Differences and Social Processes Foundation category across learning objectives for courses using standardized assessment |
| **Instrument 4** | Assess student learning within Biological Bases of Behavior and Mental Processes Foundation category across learning objectives for courses using standardized assessment |
| **Based on your results, check whether the program met the goal Student Learning Outcome 1.** | **[x]  Met** | **[ ]  Not Met** |
| **Student Learning Outcome 2:** Interpret, design, and conduct basic psychological research. |
| **Instrument 1** | Assess student learning across learning objectives for Research Methods and Research Methods Lab courses using standardized assessment |
| **Instrument 2** | Assess student learning across learning objectives for Statistics in Psychology course using standardized assessment |
| **Based on your results, check whether the program met the goal Student Learning Outcome 2.** | **[x]  Met** | **[ ]  Not Met** |
| **Student Learning Outcome 3:** Apply ethical standards to evaluate psychological science and practice. |
| **Instrument 1** | Document student training in the appropriate conduct of research with human subjects via the students’ completion of CITI training within research methods course sequence (PSYS 210/211). |
| **Based on your results, check whether the program met the goal Student Learning Outcome 3.** | **[x]  Met** | **[ ]  Not Met** |
| **Student Learning Outcome 4:** (For students completing independent study) Applies learning outcomes of the methods and statistics courses in the lab. |
| **Instrument 1** | Assess the diversity of activities of Psychological Sciences majors who complete Independent Study (e.g., PSYS 490) |
| **Based on your results, check whether the program met the goal Student Learning Outcome 4.** | **[x]  Met** | **[ ]  Not Met** |
| **Student Learning Outcome 5:** (For students in extended major) Integrate knowledge gained in complementary disciplines of psychology. |
| **Instrument 1** | Students complete open-ended instrument in which they are asked to describe at least two ways that theories or research findings in one discipline/core of psychology impacts or interacts with another (e.g., concentration). |
| **Based on your results, check whether the program met the goal Student Learning Outcome 5.** | **[x]  Met** | **[ ]  Not Met** |
| **Program Summary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)**  |
| All five of our program’s student learning outcomes were adequately met by the students whom we assessed. This assessment captures student success in a diverse set of knowledge and skills within psychology. Their continued success speaks highly to their investment in this program and the time faculty devote to ensuring that students have relevant, meaningful, and rich experiences in the classroom as well as in the laboratory. |

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| **Student Learning Outcome 1** |
| **Student Learning Outcome**  | Develop a working knowledge of psychology's content domains. |
| **Measurement Instrument 1**  | Students must take at least one course in the Developmental Processes Foundation category within the program. This instrument assesses student learning within these courses using a standardized assessment.  |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance  |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 100%747E (n = 9): 100%Total (n = 21): 100% |
| **Methods**  | The assessment includes 4 learning objectives for PSYS 220 Introduction to Lifespan Developmental Psychology and 3 learning objectives for PSYS 321 Child Developmental Psychology. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course. Note that this process happens for each course. When a student meets the objectives for at least one course as defined by 50%+, then they are classified as having met the objective for the entire foundation category. On average, individual students performed at 68.5% for PSYS 220 objectives, and individual students performed at 78.6% for PSYS 321 objectives.  |
| **Measurement Instrument 2** | Students must take at least one course in the Learning and Cognition Foundation category within the program. This instrument assesses student learning within these courses using a standardized assessment. |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 100%747E (n = 9): 88.9%Total (n = 21): 95.2% |
| **Methods** | The assessment includes 4 learning objectives for PSYS 333 Cognitive Psychology and 5 learning objectives for PSYS 331 Principles of Human and Animal Learning. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course. When a student meets the objectives as defined by 50%+, then they are classified as having met the objective for the entire foundation category. On average, individual students performed at 58.3% for PSYS 333 objectives, and individual students performed at 64.8% for PSYS 331 objectives. |
| **Measurement Instrument 3** | Students must take at least one course in the Individual Differences and Social Processes Foundation category within the program. This instrument assesses student learning within these courses using a standardized assessment. |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 100%747E (n = 9): 100%Total (n = 21): 100% |
| **Methods** | The assessment includes 4 learning objectives for PSYS 350 Social Psychology and 3 learning objectives for PSYS 440 Abnormal Psychology. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course. Note that this process happens for each course. When a student meets the objectives for at least one course as defined by 50%+, then they are classified as having met the objective for the entire foundation category. On average, individual students performed at 75.0% for PSYS 350 objectives, and individual students performed at 77.8% for PSYS 440 objectives. |
