Doctor of Philosophy (PhD) Degree in the field of Psychology and a Major Concentration in Cognitive and Affective Neuroscience

Program Learning Outcomes for the PhD Degree in the field of Psychology and a Major Concentration in Cognitive and Affective Neuroscience

Upon completing the PhD degree in the field of Psychology and a major concentration in Cognitive and Affective Neuroscience, students will be able to:

1. Apply theoretical and methodological tools necessary to carry out independent research in cognitive neuroscience.
2. Write an independent and original thesis that is of sufficient quality to merit publication in a top cognitive psychology or cognitive neuroscience journal.
3. Conduct a focused review of the literature and develop a research design to carry out independent research.
4. Defend their research design and data analysis choices by presenting their paper in a seminar environment.
5. Communicate their research effectively by writing clearly, concisely and cogently.
6. Read critically and assess research manuscripts related to their field of study and in other fields.

Requirements for the MA and PhD Degrees in the field of Psychology

MA Degree Program

The MA degree is a thesis master's degree. For general university requirements, please see Thesis Master's Degrees (https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-thesis-masters-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see All Graduate Students (https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). Although students are not normally admitted to study for an MA in Psychology, graduate students may earn the MA degree after obtaining approval of their candidacy for the PhD. For general university requirements for PhD degrees, please see Doctoral Degrees (https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/). For both MA and PhD degrees, students must complete a research thesis, including a public oral defense. Required coursework is determined by the student’s major concentration. Students must complete an admission-to-candidacy procedure to establish their expertise in their chosen major concentration. Competence in a foreign language is not required.

PhD Degree Program

For general university requirements, please see Doctoral Degrees (https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see All Graduate Students (https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). In addition, students pursuing the PhD degree in the field of Psychology must:

• Complete all coursework with a minimum grade of B- (2.67 grade points) in each required course.
• Complete all of the course requirements in their major concentration.
• Successfully complete and present the first-year project in May of the first year.
• Successfully complete and present the second-year project in May of the second year.
• Write and defend a thesis. The thesis committee must be in the area of Cognitive and Affective Neuroscience and be overseen by a Psychology faculty member affiliated with the Cognitive and Affective Neuroscience Major Concentration.

Students who have not previously completed a master's degree in Psychology or a related field, must successfully defend a master's thesis and earn the MA degree in Psychology. Students who come to Rice with a master's degree in a related field can be exempted from this requirement.

Summary

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tr>
<td></td>
<td>Total Credit Hours Required for the MA Degree in the field of Psychology</td>
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<td>Total Credit Hours Required for the PhD Degree in the field of Psychology and a Major Concentration in Cognitive and Affective Neuroscience</td>
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Degree Requirements for the PhD Degree in the field of Psychology and a Major Concentration in Cognitive and Affective Neuroscience

Core Requirements

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<th>Credit Hours</th>
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<tr>
<td>PSYC 502</td>
<td>ADVANCED PSYCHOLOGICAL STATISTICS I</td>
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<td>STAT 509</td>
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<tr>
<td>PSYC 503</td>
<td>ADVANCED PSYCHOLOGICAL STATISTICS II</td>
<td>3</td>
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<td>STAT 510</td>
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<td>PSYC 520</td>
<td>FOUNDATIONS OF COGNITIVE PSYCHOLOGY</td>
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<tr>
<td>NEUR 508</td>
<td>INTRODUCTION TO COGNITIVE NEUROSCIENCE</td>
<td>3</td>
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### Custom Core Courses
Select 1 course from the following:
- PSYC 529: COGNITIVE RESEARCH SEMINAR
- PSYC 532: HEALTH RESEARCH SEMINAR

### Neuroscience Core Courses
Select 2 courses from the following:
- PSYC 575 / NEUR 501: ADVANCED COGNITIVE NEUROSCIENCE: ATTENTION AND PERCEPTION
- PSYC 576 / NEUR 502: ADVANCED COGNITIVE NEUROSCIENCE: HIGHER MENTAL FUNCTIONS
- PSYC 586: SOCIAL AND AFFECTIVE NEUROSCIENCE

### Cognitive Core Courses
Select 2 courses from the following:
- PSYC 524: MEMORY
- PSYC 525: PSYCHOLINGUISTICS
- PSYC 527: REASONING, DECISION MAKING, PROBLEM SOLVING
- PSYC 581: VISION SCIENCE

### Affective/Health Track Core Courses
Select 2 courses from the following:
- PSYC 546: PSYCHONEUROIMMUNOLOGY
- PSYC 547: FOUNDATIONS OF HEALTH PSYCHOLOGY
- PSYC 550: FOUNDATIONS OF SOCIAL PSYCHOLOGY

### Elective Requirements
Select 2 courses from the following:
- BIOE 592: SENSORY NEUROENGINEERING
- NEUR 430 / ELEC 484: FUNDAMENTALS OF HUMAN NEUROIMAGING
- NEUR 505: OPTICAL IMAGING
- PSYC 511: HISTORY AND SYSTEMS OF PSYCHOLOGY
- PSYC 522: INFORMATION PROCESSING AND ATTENTION
- PSYC 524: MEMORY
- PSYC 525: PSYCHOLINGUISTICS
- PSYC 527: REASONING, DECISION MAKING, PROBLEM SOLVING
- PSYC 543: COMPUTATIONAL MODELING OF COGNITIVE PROCESSES
- PSYC 546: PSYCHONEUROIMMUNOLOGY
- PSYC 550: FOUNDATIONS OF SOCIAL PSYCHOLOGY
- PSYC 552: EMOTION REGULATION
- PSYC 575 / NEUR 501: ADVANCED COGNITIVE NEUROSCIENCE: ATTENTION AND PERCEPTION
- PSYC 576 / NEUR 502: ADVANCED COGNITIVE NEUROSCIENCE: HIGHER MENTAL FUNCTIONS
- PSYC 578: COGNITIVE NEUROPSYCHOLOGY: THEORIES AND METHODS
- PSYC 580: DEVELOPMENTAL COGNITIVE NEUROSCIENCE
- PSYC 581: VISION SCIENCE
- PSYC 586: SOCIAL AND AFFECTIVE NEUROSCIENCE

### Additional Coursework as Approved by Department

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<td>PSYC 590</td>
<td>ADVANCED TOPICS IN NEUROSCIENCE</td>
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<td>PSYC 560</td>
<td>ADVANCED TOPICS IN COGNITIVE PSYCHOLOGY</td>
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<td>PSYC 620</td>
<td>TOPICS IN MEMORY</td>
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<td>PSYC 621</td>
<td>TOPICS IN PSYCHOLINGUISTICS</td>
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<td>PSYC 622</td>
<td>SEMINAR IN GENES AND COGNITION</td>
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<tr>
<td>PSYC 681</td>
<td>PERCEPTUAL ORGANIZATION</td>
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### First-Year Project

### Second-Year Project

### Thesis Requirement
Completion and public defense of a thesis

### Policies for the PhD Degree in the field of Psychology

#### Department of Psychological Sciences Graduate Program Handbook
The General Announcements (GA) is the official Rice curriculum. As an additional resource for students, the department of Psychological Sciences publishes a graduate program handbook, which can be found here: https://gradhandbooks.rice.edu/2019_20/Psychology_Graduate_Handbook.pdf

### Additional Information
For additional information, please see the Psychological Sciences website: https://psychology.rice.edu/

### Opportunities for the PhD Degree in the field of Psychology

#### Additional Information
For additional information, please see the Psychological Sciences website: https://psychology.rice.edu/