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.

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

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:
Biology L&L __________ One course
(BIOL 110, 112, 120, 123, 124, 165, 172, 174, 175, 178)

Additional Natural Science Elective __________ One course
(BIOL L&L above, or 112, 119, 120, 123A, 124, 171, CHEM 141, CSCI 168)

Psychology Course __________ One course
(PSYC 120, 130, 138, 166, 167, 196)

Additional Social Science Elective __________ One course
(NEUR 185, PSYC above or COMM 176A/113, PHIL 113, 117)
REQUIRED 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

BIOL 120: Animal Psychology
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
MATH 36: Calculus for Life Sciences II

PHIL
Philosophy 32: Neuroethics (recommended)

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

FOUR ADDITIONAL UD CLASSES
At least one course from each of the following:

BIO 119: Biology of Stress
BIO 120: Animal Physiology L & L
BIO 123: Neurodevelopment
BIO 123A: Neurodevelopment - Lecture
BIO 124: Human Physiology L & L
BIO 165: Animal Behavior L & L
BIO 171: Social/ Ethical Dimensions
BIO 172: Molecular Modeling
BIO 174: Cell Biology L & L
BIO 175: Molecular Biology L & L
BIO 178: Bioinformatics

Natural Science Electives:

BIOL 112: Immunology L & L
BIOL 124 Human Physiology L & L
CHEM 141: Biochemistry I
CSCI 168: Computer Graphics

Social Science Electives:

NEUR 185: Developmental Neuroscience for Human Behavior
PSYC 120: Sensation and Perception
PSYC 130: Psychology of Learning
PSYC 166: Human Neuropsychology
PSYC 167: Psychopharmacology
PSYC 196EL: Psychology of Aging
Philosophy 113: Ethics & Constitutional Law
Philosophy 117: Bioethics & the Law

BIOL 110: Genetics L & L
BIOL 112: Immunology L & L
# COURSE PLAN

<table>
<thead>
<tr>
<th></th>
<th>FALL</th>
<th>WINTER</th>
<th>SPRING</th>
<th>Summer (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>