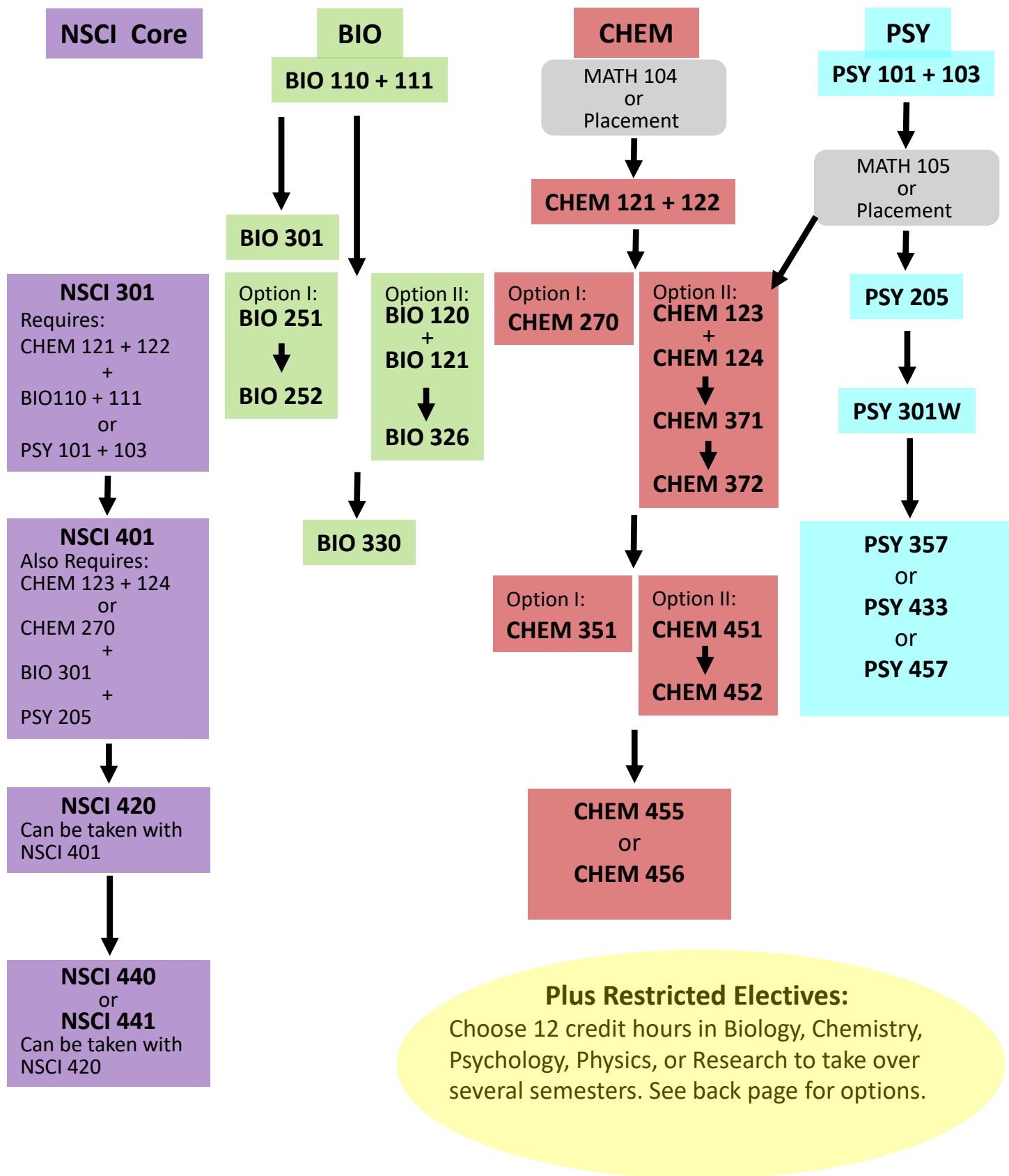


# Neuroscience Interdisciplinary Degree Flow Chart



\* Most pre-requisites (arrows, ➔) require a 'C' or better.

\*\* Pre-health (DO, DPM, MD, PA) and Transfer students are encouraged to meet with an advisor.

# Neuroscience Interdisciplinary Major Advising Flow Chart

Ideally, students take BIO 110/111 and CHEM 121/122 in their first semester followed by BIO 120/121 or BIO 251 and PSY101/103 in their second semester. NSCI 301 should be taken in the second year. NSCI 401 should be taken in the third year. Seminar courses (NSCI 420, 440) are only offered once per year. NSCI 420 will be taken in the fall semester of the third or fourth year. NSCI 440 should be taken in the winter semester of the final year of study.

