

Santa Clara University
COLLEGE OF ARTS & SCIENCES

Requirement Check Sheet for Neuroscience Majors

Students are personally responsible for knowing all academic regulations affecting their program of study and for completing all degree requirements as set forth by the University, their College or School, and academic department(s). Failure to understand these regulations and requirements does not relieve a student from responsibility. (Undergraduate Bulletin)

NAME _____
STUDENT ID _____

EXPECTED GRADUATION DATE _____
EMAIL ADDRESS _____

University Core Requirements (2009)

Foundations

Critical Thinking and Writing 1 _____
Critical Thinking and Writing 2 _____
(will be automatically enrolled in same section after completion of CT&W 1)
Cultures and Ideas 1 _____
Cultures and Ideas 2 _____
(automatically enrolled in same section after completion of C&I 1)
Religion, Theology, and Culture 1 _____
Second Language _____
(complete 2nd introductory level or equivalent by proficiency exam)
Mathematics _____ (MATH 35/11)

Explorations

Ethics _____ (PHIL 32)
Civic Engagement _____
Diversity _____
Arts _____
Natural Science w/ Lab _____ (CHEM 11)
Social Science _____ (PSYC 1)
Religion, Theology, and Culture 2 _____
Religion, Theology, and Culture 3 _____
(after 88 units)

Science, Technology, and Society
_____ (NEUR 1)

Cultures & Ideas 3 _____

Integrations

Experiential Learning for Social Justice _____*
Advanced Writing _____*
Pathway Title: _____
Pathway Course 1 _____
Pathway Course 2 _____
Pathway Course 3 _____
Pathway Course 4 _____

Note: Physics 11, 12 and 13 is recommended for all neuroscience majors. Talk to your advisor.

Neuroscience Major Requirements

Lower Division: Introductory Classes

NEUR 1 _____
BIOL 1A L&L _____
BIOL 1B L&L _____
BIOL 1C L&L _____
CHEM 11 L&L _____
CHEM 12 L&L _____
CHEM 31 L&L _____
CHEM 32 L&L _____
CHEM 33 L&L _____
PHIL 32 (recommended) _____
PSYC 1 _____

Math, Statistics & Methods

MATH 35 (or 11) _____
MATH 36 (or 12 or CSCI 10) _____
NEUR 10 L&L _____
BIOL 160 (ENVS 110) L&L _____

Upper Division:

NEUR 150 _____
NEUR 190 _____
BIOL 122 L&L _____
PSYC 165 _____
PSYC 169 _____

Four additional UD classes, at least one course from each of the following lists:

1. Biology L&L _____ One course
(BIOL 110, 112, 120, 123, 124, 165, 172, 174, 175, 178)
2. Additional Natural Science Elective _____ One course
(BIOL L&L above, or 119, 123A, 124, 171, CHEM 141, CSCI 168)
3. Psychology Elective _____ One course
(PSYC 120, 130, 138, 166, 167, 196)
4. Additional Social Science Elective _____ One course
(NEUR 185, PSYC above or COMM 113, PHIL 113, 117)

REQUIRED CLASSES:

*Can overlap with other Core or a Major requirement.
L&L = lecture and lab

FOUR ADDITIONAL UD CLASSES

NEUR 1: Introduction to Neuroscience
NEUR10: Explorations in Neuroscience L & L
NEUR 150: Neuroscience Research Seminar
NEUR 190: Neuroscience Capstone

BIOLOGY

BIOL 1A: Energy and Matter L & L
BIOL 1B: Information and Evolution L&L
BIOL 1C: System L & L

BIOL160: Biostatistics L & L
BIOL 122: Neurobiology L & L

CHEMISTRY

CHEM 11: General Chemistry I L & L
CHEM 12: General Chemistry II L & L
CHEM 31: Organic Chemistry I L & L
CHEM 32: Organic Chemistry II L & L
CHEM 33: Organic Chemistry III L & L

MATH

MATH 35: Calculus for Life Sciences I or Math 11
MATH 36: Calculus for Life Sciences II or Math 12

PHIL

Philosophy 32: Neuroethics (recommended)

PSYCHOLOGY

PSYC 1: General Psychology I
PSYC 165: Behavioral Sciences
PSYC 169: Cognitive Neuroscience

1. Biology Lecture & Lab

BIOL 110: Genetics L & L
BIOL 112: Immunology L & L
BIOL 120: Animal Physiology L & L
BIOL 123: Neurodevelopment L & L
BIOL 124: Human Physiology L & L
BIOL 165: Animal Behavior L & L
BIOL 172: Molecular Modeling L & L
BIOL 174: Cell Biology L & L
BIOL 175: Molecular Biology L & L
BIOL 178: Bioinformatics L & L

1. Natural Science Electives:

Additional BIOL L&L above
BIO 119: Biology of Stress
BIOL 112: Immunology L & L
BIOL 123A: Neurodevelopment - Lecture
BIOL 124 Human Physiology L & L
BIOL 171: Social/ Ethical Dimensions L & L
CHEM 141: Biochemistry I
CSCI 168: Computer Graphics

2. Psychology Electives:

PSYC 120: Sensation and Perception
PSYC 130: Psychology of Learning
PSYC 138: Human Memory
PSYC 166: Human Neuropsychology
PSYC 167: Psychopharmacology
PSYC 196EL: Psychology of Aging

3. Social Science Electives:

Additional Psychology course above or
COMM 113: Communication, The Body, and Health
NEUR 185: Developmental Neuro for Human Behavior
PHIL 113: Ethics & Constitutional Law
PHIL 117: Bioethics & the Law