Assurance of Student Learning 2019-2020				
Ogden College of Science and Engineering	Psychological Sciences			
BS in Psycholog	ical Science, Ref# 747 and 747E			

Use this page	e to list learning outcomes, measurements, and summarize results for your program. Detailed informa	tion must b	e completed				
	in the subsequent pages.						
	rning 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 standar	rdized assessm	ent				
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 coassessment	urses using sta	ndardized				
Instrument 4	Assess student learning within Biological Bases of Behavior and Mental Processes Foundation category across learning objective standardized assessment	s for courses u	sing				
Based on your i	results, circle or highlight whether the program met the goal Student Learning Outcome 1.	Met	Not Met				
Student Lear	rning 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 a	ssessment					
Instrument 2	Assess student learning across learning objectives for Statistics in Psychology course using standardized assessment						
Based on your i	results, circle or highlight whether the program met the goal Student Learning Outcome 2.	<b>Met</b>	Not Met				
Student Lear	rning 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 trainic course sequence (PSYS 210/211).	ng within rese	arch methods				
Based on your i	results, circle or highlight whether the program met the goal Student Learning Outcome 3.	Met	Not Met				
Student Lear	rning Outcome 4: (For students completing independent study) Applies learning outcomes of the methods an	d 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 i	results, circle or highlight whether the program met the goal Student Learning Outcome 4.	<u>Met</u>	Not Met				
Student Lear	rning Outcome 5: (For students in extended major) Integrate knowledge gained in complementary discipline	s of psychol	ogy.				
Instrument 1	Students complete open-ended instrument in which they are asked to describe at least two ways that theories or research findings psychology impacts or interacts with another (e.g., concentration).	in one discipli	ne/core of				
Based on your i	results, circle or highlight whether the program met the goal Student Learning Outcome 5.	Met	Not Met				
Program Sur	nmary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)						

(last year) The two major programs (747 and 747E) are combined in this report. Both are fairly new: 747 was first available in the Fall 2015 catalog year. 747E is an "extended" option, requiring no minor. This program was first available in the Fall 2016 catalog year. Thus, this is our first program assessment and student numbers for assessment are relatively small. For both programs, learning outcomes conform closely to APA guidelines for the undergraduate major and thus are difficult to disaggregate. Our main goals for future actions are to:

- 1) Develop assessments that will take place at intermediate points in students' academic path, which will allow us a more proximal view of student learning in each major domain
- 2) Develop an assessment of the extended major option that will assess students' ability to synthesis information across two or more content domains
- 3) Require that all students enrolled in PSYS 490 (Independent Research) respond to a structured set of questions that assesses the extent to which the research course is reinforcing learning outcomes
- 4) Examine the structure and content of PSYS 210 and 211 (Research Methods and Lab) to ensure that it addresses learning outcomes related to methodology and that it prepares students for future coursework
- 5) Examine all equivalencies and prerequisites in the major to ensure we are building on student's knowledge in earlier courses

		Student Learning Outcon	ne 1		
<b>Student Learning Outcome</b>	Develop a work	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 expectati	ons: 50% performance; Exceeds expectations: 70%	performance; Exceptional: 90% performance	e	
Program Success Target for this	Measurement	Sampled 11 graduating students (26.8%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747 (n = 5): 100% 747E (n = 6): 100% Total (n = 11): 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 79.5 % for the PSYS 220 objectives, and individual students performed at 4.8%% for PSYS 321 objectives.				
<b>Measurement Instrument 2</b>		ake at least one course in the Learning and Cognition within these courses using a standardized assessm		This instrument assesses	
Criteria for Student Success	Meets expectati	ons: 50% performance; Exceeds expectations: 70%	performance; Exceptional: 90% performance	e	
Program Success Target for this	s Measurement	Sampled 11 graduating students (26.8%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747 (n = 5): 100% 747E (n = 6): 83.3% Total (n = 11): 90.9%	

