Auburn University Samford Hall Tower Logo in orange and blue

# **ASSESSMENT REPORT**

## Psychology, BA

Our curriculum is designed to provide undergraduates with the best possible education in psychology. We seek to provide students with all the scientific tools necessary for success in this field as well as an introduction to the various content areas of psychology and supervised practical experiences. We have continued revising our B.A. Curriculum since Fall of 2012 to offer better guidance on pursuing a well-rounded education. Since 2014-2015, six additional on-line courses have been approved and implemented to provide better and flexible services to students, particularly during the summer break.

The Psychology degree has been a staple at Auburn University and has attracted a large number of majors. As of Fall 2016, we had 540 majors. Given the size of our majors, the department has been working closely with peer advisors, and Auburn Psy Chi Honor Society, an International Honor Society in Psychology, who serves an additional liaison to interact with our majors regarding their learning needs.

Since 2016-2017, two accelerated bachelor-master programs, Industrial/Organizational Psychology and Applied Behavioral Analysis, have been approved, and will be implemented starting from 2017-2018. Both programs with bright employment outlooks offer additional educational edges for our majors. In addition, a new B.S. major in Neuroscience has been proposed in 2016-2017, which is currently under an administrative review.

## Student Learning Outcomes

### Specificity of Outcomes

The learning outcomes are established by the American Psychology Association’s Guidelines for the Undergraduate Psychology Major outlined in August 2013 <http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf>. The department aligns with the APA guidelines and conduct formative and summative assessments where feasible and practical.

* 1. ***Knowledge in Psychology****:* Students will be able to identify basic psychological concepts.
  2. ***Scientific Inquiry and Critical Thinking****:* Students will be able to critically evaluate and apply basic psychological concepts by means of scientific reasoning acquired from training in statistics and research methods.
  3. ***Ethical and Social Responsibility in a Diverse World***: Students will be able to

apply ethical standards to evaluate psychological science and practice.

* 1. ***Communication:*** Students will be able to interact effectively with others.
  2. ***Professional Development****:* Students shall be able to apply psychological content and skills to pursue career goals.

### Comprehensive Outcomes

As a department, we are striving to address how best to assess the above outcomes in either summative (e.g., large scale pre-post assessments or group comparisons) or formative approaches (e.g., exit surveys, needs assessment, GTA assessment, in-class assessments such as exams and quizzes, town hall meeting, advising), which will be described below.

### Communicating Student Learning Outcomes

The undergraduate program committee in the Department of Psychology received a copy of feedback about our assessment report, and we discussed how to better improve and train our psychology majors as well as assist them in developing the professional skills to succeed beyond graduation. Additionally, we shared our communications with the department faculty, instructors on records, lecturers, and adjunct professors, and brain storm during faculty and executive committee meetings how to enrich our undergraduate student experiences and learning goals. In addition, we conducted needs assessment to identify students’ need, and disseminated annual report, scholarships/awards, internship/research opportunities, and achievements to our students through email, website, advising, and Psy Chi Society.

## Curriculum Map

1. Students complete 36 hours in Psychology coursework with 4 Core required courses:

**Core Course 1:** PSYC 2010/2013/PSYC 2017: Introduction to Psychology

**Core Course 2:** PSYC 2130/2137: Analytics Behavioral Sciences[1](#_bookmark0) **Core Course 3:** PSYC 2140/2143: Research Methods in Psychology[2](#_bookmark1) **Core Course 4:** PSYC 2020: Orientation to Psychology Major

## 24 Credit Hours in Upper Level Coursework (3000 or above)

* **Group A** courses (**Applied Science** Content includes Developmental, Abnormal, Personality, Social, and Psychology in the Workplace.
* **Group B** courses (**Basic Science** Content includes Behavioral Neuroscience,

1 PSYC 2130 has been under a major revision since June 2016 by adopting a blended learning approach (i.e., F2F lectures, on-line exercises, and open lab for discussion). Effectiveness evidence of this approach has been empirically documented in different disciplines. The department will implement and pilot this approach in 2017- 2018.

2 The department is in the process of developing up-to-dated lab exercises, with an expectation of implementing/piloting these lab exercises in 2019-2020.

