BACHELOR OF SCIENCE IN NEUROSCIENCE & COGNITIVE SCIENCE

EXPECTED GRADUATION ____________ FOCUS: Neuroscience / Cognitive Science

CATALOG: 2018-19, 2019-20

UNIVERSITY FOUNDATIONS & GENERAL EDUCATION

Composition
ENGL 101 or equivalent .................................................. 3 ___
ENGL 102 or equivalent .................................................. 3 ___
or ENGL 109H (pre-med requires addtl course- see advisor) .... 3 ___

Second Language
2nd semester proficiency by credit or exam required ______

Mathematics
Requirement satisfied by NSCS supporting coursework _______

Tier One
Individuals & Societies Traditions & Cultures
150 ___ 3 ___ 160 ___ 3 ___
150 ___ 3 ___ 160 ___ 3 ___

Tier Two
Individuals & Societies Humanities Arts
3 ___ 3 ___ 3 ___

Diversity Emphasis (Gender/Race/Class/Ethnicity/Sexual Orient./Non Western)
One course must be taken from the Diversity Emphasis list ______

NSCS FOUNDATION/SUPPORTING COURSEWORK

Chemistry
CHEM 151 (lec & lab combined) (F, S, SS) ......................... 4 ___

Biology
MCB 181R (lec) (F, S, SS) and MCB 181L (lab) (F, S) ....... 3 ___ 1 ___

Physics
PHYS 102 (lec) and 181 (lab) (F, S, SS) or PHYS 141] ... 3 ___ 1 ___

Mathematics
MATH 122A&B or MATH 125 (F, S, SS) ......................... 3-5 ___

Statistics
(MATH 263 recommended for pre-med students)
MATH 263 or PSY 230 .................................................. 3 ___

Philosophy
PHIL 241 (F, S, SS) .................................................. 3 ___

FOUNDATION FOCUS (MUST MATCH MAJOR FOCUS)

Complete 12 units from one focus

Option 1: Neuroscience Focus
CHEM 152 (lec & lab combined) (F, S, SS) ......................... 4 ___
CHEM 241A (lec) and CHEM 243A (lab) (F, S, SS) ....... 3 ___ 1 ___
PHYS 103 (lec) and 182 (lab) (F, S, SS) or PHYS 241] ... 3 ___ 1 ___

Option 2: Cognitive Science Focus
NSCS 344 Modeling the Mind (S) ................................. 3 ___

Take 3 courses from at least 2 categories (see full curriculum for options):
☐ Cognitive Psychology ☐ Linguistics ☐ Philosophy
____________________ 3 ___ ____________________ 3 ___
____________________ 3 ___

GATEWAY COURSE (APPLY TO MAJOR WHILE ENROLLED)

Students are ELIGIBLE TO APPLY to the full major when they have:
1. Completed MCB 181R/L, and CHEM 151, and PSY 101 or 150A1 (pre-
   req for NSCS 200). These courses must be completed before
taking NSCS 200 and applying to the major.
2. Completed or enrolled in calculus, statistics, NSCS 200, CHEM
   152 (neuro focus), one foundation focus course (cog sci focus)
3. Science GPA of at least 2.5

NOTE: All other courses may be completed before or after admission
to the major. Exceptions may be granted for requirements 2 & 3 on a
case-by-case basis. See your advisor.

NSCS 200 Fundamentals of Neurosci & Cog Sci (S) .......... 3 ___

*Course pre-reqs: MCB 181R/L and PSY 101 or 150A1

MAJOR CORE (MUST COMPLETE NSCS 200 FIRST)

NSCS 307 Cellular Neurophysiology (F) (Honrs Option) .3-4 ___
NSCS 308 Methods in Neuroscience (F) ......................... 1 ___
NSCS 311 Scientific Programming with MATLAB (f) ...... 3 ___
NSCS 320 Issues & Themes in Cognitive Science (f) .... 3 ___
NSCS 321 Methods in Cognitive Science (F) .................. 1 ___

