<table>
<thead>
<tr>
<th>Importance</th>
<th>Course</th>
<th>Units</th>
<th>Upper Division Units</th>
<th>Min. Grade</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>ENGL 101 - First Year Composition</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>!</td>
<td>MATH 122A - Functions for Calculus</td>
<td>1</td>
<td></td>
<td>C</td>
<td>75+ Math Placement Exam score or MATH 120R with a grade of C or higher</td>
<td>MATH 125 equivalent.</td>
</tr>
<tr>
<td>!</td>
<td>MATH 122B - First Semester Calculus</td>
<td>4</td>
<td></td>
<td></td>
<td>MATH 122A with grade of C or higher</td>
<td></td>
</tr>
<tr>
<td>!</td>
<td>UNIV 101 - Introduction to General Education</td>
<td>1</td>
<td></td>
<td></td>
<td>Entry course.</td>
<td></td>
</tr>
<tr>
<td>!</td>
<td>NSCS 200 - Engaging Topics in Neuroscience &amp; Second Language Placement</td>
<td>1</td>
<td></td>
<td></td>
<td>Freshman colloquium course for NSCS students.</td>
<td></td>
</tr>
<tr>
<td>!</td>
<td>CHEM 151 - Chemical Thinking I</td>
<td>4</td>
<td></td>
<td>60+ Math Placement Exam score or MATH 112</td>
<td>Honors section available - CHEM 161 &amp; CHEM 163. Credit is only allowed for one lecture &amp; lab combination.</td>
<td></td>
</tr>
</tbody>
</table>

2nd Semester (15 Units)

| !          | ENGL 102 - First Year Composition | 3     |                      |            |               |       |
| !          | CHEM 152 - Chemical Thinking II | 4     |                      |            | CHEM 151 or CHEM 161 & CHEM 163 (honors section) | Honors section available - CHEM 162 & CHEM 164. Credit is only allowed for one lecture & lab combination. |
| !          | MCB 181R and MCB 181L - Introductory Biology I | 4     |                      |            | 40+ Math Placement Exam score or MATH 112/120R/112B/122/125 |       |
| !          | PSY 150A1 | 4     |                      |            | General Social Scientist |       |

3rd Semester (14 Units)

| !          | NSCS 200 - Fundamentals of Neuroscience & Cognitive Science | 3     |                      |            | PSY 150A1 or PSY 161 and MCB 181R & MCB 181L or concurrent enrollment in one of the two prerequisites | Prerequisite for all NSCS and NSOS courses. |
| !          | CHEM 241A - Lectures in Organic Chemistry | 3     |                      |            | CHEM 152 or CHEM 162 (honors section) | Honors section available - CHEM 242A. Credit is only allowed for one lecture. |
| !          | CHEM 243A - Organic Chemistry Laboratory I | 1     |                      |            | CHEM 152 or CHEM 162 & CHEM 164 (honors section) | Honors section available - CHEM 244A. Credit is only allowed for one lecture. |
| !          | MATH 263 - Introduction to Statistics & Biostatistics (recommended for pre-med students) | 3     |                      |            |                           |       |

4th Semester (17 Units)

| !          | PHYS 102 and PHYS 181 - Introductory Physics I or PHYS 141 - Introductory Mechanics | 4     |                      | 60+ Math Placement Exam score or MATH 112/120R/112B/125 | Only complete one option. |
| !          | General Education Course 1* | 3     |                      |            | See Note* |       |
| !          | General Education Course 2* | 3     |                      |            | See Note* |       |
| !          | PHIL 241 - Consciousness & Cognition | 3     |                      |            |                        |       |
| !          | Second Language Course (2nd Semester Proficiency) | 4     |                      |            | Second Language Placement Exam score | See advisor for course placement after Second Language Placement Exam has been taken. Second-semester proficiency is needed to fulfill NSCS major requirements. |

5th Semester (14-15 Units)

| !          | NROS 307 - Cellular Neurophysiology | 3-4 (honors section available) |                      | 3 to 4 | NSCS 200, MCB 181R, and CHEM 151 or equivalent | Honors section is available for enrollment to students in the W.A. Franke Honors College |
| !          | NROS 308 - Methods in Neuroscience | 1     |                      | 1       | NSCS 200 |       |
| !          | NROS 311 - Scientific Programming with MATLAB | 3     |                      | 3       | NSCS 200 |       |
| !          | PHYS 103 and PHYS 182 - Introductory Physics II or PHYS 241 - Introductory Electricity & Magnetism | 4     |                      |          | PHYS 102 & PHYS 181 or PHYS 141 | Only complete one option. |
| !          | Elective Course* | 3     |                      |          | See Note* |       |

6th Semester (15-16 Units)

| !          | NROS 310 - Molecular & Cellular Biology of Neurons | 3-4 (honors section available) |                      | 3 to 4 | NSCS 200, MCB 181R and MCB 181L, CHEM 151 and CHEM 152 or equivalent | Honors section is available for enrollment to students in the W.A. Franke Honors College |
| !          | General Education Course 4* | 3     |                      | 3       | See Note* |       |
| !          | General Education Course 5* | 3     |                      | 3       | See Note* |       |
| !          | Elective Course* | 3     |                      |          | See Note* |       |