Learning, Sensation and Perception, Cognitive, and Cognitive Neuroscience)

* **Group C** courses (**Concentrated Content** is Psychology subfields and specialties- e.g., Applied Behavior Analysis, Psychology of Choice and Decision, Health Psychology, Child Psychology)
* **Psychology Electives**: 2 additional psychology courses

Course information on our website [(http://www.cla.auburn.edu/psychology/ug/course](http://www.cla.auburn.edu/psychology/ug/course-information/)

[-information/](http://www.cla.auburn.edu/psychology/ug/course-information/)) provided detailed information about courses and typical questions addressed in the course.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **COURSE** | **Knowledge** | **Scientific Inquiry** | **Ethics and Diversity** | **Communication** | **Professional Development** |
| **PSYC 2010: Intro**  **to Psychology** | 1 | 1 | 1 | 1 | 1 |
| **PSYC 2130:**  **Statistics** |  | 2 |  | 2 |  |
| **PSYC 2140:**  **Research Methods** | 1 | 2 | 2 | 2 | 1 |
| **PSYC 2020:**  **Orientation to Major** | 1 | 1 | 2 | 2 | 2 |
| **Group A Courses** | 2 | 3 | 3 | 3 | 3 |
| **Group B Courses** | 2 | 3 | 3 | 3 | 3 |
| **Group C Courses** | 3 | 3 | 3 | 3 | 3 |
| **Psychology Electives** | 3 | 3 | 3 | 3 | 3 |

1- Introduction, 2 – Supplemented, 3-Advanced

## Measurement

### Outcome-Measure Alignment

1. *Knowledge in Psychology:*

Psychology Print Exposure (PPE) Measure. Extensive data are available on the psychometrics of this measure using undergraduate psychology majors and non- psychology majors at Auburn University. Smith and Barker (2008) published an empirical article on the psychometric properties of the PPE in the *Teaching of Psychology* journal. Based on numerous semesters over the last 9 years, pretest scores were ~ 50%, or roughly at chance in a two-choice format without psychology instruction. After completing psychology courses, students should be better at a

rejecting psychological-sounding, but not "real" psychology terms, with an average score ~70%. A sample real term is “cognitive dissonance” and a bogus term is “latent gratification” from this measure.

### *Scientific Inquiry and Critical Thinking:*

The Psychology Content Measure (PCM) was designed by the Department of Psychology’s Undergraduate Program Committee in 2008. The enlisted the Department of Psychology’s faculty members who teach the psychology core courses in Analytics Behavioral Sciences (PSYC 2130) and Research Methods (PSYC 2140) and asked them to provide exemplar terms to be used for undergraduate assessment. These courses reflect only two required content classes (besides PSYC 2010: Introduction to Psychology) that all psychology majors must take before advancing to upper level courses. Based on the exemplar terms received, they generated multiple choice items for statistics and research methods.

### *Ethical and Social Responsibility in a Diverse World*:

Students are exposed by ethical training through two formative assessment approaches. All students are required to take part in research projects in PSYC 2010, which provide them with the first-hand experience about the importance of adhering ethical standards. These research participation opportunities are also offered by other upper level courses periodically. In addition, students learn various cases pertaining to ethical and social responsibility from courses including PSYC 2140, PSYC 2020, and other upper level courses.

### *Communication*[*3*](#_bookmark2):

To assess students if they interact effectively with others, we rely on the formative assessment approach throughout the undergraduate study. Students are often required to complete oral presentations, and submit written projects in various courses. Because of diverse topics covered by different classes, it is not feasible to provide an integrated summative assessments of these courses.

### *Professional Development:*

An anonymous exit survey was designed for graduating seniors. The aim of the exit survey was to generate an indirect measure of our undergraduate program goals, determine whether students were involved in research and outreach opportunities, and the number of graduating students pursuing post- baccalaureate education (and indirect measure of students prepared to become future scientists and/or practitioners). Because research and/or outreach

opportunities are fundamental to pursue graduate or professional degrees, we wanted to determine whether our students were getting the skills outside of the classroom to prepare them to pursue psychology careers.

### Direct Measures

***Knowledge in Psychology*** The psychology department has a long history of experience with this test, and the test satisfies the academic requirements for standardized test construction. This measure has 100 items. The score can range3 from 0 to 100, with chance performance being 50. Students rarely score above 90 so a score of 80 or above would be considered excellent in this measure.

3 It has been discussed to create a one-credit capstone course when we have additional personnel come on board. The course requires all majors complete a written report of a chosen topic by integrating one course from each of three categories of coursework (Groups A, B, and C).

***Scientific Inquiry and Critical Thinking****:* There are 20 questions on the measure with 4 answer choices per question, and scores can range from 0 (all incorrect responses) to 20 (all correct responses). Questions require students to apply concepts and critically evaluate responses. In addition, graduating seniors provided a subjective assessment of the above two goals: Students respond to questions about whether completing the psychology major helped them with psychological concepts, scientific literacy, and critical thinking skills using a 5-point Likert scale as follows: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree.