| **Measurement Instrument 4** | Students must take at least one course in the Biological Bases of Behavior and Mental Processes Foundation category within the program. This instrument assesses student learning within these courses using a standardized assessment. |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 91.7%747E (n = 9): 88.9%Total (n = 21): 90.5% |
| **Methods** | The assessment includes 4 learning objectives for PSYS 360 (362) Behavioral Neuroscience (with Lab) and 3 learning objectives for PSYS 363 Sensory and Perceptual Systems. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course. Note that this process happens for each course. When a student meets the objectives for at least one course as defined by 50%+, then they are classified as having met the objective for the entire foundation category. On average, individual students performed at 73.8% for PSYS 360/362 objectives, and individual students performed at 50.0% for PSYS 363 objectives. |
| **Based on your results, highlight whether the program met the goal Student Learning Outcome 1.** | **[x]  Met** | **[ ]  Not Met** |
| **Actions** (Describe the decision-making process and actions for program improvement. The actions should include a timeline.) |
| The existing assessment seems adequate for evaluating student learning in the program. Note that the American Psychological Associations Guidelines for the Undergraduate Psychology Major 2.0 recommends that all students majoring in psychology complete one course in each of four specific content domains – those domains that we have assessed here. This collection of courses provides students with a strong, broad background within the discipline, prepares students for the rigor of graduate coursework on advanced topics in these domains, and presents students with exposure to many possible directions for future study and careers in psychology. Across the four measurement instruments, students are displaying evidence of meeting the learning outcomes for the four domains. The lowest level of performance appeared in the Biological Bases of Behavior and Mental Processes domain. Students nevertheless met the learning outcomes across the foundation knowledge categories. |
| **Follow-Up** (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.) |
| Within the Learning/Cognition domain, a new assessment was developed for the Learning content covered in the Principles of Human and Animal Learning (PSYS 331). From year to year, we continue to observe smalls improvements in the percentage of students meeting the objectives for this category. |
| **Next Assessment Cycle Plan** (Please describe your assessment plan timetable for this outcome) |
| This outcome will be assessed next year at the end of the spring term. The assessment items are administered via Qualtrics and are thus easy to share with graduating students. The assessment will be administered by the undergraduate program coordinator or the department head of the Department of Psychological Sciences. Student recruitment for the assessment takes place via a direct appeal to the graduating seniors. Our response rate is better when we reach out to students in this centralized manner than asking individual faculty to reach out to graduating seniors. A list of graduates is compiled and then used for outreach.  |

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| **Student Learning Outcome 2** |
| **Student Learning Outcome**  | Interpret, design, and conduct basic psychological research. |
| **Measurement Instrument 1** | Students must take a Research Methods course and a Research Methods lab course. This instrument assesses student learning within these courses using a standardized assessment. |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 91.7%747E (n = 9): 100%Total (n = 21): 95.2% |
| **Methods**  | The assessment includes 4 learning objectives for PSYS 210/211 Research Methods and Research Methods Lab. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course sequence. When a student meets the objectives for the course sequence as defined by 50%+, then they are classified as having met the student learning outcome. On average, individual students performed at 73.2% for PSYS 210/211 objectives. |
| **Measurement Instrument 2** | Students must take a Statistics in Psychology course. This instrument assesses student learning within the course using a standardized assessment. |
| **Criteria for Student Success** | Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance |
| **Program Success Target for this Measurement** | Sampled 21 graduating students (44.7%) from the 2020-2021 academic year. The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 12): 83.3%747E (n = 9): 66.7%Total (n = 21): 76.2% |
| **Methods** | The assessment includes 3 learning objectives for PSYS 313 Statistics in Psychology. Students complete 2 items in the assessment for each learning objective, and then the percentage correct across all learning objectives within a course are used to determine if a student has met the objectives for the course sequence. When a student meets the objectives for the course sequence as defined by 50%+, then they are classified as having met the student learning outcome. On average, individual students performed at 58.3% for PSYS 313 objectives. |
| **Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.** | **[x]  Met** | **[ ]  Not Met** |
| **Actions** (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.) |
