Annual Assessment Report



Part I. General Information

Program(s) Discussed: Psychological Science

Current Semester: Spring 2018

Dates of Assessment Meetings – Part of several monthly department meetings throughout the 2016-2017 academic year were devoted to assessment.

Participants in Assessment Meeting(s): The entire Department: Sheri Young, Helen Murphy, Abdul Imam, Denise BenPorath, John Yost, Angela Jones, Tracy Masterson, Elizabeth Swenson, Anthony Tarascavage (Fall 2017), Beth Martin

(We often use part of our monthly dept. meetings to discuss ongoing assessment issues)

All Annual Assessment Reports are available to the appropriate Associate Dean, Dean, and the Provost, as well as to other administrators for institutional effectiveness and accreditation purposes. Please indicate the degree to which your program would like this information more widely shared.

On-Campus Users	Off-Campus Users
X□ Freely available	X□ Freely available
□ Available upon request	Available upon request
☐ Unavailable	☐ Unavailable

Part II. Assessment Process

Prompt: In one or two paragraphs, describe your assessment process. Did you gather data on all of your program's student learning goals? If not, which student learning goals did you measure in this assessment cycle? What tools did you use to attempt to measure student learning? Where and how were they administered? Who scored them?

There are 8 student learning goals for the program and we have an ongoing assessment of all 8, however, we typically discuss 1-2 in depth every year. This year we focused primarily on our learning goals number 1 (Knowledge base in the core areas of psychological science) and number 6 (Ethics and values of the discipline).

This year for the assessment process we looked specifically at three main issues: s: 1) a direct measure - MFT scores, 2) goal 1 (knowledge base in core areas of psychological science, and PS 101 as an ethics and social justice course.

The MFT is a standardized comprehensive written exam that is divided broadly into four sections: 1) Learning & Cognition, language, Memory, and Thinking, 2)

Perception, Sensory, Physiology, Comparative and Ethology, 3) Clinical, Abnormal, and Personality, and 4) Developmental and Social. All majors are required to complete the MFT with a passing score in the final semester of their senior year. The MFT was given in late January all senior majors graduating in May or August and in the previous fall to students graduating in December/January. The exam is proctored by a faculty member and then is sent to Educational Testing Service to be scored. When we receive the exam result, they are discussed at a department meeting and students are sent a letter and e-mail inviting them to meet with the Department Chair to discuss their results.

One of two courses that all students in the Psychology major must complete is PS 301/PS 301Lab (Experimental Design and Analysis). The department (primarily those faculty teaching PS 301) created a 25 item exam to assess student knowledge and student learning regarding the fundamental topics in research design and analysis. Three faculty members went through several iterations in the development process until they felt confident they had covered most of the critical concepts. The exam was intentionally kept to 25 items so that it would not impede teaching time and would hopefully engage the students. The test was given to all PS 301 students (3 sections) in the Fall 2017 semester as both a pretest (during the first week of the semester) and also a post-test (administered during the last week of the semester. The decision was made that the students would not be graded on this assessment, and it was hoped that they would try to do well.

As Social Justice is foundational to the field of Psychology, our work around the learning goal of ethics and value in the discipline focused on recreating sections of the Introductory Psychology (PS 101) that meet the requirements for Issues in Social Justice (University Core).

Part III. Findings

Prompt: Along with this report, please submit the data charts the program used during the assessment meeting. Describe, in words, what your program learned about student learning during this assessment cycle. What were your strengths? In what ways did students fail to meet the goals you set for them?

MFT: The department has kept a record of the student's performance on the MFT since 1992 so we can look at any trends that have developed. Data shows the number of MFTs taken, and the average national percentile rank for the JCU students. Our department requires students to score a minimum of ½ sd below the national mean to pass the exam.

Last year the department faculty took a look at the test itself and see if the questions on the exam were a good match with what we are currently teaching in

our courses. We gained permission from ETS to meet as a department and look at the items on the test (no notetaking was allowed). All full-time faculty members except one was present and we went item-by-item through the 200 item test. All but a couple of items were accounted for in either introductory psychology or another commonly taken class. The faculty evaluated the questions carefully and we decided that the test was fine. We then discussed other possible reasons for the declining performance: students of lower caliber, students not preparing for the exam, classes poorly taught. While we had various other ideas, the general consensus was that we would approach the problem of declining scores in a systematic way. This year we decided to try changing the student test preparation.