***Professional Development****:* A Qualtrics survey was developed where graduating seniors responded questions about professional development using Likert response scales provided to them. Items and response scales are provided in the results section.

***Needs Assessment***: All students receive needs assessment at least once a year to gauge their need. The assessment done during this period of assessment is about their interest to pursue a B. S. in Neuroscience if it was offered by the Department. A Qualtrics survey was developed. Items and response scales are provided in the results section.

***GTA Assessment***. GTAs play a critical role, in addition to faculty, to facilitate student learning. Thus, it is critical to provide a process evaluation assessment to provide developmental feedback about GTA performance in key courses (PSYC 2010, 2130, and 2140). The department initiated this process assessment starting in the mid of Spring semester in 2017. Instructors assessed GTAs as well as provided developmental feedback with the goal of strengthening GTAs’ performance in those key courses. After that, GTAs receive feedback from their advisors and program directors.

### Data Collection

In the mid of Spring semester in 2017, instructors in PSYC 2010, 2013, and 2014 assessed GTAs as well as provided developmental feedback with the goal of strengthening GTAs’ performance in those key courses.

In addition, a needs Assessment survey was conducted in Spring of 2017 to gauge students’ interest to pursue a B. S. in Neuroscience if it was offered by the Department.

Administration of the PPE, PCM, Professional Development, and self-assessment of their psychological concepts, scientific literacy, and critical thinking skills to graduating seniors during Fall of 2016 (n = 14, response rate: 52%), and Spring of

2017 (n = 33, response rate: 45%) occurs as part of graduating survey. We send to all graduating seniors the semester that they were scheduled to graduate.

Completion of the graduating senior survey is voluntary, as such, the response rate is low as we do not have a capstone course that all seniors must take in the curriculum before they graduate. Additionally, students complete the professional development and self-assessment questions during this administration of the survey.

In comparison, we administer PPE and PCM when early psychology majors took PSYC 2020: Orientation to the Psychology Major course during Fall of 2016 (n=100) and Spring of 2017 (n=105). The majority of students are commencing their psychology curriculum (albeit, all students have had an introductory to psychology course and a few advanced students take this course as well depending when they declared psychology as their major). This survey is administered as the last component of the course and is required, hence, the higher response rate.

## Results

### Reporting Results

*Knowledge in Psychology:*

Graduating seniors: There were no statistical differences in scores between semesters (Performance means (M) & standard deviations (SD) were as follows for Fall 2016: M = 74.92. SD = 6.86 and Spring: 2017 M = 72.85, SD = 9.84). Thus, we

present the subsequent data aggregating both semesters for graduating seniors.

Early Psychology Majors: Performance was not statistically different between semesters: Fall 2016: M = 61.6, SD = 8.7 and Spring 2017: M = 65.13, SD =

11.36. Thus, we present the subsequent data aggregating both semesters for early psychology majors.

First, we have matched graduating seniors test results taken during PSYC 2020, and taken before they graduated in 2016-2017. Based on dependent t-test, their test results have significantly increased from M = 63 to M = 74.

Second, we compared test results between graduating seniors and early psychology majors. Senior majors performed significantly better (M = 73.43, SD = 9.07) than early psychology majors (M = 63.4, SD = 10.28).

Furthermore, higher proportions of graduating seniors significantly fall into the proficient and very proficient levels, compared to early psychology majors, as shown in Table below (PPE scores: below 60- Not Proficient, 60 to 69- Somewhat Proficient,70 to 79- Proficient, and 80 and above- Very Proficient).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Not Proficient | Somewhat Proficient | Proficient | Very Proficient |
| Graduating Seniors | 9% | 17% | 54% | 20% |
| Early Psychology Majors | 38% | 32% | 24% | 6% |

### *Scientific Inquiry and Critical Thinking:*

Graduating seniors: There were no statistical differences in scores between semesters (Performance means (M) & standard deviations (SD) were as follows for Fall 2016: M = 15.62. SD = 2.57 and Spring 2017: M = 14.18, SD = 3.70).

Thus, we present the subsequent data aggregating across semesters for graduating seniors.

Early Psychology Majors: Performance was not statistically different between semesters: Fall 2016: M = 13.21, SD =3.29 and Spring 2017: M = 13.51, SD =

3.34. Thus, we present the subsequent data aggregating across semesters for early psychology majors.

Based on mean comparison between graduating seniors and early psychology majors, senior majors performed significantly better (M = 14.59, SD = 3.46) than early psychology majors (M = 13.36, SD = 3.31).