7th Semester (16 Units)

| !          | Elective Course* | 3     |                      |          | See Note* |       |
| !          | CGSC 320 - Issues & Themes in Cognitive Science | 3     |                      | 3       | NSCS 200 |       |
| !          | CGSC 321 - Methods in Cognitive Science | 1     |                      | 1       | NSCS 200 |       |
| !          | Emphasis Course 1** | 3     |                      | 3       | See Note** |       |
| !          | Emphasis Course 2** | 3     |                      | 3       | See Note** |       |
| !          | Elective Course* | 3     |                      |          | See Note* |       |
CogSci Foundation Focus Course Listings

Choose three (3) courses from at least two (2) categories:

**Cognition**
- LING 440 - The Bilingual Mind
- PSY 333 - Judgment and Decision-Making
- PSY 340 - Intro to Cognitive Development
- PSY 426 - Advanced Human Memory
- PSY 429 - Advanced Perception

**Philosophy**
- PHIL 202 - Introduction to Symbolic Logic
- PHIL 346 - Minds, Brains and Computers
- PHIL 442 - Knowledge and Cognition
- PHIL 450 - Philosophy of Mind

**Linguistics**
- LING 201 - Introduction to Linguistics
- LING 341 - Language Development
- LING 432 - Psychology of Language
- LING 449A - Biolinguistics

**Neurobiology**
- ECOL 346 - Bioinformatics
- ISTA 457 - Neural Networks
- LING 432 - Psychology of Language
- PSY 422 - Introduction to Brain Connectivity
- PSY 433 - Decisions and the Brain

**Psychology**
- PSY 313 - Drugs and the Brain
- PSY 321 - Brain Rehabilitation
- PSY 326 - Human Memory
- PSY 340 - Introduction to Cognitive Development
- PSY 405 - Developmental Cognitive Neuroscience
- PSY 412 - Animal Learning

**Psychomotor**
- MATH 475A - Math Prin. of Numerical Analysis
- MATH 485 - Mathematical Modeling
- NROS 440 - Modeling the Mind: Computational Models of Cognition
- NROS 415 - Electrophysiology Lab
- NROS 420 - Sensing and Action in Predator/Prey Encounters

**Psychology**
- MATH 129 - Calculus II
- MATH 254 - Introduction to Ordinary Differential Equations
- MATH 355 - Analysis of Ord. Differential Equations
- NROS 381 - Animal Brains, Signals, Sex, and Social Behaviors
- NROS 410 - Bayesian Modeling and Inference
- NROS 430 - Principles of Neuroanatomy: Cells to Systems
- NROS 412 - Molecular Mechanisms of Learning and Memory
- NROS 415 - Electrophysiology Lab
- NROS 420 - Sensing and Action in Predator/Prey Encounters
- NROS 430 - Neurogenetics
- NROS 440 - How to Build a Brain: Mech. of Neural Development
- NROS 430 - Neurogenetics
- NROS 440 - How to Build a Brain: Mechanisms of Neural Development
- NROS 430 - Neurogenetics
- NROS 440 - How to Build a Brain: Mechanisms of Neural Development

Development and Aging
- FCM 496D - Disability Perspectives in Research, Policy, and Practice
- FSHD 413 - Issues in Aging
- NROS 440 - How to Build a Brain: Mech. of Neural Development
- PSY 340 - Introduction to Cognitive Development
- PSY 405 - Developmental Cognitive Neuroscience
- PSY 424 - Genontology: A Multidisc. Perspective
- PSY 459 - Adult Development and Aging
- PSY 478 - Sleep and Sleep Disorders
- SLHS 340 - Language Science

**Language and Communication Science**
- LING 300 - Introduction to Syntax
- LING 315 - Introduction to Phonology
- LING 322 - The Structure & Meaning of Words
- LING 341 - Language Development
- LING 364 - Introduction to Formal Semantics
- LING 388 - Language & Computers
- LING 440 - The Bilingual Mind
- LING 449A - Biolinguistics
- LING 455 - Philosophy and Artificial Intelligence
- LING 473 - Communication Disorders II
- PHIL 202 - Introduction to Symbolic Logic
- PHIL 346 - Minds, Brains and Computers
- PHIL 442 - Knowledge and Cognition
- PHIL 450 - Philosophy of Mind

**Notes:**
- Students may choose to complete a Thematic Emphasis with courses of their choosing in a given theme. Thematic Emphasizes must be approved by the student's advisor, and the NSCS Director.
- Students may use up to six (6) units of Upper Division Thesis, Independent Study, Directed Research, Internship, or Preceptorship (max three [3] units) towards their emphasis.

**Last Modified: 9/25/2023 by Collin Stout**