MINOR IN NEUROSCIENCE

Program Learning Outcomes for the Minor in Neuroscience

Upon completing the minor in Neuroscience, students will be able to:

1. Demonstrate knowledge of the key issues, questions, and perspectives that define contemporary neuroscience.
2. Understand neuroscience as an interdisciplinary field and demonstrate the ability to draw on, and synthesize, key findings and concepts in the sciences, humanities and/or engineering in both the evaluation of existing theories and in the formulation and solution of new problems in neuroscience.

Requirements for the Minor in Neuroscience

Students pursuing a minor in Neuroscience must complete:

- A minimum of 6 courses (18 credit hours) to satisfy minor requirements.
- A minimum of 3 courses (9 credit hours) at the 300-level or above.
- No more than 2 courses (6 credit hours) from study abroad or transfer credits. For additional program guidelines regarding transfer credit, see the Policies tab.
- At least 2 of the electives should be completed for the minor only (not shared or double-counted with another major).
- The requirements for 1 Area of Specialization (see list below). The Areas of Specialization for the minor in Neuroscience are:
  - Humanities and Social Science specialization (p. 1): represents cognitive and behavioral approaches to neuroscience.
  - Natural Sciences and Engineering specialization (p. 1): represents genetics, cellular/molecular, bioengineering, computation, and systems-level investigations.

The courses listed below satisfy the requirements for this minor. In certain instances, courses not on this official list may be substituted upon approval of the minor’s academic advisor (or official certifier). Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Total Credit Hours Required for the Interdisciplinary Minor in Neuroscience</td>
<td>18</td>
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Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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</table>
| Core Requirements
  NEUR 380 / PSYC 380 / BIOC 380 | FUNDAMENTAL NEUROSCIENCE SYSTEMS | 3            |
| Area of Specialization
  Select 1 from the following (see areas of specialization below): | 3            |

Humanities and Social Science Track

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
| Required Course
  NEUR 362 / PSYC 362 | COGNITIVE NEUROSCIENCE: EXPLORING THE LIVING BRAIN | 3            |
| Elective Requirements
  Select at least 3 courses from the Humanities and Social Science specialization electives listed below | 9            |
| Select at least 1 course (a minimum of 3 credit hours) from the Natural Science and Engineering specialization electives listed below (to provide breadth in the field of Neuroscience) | 3            |

Total Credit Hours

Footnotes and Additional Information

1 At least 2 of the electives should be completed for the minor only (not shared or double-counted with another major).
2 NEUR 385/BIOC 385 may be used to fulfill this requirement.
3 No more than 3 credits for research (NEUR 310 and/or NEUR 401/NEUR 402/NEUR 412) may be used to satisfy elective requirements for this specialization. Additionally, the entire course sequence NEUR 401/NEUR 402/NEUR 412 must be completed in order to apply this coursework toward the Neuroscience minor requirements.

Area of Specialization: Natural Sciences and Engineering

Students must complete 5 courses (15 credit hours) as listed below to satisfy the requirements for the Natural Sciences and Engineering area of specialization.

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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</table>
| Required Course
  NEUR 385 / BIOC 385 | FUNDAMENTALS OF CELLULAR AND MOLECULAR NEUROSCIENCE | 3            |
| Elective Requirements
  Select at least 3 courses from the Natural Science and Engineering specialization electives listed below | 9            |
| Select at least 1 course (a minimum of 3 credit hours) from the Humanities and Social Science specialization electives listed below (to provide breadth in the field of Neuroscience) | 3            |

Total Credit Hours

Footnotes and Additional Information

1 At least 2 of the electives should be completed for the minor only (not shared or double-counted with another major).
2. No more than 3 credit hours for research (NEUR 310 and/or NEUR 401/NEUR 402/NEUR 412) may be used to satisfy elective requirements for this specialization. Additionally, the entire course sequence NEUR 401/NEUR 402/NEUR 412 must be completed in order to apply this coursework toward the Neuroscience minor requirements.