Furthermore, higher proportions of graduating seniors significantly fall into the proficient and very proficient levels, compared to early psychology majors, as shown in Table below (PCM scores: 10 or below- Not Proficient, 11 to 13- Somewhat Proficient, 14 to 16- Proficient and 17 and above- Very Proficient).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Not Proficient | Somewhat Proficient | Proficient | Very Proficient |
| Graduating Seniors | 11% | 22% | 32% | 35% |
| Early Psychology Majors | 19% | 30% | 32% | 19% |

### *Professional Development and Self-Assessment:*

Several questions were used to assess graduating seniors’ professional development process including research and outreach participations, study progress, and post- baccalaureate plan.

**Research and outreach participations.** Students responded to the following statement with items and response scale represented in the Table. To what extent have you participated in the following opportunities in the Department of Psychology…

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Statement | Never | Rarely | Sometimes | Often | All the  Time |
| Volunteered in a Research Lab | 32% | 11% | 21% | 21% | 15% |
| Received Credit for  Lab Experience | 57% | 0% | 19% | 17% | 6% |
| Volunteered in the Community | 23% | 23% | 26% | 13% | 15% |
| Received Credit for Community Outreach | 70% | 6% | 13% | 4% | 7% |

**Study progress:** Graduating seniors provided their subjective assessment about attaining the learning goals of the Undergraduate Program in Psychology

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Statement | Strongly Disagree | Disagree | Neither Agree or Disagree | Agree | Strongly Agree |
| The psychology major prepare them well to accomplish their career plans**.** | 0% | 7% | 30% | 39% | 24% |
| Completing the psychology major helped them to recognize basic psychological concepts. | 0% | 0% | 2% | 41% | 57% |
| Completing the psychology major increased their scientific literacy. | 0% | 6% | 15% | 44% | 35% |
| Completing the psychology major increased their critical thinking skills. | 0% | 2% | 11% | 50% | 37% |

**Post- baccalaureate plan**: Graduating seniors provided their Post- baccalaureate plan

|  |  |
| --- | --- |
| Plans | Percentage endorsing option\* |
| Military Service | 4.3% |
| Graduate School in Psychology doctorate (PhD, PsyD) | 6.5% |
| Professional School (e.g., MD, JD, DDS, PharmD) | 6.5% |
| Employment in a psychology-related field | 15.2% |

|  |  |
| --- | --- |
| Graduate School in Psychology (Masters) | 17.4% |
| Take time off from school and work | 10.9% |
| Employment in a field unrelated to psychology | 21.7% |
| Other | 17.4% |

\*Students could endorse more than 1 item therefore numbers do not equal 100%.

***Needs Assessment***: Based on students’ frequent informal inquiry about neuroscience, the department conducted a needs assessment to all majors in Spring of 2017. The survey is to gauge students’ interest to pursue a B. S. in Neuroscience if it was offered by the Department.

|  |  |  |
| --- | --- | --- |
| Response Category | % | Count |
| Extremely interested | 33.78% | 25 |
| Very interested | 12.16% | 9 |
| Moderately interested | 24.32% | 18 |
| Slightly interested | 9.46% | 7 |
| Not interested | 20.27% | 15 |
| Total Responses |  | 74 |

***GTA Assessment***. Advisors and Graduate Program Directors received reports of 8 GTAs’ performance assessed by instructors in PSYC 2010, 2013, and 2014.

These tasks include: respond to emails in a timely manner, be available to students, lectures/labs are well-prepared, grading is fair and consistent, and come to class on time. Among GTAs, one received substantive feedback from the instructor, and the student’s advisor and graduate program director.

### Interpreting Results

[Please provide an interpretation of the results aligned with the student learning outcomes. The interpretation should reflect consideration of factors (e.g., capabilities of a particular cohort, innovative curricular change) that may have affected the results. ]

### Communicating Results

[Please provide a very brief narrative describing with whom the results are shared (e.g., all program faculty).]

## Use of Results

### Purposeful Reflection and Action Plan

The response rate is high for the PSYC 2020 course because the assessment is integrated into the course; however, response rates are lower for graduating seniors.

**Action plan:** We will collect assessment data earlier in the semester for graduating seniors given that the lower response rate might be due to the end of the semester workload and offer incentives. In addition, we will explore offering incentives (e.g., water bottle, mug, or jump drive with department log) for graduate seniors to complete the survey.

The PPE, PCM, and self-assessment indicates that the department is doing fairly

well with our student learning goals, and we have room for improvement in all these areas.

