# COGNITIVE SCIENCE MAJOR: PERCEPTION TRACK

1. Foundation Requirement in Cognitive Science (185:201; 4cr)
2. Logical and Statistical Reasoning (One Course from Each Column)

<table>
<thead>
<tr>
<th>Computational/Logical Reasoning</th>
<th>Statistical Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduction to Logic (730:201; 3cr)</td>
<td>• Methods in Cognitive Science (185:320; 3cr)</td>
</tr>
<tr>
<td>• Introduction to Logic (730:202; 4cr)</td>
<td>• Discrete Structures II (198: 206; 4cr)</td>
</tr>
<tr>
<td>• Computing for Math and the Sciences ((198:107; 3cr)</td>
<td>• Calculus I (640:135; 4cr) or Honors (640:191; 4cr)</td>
</tr>
<tr>
<td>• Introduction to Discrete Structures I (198:205; 4cr)</td>
<td>• Calculus II (640:136; 4cr) or Honors (640:192; 4cr)</td>
</tr>
<tr>
<td>• Mathematical Logic (640:461; 3cr)</td>
<td>• Calculus I for Mathematical and Physical (640:151; 4cr)</td>
</tr>
<tr>
<td>• Introduction to Mathematical Reasoning (640:300; 3cr)</td>
<td>• Calculus I for Mathematical and Physical (640:152; 4cr)</td>
</tr>
</tbody>
</table>

3. Distributional requirements (One Course from Three Columns)

<table>
<thead>
<tr>
<th>Cognitive Neuroscience</th>
<th>Decision Making</th>
<th>Language</th>
<th>Minds, Machines, &amp; Computation</th>
<th>Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Brain, Mind and Behavior (119:195; 3cr)</td>
<td>• Cognition and Decision Making (185:301; 4cr)</td>
<td>• Language and Cognition (185: 410; 4cr)</td>
<td>• The Concept of ‘Concepts’ in Cognitive Science (185: 310; 3cr)</td>
<td>• Design and Analysis of Computer Algorithms (198:344; 4cr)</td>
</tr>
<tr>
<td>• Fundamentals of Neurobiology (146:245; 3cr; for CBN majors)</td>
<td>• Reasoning, Problem Solving, and Decision Making (830:408 or 409; 3cr)</td>
<td>• Introduction to Linguistic Theory (615:201; 3cr)</td>
<td>• Introduction to Computer Science (198:111; 4cr) or</td>
<td>• Sensation &amp; Perception (830:301; 3cr)</td>
</tr>
<tr>
<td>• Essentials of Cell Biology &amp; Neuroscience (146:295; 3cr)</td>
<td></td>
<td>• Philosophy of Language (730:210; 3cr)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Data Structures (198:112, 4cr)</td>
<td></td>
<td>• Psychology of Language (830:351; 3cr)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physiological Psychology (830:313; 3cr)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Capstone Course (One Course from the Following)

| Advanced Topics in Cognitive Science (185:411; 4cr) | Research in Cognitive Science (185:495; 3cr) |

Revised 6/2/17
## COGNITIVE SCIENCE MAJOR: PERCEPTION TRACK

### 5. Electives (Three Courses from the Following)
- Visual Intelligence (185:420; 3cr)
- Design and Analysis of Computer Algorithms (198:344; 4cr)
- Introduction to Artificial Intelligence (198:440; 4cr)
- Philosophy of Psychology (730:328; 3cr)
- Philosophical Aspects of Cognitive Science (730:360; 3cr)
- Sensation & Perception (830:301; 3cr)
- Physiological Psychology (830:313; 3cr)
- Topics in Visual Perception (830:480; 3cr)
- Visual Intelligence (185:401; 3cr)
- One from following:
  - Graph Theory (640:428; 3cr)
  - Mathematical Logic (640:461; 3cr)
  - Mathematical Theory of Probability (640:477; 3cr)

### 6. Additional Requirements
- Minimum of 36 credits
- Four Cognitive Science Courses
- Grades of C or better must be earned in all courses counted towards the major.
- Two thirds of total credits must be from School of Arts and Sciences
- Two thirds of total credits must be 300 level+
- No more than 4 courses from Philosophy or Computer Science
- No more than 3 courses from any other department

---

Questions? E-mail: undergrad@ruccs.rutgers.edu

---

Center for Cognitive Science
Psychology Building Addition
152 Frelinghuysen Road - Busch Campus
Piscataway, NJ 08854
ruccs.rutgers.edu

Revised 6/2/17