| Consistent with the American Psychological Associations Guidelines for the Undergraduate Psychology Major 2.0, all Psychological Science majors complete courses in Research Methods and Statistics. Students gain practical research design and analysis skills that serve as the foundation of their background and skill in scientific inquiry and support further training in graduate school or employment within human science, health, and service fields. Across the two measurement instruments, students displayed evidence that they are meeting the expected learning outcomes. The lowest level of performance appeared in the Statistics assessment, but even here performance was well above the level needed to demonstrate that students were meeting expectations for the learning outcome. We will continue to monitor performance on the Statistics assessment to ensure that students in both 747 and 747E are meeting our performance expectations. |
| **Follow-Up** (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.) |
| Previously we had thought that reaching out to students via course instructors might improve our sampling. This turned out to be inaccurate, as a more centralized approach in which the undergraduate program coordinator emails all graduating students and shares with them the assessment information, including reasoning behind the assessment, improved sample size. We will continue to monitor sampling ability using this approach to building a sample. |
| **Next Assessment Cycle Plan** (Please describe your assessment plan timetable for this outcome) |
| This outcome will be assessed next year at the end of the spring term. The assessment items are administered via Qualtrics and are thus easy to share with graduating students. The assessment will be administered by the undergraduate program coordinator or the department head of the Department of Psychological Sciences. Student recruitment for the assessment takes place via a direct appeal to the graduating seniors. Our response rate is better when we reach out to students in this centralized manner than asking individual faculty to reach out to graduating seniors. A list of graduates is compiled and then used for outreach.  |

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| **Student Learning Outcome 3** |
| **Student Learning Outcome**  | Apply ethical standards to evaluate psychological science and practice. |
| **Measurement Instrument 1** | Document student training in the appropriate conduct of research with human subjects via the students’ completion of CITI training within research methods course sequence (PSYS 210/211). |
| **Criteria for Student Success** | Meets expectations: 60% of students complete; Exceeds expectations: 75% of students complete; Exceptional: 90% of students complete |
| **Program Success Target for this Measurement** | 100% of graduating students were sampled (*n* = 47). The goal is to have 60% of students complete the training. | **Percent of Program Achieving Target** | 747 (n = 31): 83.9%747E (n = 16): 100%Total (n = 47): 89.4% |
| **Methods**  | Within the research method course and lab, within content courses, and within student independent study, students discuss the appropriate conduct of research with human subjects. To assess students’ understanding and application of this knowledge, students complete CITI training in the responsible conduct of research. This is a requirement for students completing PSYS 210 and PSYS 211. All students were sampled. |
| **Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.** | **[x]  Met** | **[ ]  Not Met** |
| **Actions** (Describe the decision-making process and actions for program improvement. The actions should include a timeline.) |
| As noted earlier, the American Psychological Associations Guidelines for the Undergraduate Psychology Major 2.0 recommends that all students majoring in psychology receive an educational background in the ethics of designing experiments, working with human subjects, managing data and participant confidentiality, and the responsibilities that researchers have to their participants. In addition to research design related knowledge, students complete training in the responsible conduct of research on human subjects through the CITI (Collaborative Institutional Training Initiative) training program. Documentation of this training is submitted to course instructors as well as to faculty research mentors who sponsor undergraduate research projects. Although our students’ performance on this assessment exceeds our expectations, faculty teaching PSYS 210/211 and working with students on research projects will continue to have students complete this training or to require it for their involvement in research. |
| **Follow-Up** (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.) |
| In order to improve our ability to track who complete the CITI training, student transcripts are examined for evidence of completion of PSYS 210/211 and/or PSYS 290 or 490. This has allowed us to identify additional students who have received the training outside the traditional class-required activities. |
| **Next Assessment Cycle Plan** (Please describe your assessment plan timetable for this outcome) |
| This assessment will also take place next spring. A list of graduating seniors is compiled, and then this list is used by the undergraduate program coordinator to identify those students who have completed the coursework and/or independent study activities requiring ethics training. It is possible to sample more broadly in this manner, as we are not relying on students to complete a survey in order to share their training information. |

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| **Student Learning Outcome 4** |
| **Student Learning Outcome**  | For students completing independent study, apply learning outcomes of the methods and statistics courses in the lab. |
| **Measurement Instrument 1**  | Assess the diversity of activities of Psychological Sciences majors who complete Independent Study (e.g., PSYS 490) |
| **Criteria for Student Success** | Meets expectations: 2 activities; Exceeds expectations: 3 activities; Exceptional: 4 or more activities |
| **Program Success Target for this Measurement** | Sampled 30 students of 39 in program who registered for independent study during 2020-2021 academic year (76.9%). The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 747 (n = 16): 100%747E (n = 14): 100%Total (n = 30): 100% |