3. NEUR 362/PSYC 362 may be used to fulfill this requirement.

### Electives: Humanities and Social Science Specialization

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>LING 411 / ANTH 411</td>
<td>NEUROLINGUISTICS</td>
<td>3</td>
</tr>
<tr>
<td>NEUR 301</td>
<td>ADVANCED COGNITIVE NEUROSCIENCE: ATTENTION AND PERCEPTION</td>
<td>3</td>
</tr>
<tr>
<td>NEUR 302</td>
<td>ADVANCED COGNITIVE NEUROSCIENCE: HIGHER MENTAL FUNCTIONS</td>
<td>3</td>
</tr>
<tr>
<td>NEUR 364</td>
<td>COGNITIVE NEUROSCIENCE LAB</td>
<td>1</td>
</tr>
<tr>
<td>PHIL 103</td>
<td>PHILOSOPHICAL ASPECTS OF COGNITIVE SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 303</td>
<td>THEORY OF KNOWLEDGE</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 312</td>
<td>PHILOSOPHY OF MIND</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 358</td>
<td>PHILOSOPHY OF NEUROSCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 359</td>
<td>ANIMAL MINDS</td>
<td>3</td>
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<tr>
<td>PSYC 375</td>
<td>NEUROPYSCHOLOGY OF LANGUAGE AND MEMORY</td>
<td>3</td>
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<tr>
<td>PSYC 432</td>
<td>BRAIN AND BEHAVIOR</td>
<td>3</td>
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### Footnotes and Additional Information

1. Course is taught at UT-Health Science Center.

### Policies for the Minor in Neuroscience

#### Program Restrictions and Exclusions

Students pursuing minor in Neuroscience should be aware of the following program restriction:

- As noted in Majors, Minors, and Certificates (ga.rice.edu/undergraduate-students/academic-opportunities/majors-minors-certificates), i.) students may declare their intent to pursue a minor only after they have first declared a major, and ii.) students may not major and minor in the same subject.

#### Transfer Credit

For Rice University’s policy regarding transfer credit, see Transfer Credit (ga.rice.edu/undergraduate-students/academic-policies-procedures/transfer-credit). Some departments and programs have additional restrictions on transfer credit. The Office of Academic Advising maintains the university’s official list of transfer credit advisors on their website: http://oaa.rice.edu. Students are encouraged to meet with their academic program’s transfer credit advisor when considering transfer credit possibilities.

#### Program Transfer Credit Guidelines

Students pursuing the minor in Neuroscience should be aware of the following program-specific transfer credit guidelines:

- No more than 2 courses (6 credit hours) of transfer credit from U.S. or international universities of similar standing as Rice may apply towards the minor.
- Requests for transfer credit will be considered by the program director (and/or the program’s official transfer credit advisor) on an individual case-by-case basis.

For additional information, please see the Neuroscience website: http://neuroscience.rice.edu/.

### Opportunities for the Minor in Neuroscience

#### Academic Honors

The university recognizes academic excellence achieved over an undergraduate’s academic history at Rice. For information on university honors, please see Latin Honors (ga.rice.edu/undergraduate-students/honors-distinctions/university) (summa cum laude, magna cum laude, and cum laude) and Distinction in Research and Creative Work (ga.rice.edu/undergraduate-students/honors-distinctions/university). Some departments have department-specific Honors awards or designations.

#### Research in Neuroscience

Research in highly encouraged for all neuroscience minors, and may opportunities are available for independent research at Rice and other institutions of the Texas Medical Center. Students can receive course...
credit for independent research through the courses NEUR 310 and NEUR 401, NEUR 402, and NEUR 412. There is a 3 credit hour limit for applying research courses to the NEUR minor degree requirements.

For additional information, please see the Neuroscience website: [http://neuroscience.rice.edu/](http://neuroscience.rice.edu/).