MAJOR FOCUS (MUST MATCH FOUNDATION FOCUS)

Complete 6 units from one focus

Option 1: Neuroscience Focus
NROS 310 Mol & Cell Bio of Neurons (S) (Honrs Option) 3-4 ___
NROS 418 Fund Principles in Systems Neuro (S) .......... 3 ___

Option 2: Cognitive Science Focus
Take 2 courses from the Cognition Emphasis list (courses cannot double-dip):
____________________ 3 ___ ____________________ 3 ___

EMPHASIS ELECTIVES

Complete 15 units from one emphasis. Up to 6 units of upper-
division research, internship, preceptorship (max 3 units), or thesis
credit may be applied. Course listing at nscs.arizona.edu

Cognition
Computation
Development & Aging
Lang. & Comm. Science
Neurobiology
Philosophy of Mind
Thematic

Course Units
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________

Total Units _______

ADDITIONAL NSCS GRADUATION REQUIREMENTS

Special Lectures ☐ Ethics ☐ Science Policy
Program Assessment Completed ☐

ADDITIONAL GRADUATION REQUIREMENTS: 120 total units ☐ 42 upper div. units☐ 2.000+ cum GPA□ 2.000+ major GPA□
MCWA complete___ 30+ total units at UA ___ 18+ NSCS units at UA ___
Students are ELIGIBLE TO APPLY to the full major when they have:
1. Completed MCB 181R/L, and CHEM 151, and PSY 101 or 150A1 (pre-
   req for NSCS 200). These courses must be completed before
taking NSCS 200 and applying to the major.
2. Completed or enrolled in calculus, statistics, NSCS 200, CHEM
   152 (neuro focus), one foundation focus course (cog sci focus)
3. Science GPA of at least 2.5

NOTE: All other courses may be completed before or after admission
to the major. Exceptions may be granted for requirements 2 & 3 on a
case-by-case basis. See your advisor.

NSCS 200 Fundamentals of Neurosci & Cog Sci (S) .......... 3 ___

*Course pre-reqs: MCB 181R/L and PSY 101 or 150A1

MAJOR CORE (MUST COMPLETE NSCS 200 FIRST)

NSCS 307 Cellular Neurophysiology (F) (Honrs Option) .3-4 ___
NSCS 308 Methods in Neuroscience (F) ......................... 1 ___
NSCS 311 Scientific Programming with MATLAB (f) ...... 3 ___
NSCS 320 Issues & Themes in Cognitive Science (f) .... 3 ___
NSCS 321 Methods in Cognitive Science (F) .................. 1 ___

MAJOR FOCUS (MUST MATCH FOUNDATION FOCUS)

Complete 6 units from one focus

Option 1: Neuroscience Focus
NROS 310 Mol & Cell Bio of Neurons (S) (Honrs Option) 3-4 ___
NROS 418 Fund Principles in Systems Neuro (S) .......... 3 ___

Option 2: Cognitive Science Focus
Take 2 courses from the Cognition Emphasis list (courses cannot double-dip):
____________________ 3 ___ ____________________ 3 ___

EMPHASIS ELECTIVES

Complete 15 units from one emphasis. Up to 6 units of upper-
division research, internship, preceptorship (max 3 units), or thesis
credit may be applied. Course listing at nscs.arizona.edu

Cognition
Computation
Development & Aging
Lang. & Comm. Science
Neurobiology
Philosophy of Mind
Thematic

Course Units
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________
_______________________________________________

Total Units _______

ADDITIONAL NSCS GRADUATION REQUIREMENTS

Special Lectures ☐ Ethics ☐ Science Policy
Program Assessment Completed ☐

ADDITIONAL GRADUATION REQUIREMENTS: 120 total units ☐ 42 upper div. units☐ 2.000+ cum GPA□ 2.000+ major GPA□
MCWA complete___ 30+ total units at UA ___ 18+ NSCS units at UA ___