| **Methods**  | Students complete a survey after completing an independent study course (e.g., PSYS 490) and, from a list of activities, they check all of the activities in which they were engaged during the experience. On average, individual students engaged in 5.8 number of activities (range: 2-11; SD = 2.4). 747: M = 4.9; SD = 1.7. 747E: M = 6.8; SD = 2.8. |
| **Based on your results, highlight whether the program met the goal Student Learning Outcome 1.** | **[x]  Met** | **[ ]  Not Met** |
| **Actions** (Describe the decision-making process and actions for program improvement. The actions should include a timeline.) |
| All students completing this assessment met the learning outcomes, which demonstrates that students who are taking part in independent study are utilizing the knowledge and skills that they developed in their research methods and statistics courses in an applied manner to address research questions in their concentrations of study. We will continue to monitor student success with this learning outcome to ensure that Psychological Science majors have outstanding and relevant research experiences. |
| **Follow-Up** (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.) |
| This is only the second time that this assessment has been administered, but it clearly demonstrates that students have very vibrant experiences within their independent study research labs. We hope to continue to meet the 100% success rate, and continuously monitor the rigor and relevance of the experiences that students have in our labs. |
| **Next Assessment Cycle Plan** (Please describe your assessment plan timetable for this outcome) |
| This assessment will be given next Spring as well. Sampling involves compiling a list of students who completed independent study credit in the fall and spring terms. The undergraduate coordinator reaches out to these students, which consists of students from all standings in the major, to ask them to complete a short survey that captures the types and variety of activities the students were involved in over the course of their independent study. Administering this each year is relatively low cost, as students complete a cery short (2-5 minute) inventory. |

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| **Student Learning Outcome 5** |
| **Student Learning Outcome**  | For students in extended major only, integrate knowledge gained in complementary disciplines of psychology. |
| **Measurement Instrument 1**  | Students complete open-ended instrument in which they are asked to describe at least two ways that theories or research findings in one discipline/core of psychology impacts or interacts with another (e.g., concentration). |
| **Criteria for Student Success** | Meets expectations: 50% of students meet standards in all 4 dimensions; Exceeds expectations: 70% of students meet standards in all 4 dimensions; Exceptional: 90% of students meet standards in all 4 dimensions |
| **Program Success Target for this Measurement** | 37.5% of 747E graduating students were sampled (*n* = 6). The goal is to have 50% of these students meet the criteria for success. | **Percent of Program Achieving Target** | 100% |
| **Methods**  | Responses are scored with a rubric along 4 dimensions: Connections within disciplines, Transfer across disciplines, Mechanics of response focus, and Mechanics of interconnected thought. Students earn ratings of exceptional (4), exceeds standards (3), meets standards (2), or fails to meet standards (1). Responses are scored by at least one faculty member using the rubric. The average scored responses for each dimension were: Connections within discipline 3.33, Transfer across disciplines 3.50, Mechanics of response focus 4.00, and Mechanics of interconnected thought 4.00. All students reached, at minimum, meets standards on all 4 dimensions. |
| **Based on your results, highlight whether the program met the goal Student Learning Outcome 1.** | **[x]  Met** | **[ ]  Not Met** |
| **Actions** (Describe the decision-making process and actions for program improvement. The actions should include a timeline.) |
| We will continue to sample our graduating students broadly to ensure that we can generate the largest possible sample for this assessment. This is the second year for administering the assessment, and the success of the students suggests that they are forming connections between the content learned across concentration, integrating knowledge and experiences to inform their perspective in psychology. |
| **Follow-Up** (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.) |
| In the past, our sample for this assessment was small. However, with a change to the way that we administered the assessment (i.e., central administration of assessment by undergraduate program coordinator instead of reminders from faculty teaching courses), we were able to improve our sample. We will continue to monitor our progress on sampling an adequate number of graduates in the extended major (747E) to ensure that we have useful data. |
| **Next Assessment Cycle Plan** (Please describe your assessment plan timetable for this outcome) |
| This outcome will be assessed next year at the end of the spring term. The assessment items are administered via Qualtrics and are thus easy to share with graduating students. The assessment will be administered by the undergraduate program coordinator or the department head of the Department of Psychological Sciences. Student recruitment for the assessment takes place via a direct appeal to the graduating seniors. Our response rate is better when we reach out to students in this centralized manner than asking individual faculty to reach out to graduating seniors. A list of graduates is compiled and then used for outreach. |