**Action plan:** We will collect assessment data at the end of each semester across all courses, as part of course evaluation materials. Based on these data, we shall further discuss and develop strategies to address learning outcomes based on the process assessment approach.

Although students use basic statistical and research methods throughout their psychology curriculum, it would be beneficial to demonstrate additional measures of scientific literacy that reflect current performance of students. Oftentimes, there is a lag between taking statistics and methods courses (usually in sophomore year) and the administration of the exit survey to graduating seniors. We have implemented a curriculum for the psychology major that provides more structure to the curriculum by setting basic courses as a requirement for advanced courses, and students select from course options from different content in applied and basic science to ensure that they are getting a well-rounded sample of psychology courses to improve scientific literacy.

**Action plan**s: Generating and validating scientific literacy, inquiry, ethics, and critical thinking items from upper level basic and applied courses in the curriculum.

Conduct additional item analysis based on item difficulty and item discrimination indexes to reduce Psychology Print Exposure (PPE) Measure items. The preliminary analysis of item difficulty based on data from Fall 2015 to Spring 2016, there are 33 items that are too easy (i.e., 75% of them answered a question correctly), one time that is too difficult (i.e., 25% of them answered a question correctly) for both PSYC 2020 and graduating seniors. Finally, based on item discrimination indexes, 11 items fail to distinguish both groups. Should these results be validated further, about half of PPE items can be dropped from future data collection.

The number of students pursuing post-baccalaureate degrees is on par with the average for national universities.

**Action plan**s: The department will need to increase the research and/or outreach opportunities (e.g., capstone project as one of many options) so that are students can be competitive for future work and graduate studies. In addition, this assessment shall be implemented both formally (via the annual survey to all majors) and informally (via advising) for all majors to monitor their involvements.

## Summary of Overall Action Plans

* Increase online course offerings and increase variety of courses offered each semester to allow students to engage in well-rounded education.
* Assess feasibility of creating certificates for specific topics that are studied by various units. These certificates would provide
* Provide more opportunities for students to be involved in outreach and research opportunities. We are looking into the feasibility of making these courses an integral part of the curriculum rather than an elective only.
* Increase opportunities for senior undergraduate students to assist in student

learning by becoming Learning Assistants to core Psychology courses. We have piloted this program in 2016-2017 with great success. An instructor of PSYC 2010 led 6 undergraduate learning assistants. All of them demonstrated superior performance and enjoyed the opportunities working with other students. The process of recruiting and training learning assistants have been documented and distributed to faculty, instructors on records, lecturers, and adjunct professors in Spring of 2017.

* Revamp and refinement of two core psychology courses: PSYC 2130 and PSYC 2140 to provide opportunities to improve student learning outcomes and provide consistent experience across instructors.
* Improve Assessment Measures
  + Refine scientific inquiry PCM measure to better capture learning across majors.
  + Reduce PPE items to reduce burdens of respondents.
  + Provide incentives to increase response rates for graduating senior Psychology majors.
* Provide better learning and professional opportunities. Two ABM (Accelerated Bachelors Masters) programs will begin in Fall 2017. Students will have opportunity to earn B.A. in psychology and M.S. degree in either Applied Behavior Analysis or Industrial/Organizational Psychology in 5 years allowing students opportunity to acquire applied positions. These fields have excellent job prospects for master’s level students and are in high demand in the United States.
* Institutionalize GTA assessments before the mid of each semester to improve learning process.
* Explore the feasibility to have a one-credit capstone course required by all majors. The course requires students during their junior or senior years to complete a written report of a chosen topic by integrating one course from each of three categories of coursework (Groups A, B, and C).
* Strengthen communication among faculty, lecturers, GTAs, and students.
  + To ensure continuity of providing timely advising, the department has created a permanent undergraduate program director position in 2017. The UG program director, Dr. Robert Gordon will assume the position starting from Fall of 2017.
  + Faculty/lecturers/GTAs input regarding major revisions to undergraduate policies and curriculum as well as assessment measures are communicated either electronically via to department chair to faculty or face-to-face during monthly faculty meetings.
  + Undergraduate Students receive communications via email, are queried during anonymous surveys, and face-to-face meetings (town halls and Psi Chi-Honor Society meetings)
  + Work closely with peer advisors. Office of peer advising will be moved to the main office so that advising work can be streamlined and monitored.
  + Explore the feasibility to distribute case-in-points to inform best practices to all majors starting in 2017-2018.
  + Produce video podcasts about faculty’s research to encourage students to

engage in research and outreach activities.