In last year's report we indicated that we would create and then provide practice exams in the beginning of the Fall of their senior year and then also at the end of the Fall semester/beginning of the Spring semester. We hoped that their scores on the practice tests would encourage them to prepare for the actual exam. Data was to be reported this year.

It took us a bit of time to create practice exams. They were not completed in time for preparation for the Spring 2017 exam in early February. They were, however, ready for the Fall 2017 exam. There were 4 practice tests of 25 questions each, for each of the 4 MFT sections, plus some additional questions.

Student scores on the MFT: In the Spring 2016 only 62% of the students passed the MFT on the first try. In the Spring 2017 semester 81% passed the MFT on the first try. This is a remarkable improvement. Note, this was also without the practice tests. In the Fall 2017 semester, we had only 4 students graduating who took the MFT. Of those 4 students, 3 used the practice tests and all 3 passed. One student did not use the practice tests and that student did not pass. Note, we cannot conclude that the practice tests were causal in the success of the students, but it is encouraging to note that the test were used by many students, and that those students did well on the assessment.

PS 301 Pre and Post Tests: All students in all sections took the pre and post tests. The data indicated the following:

	Pre-test	Post-test
Scores in the 90's % correct	0% of students	23% of students
Scores in the 80's % correct	5% of students	25% of students
Scores in the 70's % correct	16% of students	18% of students
Scores in the 60's % correct	26% of students	17% of students
Scores below 50% correct	53% of students	17% of students

The scores above indicate that there is tremendous learning in the course. We are pleased to see this trend. We were able to identify about 6 items that few students got correct. At this point we cannot be sure if the test item was a poor item, or if the concept was simply not well understood by the students. Because we don't want to change the assessment instrument after one semester, we will begin by trying to spend a bit more time on those specific concepts in the class, and then reassess the issue again after the spring semester.

PS 101: (FROM LAST YEAR'S REPORT: With the new integrated core curriculum there is a need for departments to develop courses around the issues of social justice. There are specific requirements that each course qualifying for a Social Justice designation must meet. Throughout several discussions on this topic it became quite clear that Introductory Psychology would be an excellent fit for such a course. With that in mind we started the process of developing such a course. At this time the syllabus and course assignments have been developed but some of the paperwork is still being completed. The course will be submitted for approval by the end of the Spring 2016 semester. We feel that this is a huge step forward for PS 101 which has not had a major make-over in many years. Note, that not all sections of PS 101 will adopt this format at the current time. We will assess both faculty and student evaluations of the course and then make decisions going forward.

NEW 2018: The new course was approved and several sections were offered for the first time in the Fall 2017 semester. At this time assessment and adjustments are on-going. More complete coverage of this topic will be reported in next years' report.

In addition, as part of the department's commitment to ethics and social justice, each Psychology major is required to complete the CITI training Basic course (Collaborative Institutional Training Initiative) as part of the PS 301 class. The Collaborative Institutional Training Initiative (CITI Program) is an online program that provides a high quality, peer-reviewed, web-based educational course in research, ethics, regulatory oversight, responsible conduct of research, research administration, and other similar topics.

Part IV. Planned Changes to the Assessment System

Prompt: What changes, if any, do you need to make to your assessment system? (Questions to consider include: 1) Do your measures and processes provide useful data with a reasonable amount of effort? and 2) Are your measures reliable, valid, and sufficient?) On which student learning goals do you plan to focus your attention during the next assessment cycle? Do you need to implement additional formative assessment tools to better understand some of your findings? If so, describe those here.

We have no planned changed to the assessment system at this time. We will continue to monitor the practice tests for the MFAT. We will continue to collect data on the PS 301 pre and post-tests, and we will continue developing assessment tools for the new Social Justice version of Intro Psychology.

Part V. Planned Changes to the Program in Response to Data

Prompt: What changes, if any, do you need to make to your program in response to what you now know about student learning? (Possibilities include changes to learning goals, pedagogy, assignments in particular classes, activities, and curricular requirements and/or structure.) What is your anticipated timeline for both implementation and assessment of the planned changes?