Methods	Human and Ani assessment for e a student has me met the objectiv	The assessment includes 4 learning objectives for PSYS 333 Cognitive Psychology and 5 learning objectives for PSYS 331 Principles of Human and Animal Learning. The latter are being implemented for the first time this academic year. 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 67.0% for the PSYS 333 objectives, and individual students performed at 73.4% for the PSYS 331 objectives.				
<b>Measurement Instrument 3</b>		ake at least one course in the Individual Difference sees student learning within these courses using a s		within the progra	am. This	
Criteria for Student Success	Meets expectation	ons: 50% performance; Exceeds expectations: 70%	performance; Exceptional: 90% performance	ce		
Program Success Target for thi	s Measurement	Sampled 11 graduating students (26.8%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747E	(n = 5): 100% (n = 6): 100% n = 11): 100%	
Methods	Psychology. Stu objectives withi course. When a for the entire for	includes 4 learning objectives for PSYS 350 Social dents complete 2 items in the assessment for each in a course are used to determine if a student has mistudent meets the objectives for at least one course undation category. On average, individual students .8% for PSYS 440 objectives.	learning objective, and then the percentage of et the objectives for the course. Note that this e as defined by 50%+, then they are classified	correct across all s process happer I as having met t	learning as for each the objective	
<b>Measurement Instrument 4</b>		ake at least one course in the Biological Bases of B assesses student learning within these courses using		tegory within th	e program.	
Criteria for Student Success	Meets expectation	ons: 50% performance; Exceeds expectations: 70%	performance; Exceptional: 90% performance	ce		
Program Success Target for this	s Measurement	Sampled 11 graduating students (26.8%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747E	(n = 5): 100% (n = 6): 100% n = 11): 100%	
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 75.0% for the PSYS 360/362 objectives, and individual students performed at 56.1% for PSYS 363 objectives.					
·		r the program met the goal Student Learning O		<u>Met</u>	Not Met	
<b>Actions</b> (Describe the decision-ma	aking process and	actions planned for program improvement. The a	ctions should include a timeline.)			

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. The Psychological Science major was developed at WKU to provide students with a STEM-based curriculum in the discipline. Consequently, the course work focuses on building students' empirical and interpretative skills within 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 Learning/Cognition domain. Students experienced more difficulty with the Cognition course's objective than the Learning course.

Follow-Up (Provide your timeline for 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 saw a small improvement in the percentage of students meeting the objectives for this category.

Student Learning Outcome 2						
<b>Student Learning Outcome</b>	Interpret, desi	Interpret, design, and conduct basic psychological research.				
Measurement Instrument 1		ke a Research Methods course and a Research Metatandardized assessment.	thods lab course. This instrument assesses st	udent learning within these		
Criteria for Student Success		Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance	Criteria for Student Success	Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional: 90% performance		
Program Success Target for this Measurement	academic year. T	Sampled 12 graduating students (29.3%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.  Percent of Program Achieving Target  747 (n = 6): 100%  747E (n = 6): 100%  Total (n = 12): 100%				
Methods	in the assessmen determine if a stu- defined by 50%-	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 78.1% for the PSYS 210/211 objectives.				
Measurement Instrument 2	Students must ta assessment.	Students must take a Statistics in Psychology course. This instrument assesses student learning within the course using a standardized assessment.				
Criteria for Student Success		ons: 50% performance; Exceeds expectations: ee; Exceptional: 90% performance	Criteria for Student Success	Meets expectations: 50% performance; Exceeds expectations: 70% performance; Exceptional:		

			90% performan	ce	
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 60.6% for the PSYS 313 objectives.				
Program Success Target for this Measurement	Sampled 11 graduating students (26.8%) from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747E	(n = 5): 100% (n = 6): 50% = 11): 72.7%	
<b>Measurement Instrument 3</b>					
Criteria for Student Success					
Program Success Target for this Measurement		Percent of Program Achieving Target			
Methods					
Based on your results, circle or l	highlight whether the program met the goal Student Learning O	utcome 2.	<u>Met</u>	Not Met	