*\*Pre-medical school students (DO, DPM, or MD) should take a year of General Chemistry, a year of Organic Chemistry (Option II; CHEM 371-372), and a year of algebra-based Physics (restricted electives; PHY 221- 222).*

## Restricted Electives

### Biology Electives

- BIO 305 Cell & Molecular Biology (3)
- BIO 306W Cell & Molec. Biology & Genetics Lab (3)
- BIO 315 Evolution (3)
- BIO 328 Microbiology for Health Professions (4)
- BIO 443 Developmental Biology (3)
- BIO 474 Comparative Anatomy of Vertebrates (4)

### Chemistry Electives

- CHEM 123 & CHEM 124 Gen Chemistry II (3) and Lab (1)
- CHEM 411 Toxicology (2)
- CHEM 451 Biochemistry I (3)
- CHEM 452 Biochemistry II (3)
- CHEM 453W Biochemistry Laboratory (2)
- CHEM 455 Neurochemistry (3)
- CHEM 456 Cell Signaling & Disease (3)
- CHEM 457 Medicinal Chemistry & Drug Design (3)

### Psychology Electives

- PSY 304 Learning (3)
- PSY 321 Child Psych (3) or PSY 323 Psych of Human Aging (3)

### Psychology Electives (continued)

- PSY 324 Lifespan Developmental Psychology (3)
- PSY 356 Motivation & Emotion (3)
- PSY 357 Sensation & Perception (3)
- PSY 360 Introduction to Clinical Psychology (3)
- PSY 433 Cognitive Neuroscience (3)
- PSY 457 Physiological Psychology (3)
- PSY 458 Comparative Animal Behavior (3)

### Physics Electives

- PHY 221 Mechanics, Sound & Heat (4)
- PHY 222 Electricity & Light (4)

### Neuroscience Electives

- No more than six credit hours from the following:*
- NSCI 397 Individual Readings in Neuroscience (1)
  - NSCI 398 Individual Readings in Neuroscience (2)
  - NSCI 399 Individual Readings in Neuroscience (3)
  - NSCI 497L6 Individual Research in Neuroscience (1)
  - NSCI 498L6 Individual Research in Neuroscience (2)
  - NSCI 499L6 Individual Research in Neuroscience (3)

## Required Courses

### Neuroscience Core (13)

- NSCI 301 Introduction to Neuroscience (3)
- NSCI 401 Advanced Neuroscience (4)
- NSCI 420 Seminar I (3)
- NSCI 440 Seminar II or NSCI 441 Applications of Clinical Neuroscience (3)

### Biology (20 – 21)

- BIO 110 Introductory Biology: Cells & Molecules (3)
- BIO 111 Introductory Biology Lab: Cells & Molecules (2)
- BIO 301 Genetics (3)
- BIO 330 Neuroanatomy (4)
- Option I:*
- BIO 251 Human Anatomy and Physiology I (4)
- BIO 251 Human Anatomy and Physiology I (4)
- Option II:*
- BIO 120 Introductory Biology: Evolution and Ecology (3)
- BIO 121 Introductory Biology Lab: Evolution and Ecology (3)
- BIO 326 Human Physiology (4)

### Chemistry (15 – 19)

- CHEM 121 General Chemistry I (3)
- CHEM 122 General Chemistry I Lab (1)
- CHEM 123 General Chemistry II (3)
- CHEM 124 General Chemistry II Lab (1)

### Chemistry (continued)

- Organic Option I:
- CHEM 270 Survey of Organic Chemistry (4)
- Organic Option II:
- CHEM 371 Organic Chemistry I (3)
- CHEM 372 Organic Chemistry II (3)
- Biochemistry Option I:
- CHEM 351 Foundations of Biochemistry (4)
- Biochemistry Option II:
- CHEM 451 Biochemistry I (3)
- CHEM 452 Biochemistry II (3)
- CHEM 455 Neurochemistry or CHEM 456 Cell Signaling & Dis. (3)

### Psychology (15)

- PSY 101 General Psychology Lecture (3)
- PSY 106 General Psychology Lab (1)
- PSY 205 Quantitative Methods in Psychology (4)
- PSY 301W Introductory Experimental Psychology (4)
- One of the following:*
- PSY 357 Sensation and Perception (3)
- PSY 433 Cognitive Neuroscience (3)
- PSY Physiological Psychology (3)