We will continue to monitor the new Intro Psychology social justice class. Assessments will be developed and data collected, at which time planned changes will be adapted if deemed necessary. We will focus a bit more time on those concepts in PS 301 which students appear to struggle with. If there is no change in the test performance this semester, then consideration will be given to reevaluating the actual test items for clarity. Finally, the faculty will collect data on the number of students who do/do not complete the MFT practice tests and determine if they are an aid in student preparation. Planned changes will occur at that time.

JCU Learning outcomes

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills
- 9. Understand the religious dimensions of human experience

PS 101 Introduction to Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 150 Violence and Aggression

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 175 Life Span Development

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 190 Preparing for Graduate School

This course meets the following university learning outcomes:

- 3. Apply creative and innovative thinking
- 8. Employ leadership and collaborative skills

PS 226 Drugs and Behavior

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas

PS 241 Social Psychology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 261 Child Development

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds;
- 2. Develop habits of critical analysis and aesthetic appreciation
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 9. Understand the religious dimensions of human experience

PS 262 Adolescent Development

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 9. Understand the religious dimensions of human experience

PS 295 Introduction to Special Topics

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 297 Introduction to Cognitive Science

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking

JCU Dept. of Psychological Science Courses Mapped to JCU Learning 7. Apply a framework for examining ethical dilemmas

PS 299 Research Experience in Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 301/L Experimental Design/Analysis

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 310 Sport Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 318/L Sensation and Perception

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression

JCU Dept. of Psychological Science Courses Mapped to JCU Learning 7. Apply a framework for examining ethical dilemmas

PS 326 Psychobiology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 332/L Learning and Behavior

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 342 Psychology of Prejudice

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 351 Theories of Personality

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 359 Industrial/Organizational Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 362 Health Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 365 Adulthood and Aging

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 7. Understand and promote social justice
- 8. Apply a framework for examining ethical dilemmas
- 9. Understand the religious dimensions of human experience

PS 370 Forensic Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 375 Clinical Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 381 Eating Disorders

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas

PS 380/L Human Memory and Cognition

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 386 Mind, Brain and Behavior

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 395 Special Topics

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 401 Advanced Research Methods in Psychology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 407 Psychology of Autism

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 415 Multicultural Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 421 History and Systems of Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills
- 9. Understand the religious dimensions of human experience

PS 426 Psychopharmacology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas

PS 435 Tests and Measurements

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 442 Lab Management in Psychological Science

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 455 Child and Adolescent Psychopathology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 457 Psychopathology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas

PS 459 Performance Evaluation and Goal Setting

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 462 Counseling Theory and Practice

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 5. Act competently in a global and diverse world
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 470 Children and Families in the Legal System

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 471 Seminar in Ethics of Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 2. Develop habits of critical analysis and aesthetic appreciation
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 476 Senior Seminar in Child and Family Studies

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 6. Understand and promote social justice
- 7. Apply a framework for examining ethical dilemmas

PS 477 Senior Seminar in Mental Health Services

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 478 Senior Seminar in Eating Disorders

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 479 Senior Seminar in Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 480-481 Practicum in Industrial/Organizational Psychology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 482-483 Practicum in Mental Health Services

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 484-485 Practicum in General Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 486-487 Practicum in Child and Family Studies

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 488-489 Practicum: The Hospitalized Child

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 494 Internship/Seminar in Forensic Science

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 5. Act competently in a global and diverse world
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 495 Advanced Special Topics in Psychology

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 496 Readings in Psychology

JCU Dept. of Psychological Science Courses Mapped to JCU Learning This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 497N Advanced Research in Neuroscience

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas

PS 498 Practicum in Research Methods

This course meets the following university learning outcomes:

- 1. Demonstrate an integrative knowledge of human and natural worlds
- 3. Apply creative and innovative thinking
- 7. Apply a framework for examining ethical dilemmas
- 8. Employ leadership and collaborative skills

PS 499 Individual Research Project in Psychology

- 1. Demonstrate an integrative knowledge of human and natural worlds
- Apply creative and innovative thinking
- 4. Communicate skillfully in multiple forms of expression
- 7. Apply a framework for examining ethical dilemmas