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

The American Psychological Associations Guidelines for the Undergraduate Psychology Major 2.0 recommends that all students majoring in psychology complete a course in Research Methods and Statistics - those domains that we have assessed here. Within these courses, 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. The Psychological Science major was developed at WKU to provide students with a STEM-based curriculum in the discipline. Consequently, Research Methods and Statistics focus on building students' skills with ethically collecting and interpreting data and disseminating findings. 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. Student sampling is likely one issue contributing to the performance level for the stats objectives, as random sampling does not guarantee representative sampling of our graduates.

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

To improve sampling, faculty teaching graduating seniors will be asked to monitor student compliance with our assessment strategy.

Student Learning Outcome 3			
<b>Student Learning Outcome</b>	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		

<b>Program Success Target for this</b>	Measurement	100% of graduating students were sampled ( $n = 41$ ). The goal is to have 60% of students	Percent of Program Achieving Target		n = 29): 93.1% n = 12): 83.3%	
		complete the training.			n = 41): 90.2%	
Methods	conduct of resear	rch method course and lab, within content courses, rch with human subjects. To assess students' under sponsible conduct of research. This is a requirement	standing and application of this knowledge,	students comple	ete CITI	
Based on your results, circle or h	nighlight whether	the program met the goal Student Learning Ou	itcome 3.	<u>Met</u>	Not Met	
Actions (Describe the decision-ma	king process and	actions planned for program improvement. The ac	tions should include a timeline.)			
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 covering this content across the major program, including within PSYS 210/211 Research Methods and Research Methods Lab, 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 have students complete this training or to require it for their involvement in research.						
Follow-Up (Provide your timeline	Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)					
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Student Learning Outcome 4						
<b>Student Learning Outcome</b>	For students of	completing independent study, apply learn	ing outcomes of the methods and stat	istics courses	in the lab.	
Measurement Instrument 1	Assess the divers	Assess the diversity of activities of Psychological Sciences majors who complete Independent Study (e.g., PSYS 490)				
Criteria for Student Success	Meets expectation	Meets expectations: 2 activities; Exceeds expectations: 3 activities; Exceptional: 4 or more activities				
Program Success Target for this Measurement		Sampled 16 students in program from the 2019-2020 academic year. The goal is to have 50% of these students meet the criteria for success.	Percent of Program Achieving Target	747E (	(n = 8): 100% (n = 8): 100% n = 16): 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 6.88 number of activities (range: 2-11; SD = 2.4).					
Based on your results, circle or l	nighlight whether	the program met the goal Student Learning O	atcome 4.	Met	Not Met	

**Actions** (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

This learning outcome is being newly assessed this year. We wanted to assess our students enrolled in PSYS 490 (Independent Research) to determine the extent to which this course is reinforcing learning outcomes related to methods and statistics. Clearly students are very engaged in the research process and in applying knowledge gained from their research methods and statistics courses.

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

	T	Student Learning Outcom	<u>e 5</u>		
Student Learning Outcome	For students i	For students in extended major only, integrate knowledge gained in complementary disciplines of psychology.			
Measurement Instrument 1		tudents complete open-ended instrument in which they are asked to describe at least two ways that theories or research findings in one iscipline/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	25% of 747E graduating students were sampled $(n = 3)$ . 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 3.67, Transfer across disciplines 3.33, Mechanics of response focus 3.33, and Mechanics of interconnected thought 3.33. All students reached, at minimum, meets standards on all 4 dimensions.				s (2), or fails ach
Based on your results, circle or l		the program met the goal Student Learning Ou		<b>Met</b>	Not Met
Actions (Describe the decision-ma	aking process and	actions planned for program improvement. The act	tions should include a timeline.)		
Follow-Up (Provide your timeline	for follow-up. If	follow-up has occurred, describe how the actions a	bove have resulted in program improvement	t.)	