

The OLD Neuroscience Major at Dickinson College

PSYCHOLOGY COURSES (3 courses)

<u>PSYCHOLOGY 125</u>	Brain and Behavior (with lab)
<u>PSYCHOLOGY 325</u>	Research Methods in Biological Psychology

1 of the following:

PSYCHOLOGY 310	Research Methods in Animal Learning
PSYCHOLOGY 315	Research Methods in Drugs and Behavior
PSYCHOLOGY 330	Research Methods in Cognitive Psychology

BIOLOGY COURSES (3 courses)

<u>BIOLOGY 124</u>	Biology of Behavior
<u>BIOLOGY 330</u>	Neurobiology

1 of the following:

BIOLOGY 216	Genetics
BIOLOGY 313	Cell Biology
BIOLOGY 327	Developmental Neurobiology
BIOLOGY 333	Physiology

400 LEVEL NEUROSCIENCE COURSE (1 course)

PSYCHOLOGY 425	Human Neuropsychology
PSYCHOLOGY 430	Seminar in Cognitive Psychology
PSYCHOLOGY 480	(if neuroscience related)
BIOLOGY 401	(if neuroscience related)
BIOLOGY 412	(if neuroscience related)

CHEMISTRY (4 courses)

CHEMISTRY 131*	General Chemistry I with Lab
CHEMISTRY 132*	General Chemistry II with Lab
CHEMISTRY 241	Organic Chemistry I
CHEMISTRY 242	Organic Chemistry II

*Chemistry 141 Accelerated General Chemistry with Lab will count for both courses.

ELECTIVES (2 courses)

Science Elective: One elective from either 300-level Psychology or Biology courses listed above that the student has not already taken or another upper-level science course related to Neuroscience (200-level or higher).

Current Dickinson courses that satisfy the Science Elective

Bio 315 Pop Gen & Evolution	
Bio 318 Animal Development	Bio/Chem 342 Struct & Funct Biomolecules
Bio 321 Invertebrate Zoology	Chem 490 (Med Chem, Bioorganic, Case Studies in Biochem)
Bio 326 Microbiology	ES 390 Modeling
Bio 334 Vertebrate Biology	Psych 355 Res Mthds in Child Dev
Bio 355 Microanatomy	Psych 380 Res Mthds Topics (if relevant)
Bio 417 Molecular Genetics	
Bio 418 Dev Genomics	

For more Information, See: <http://www.dickinson.edu/homepage/41/neuroscience>

Second Elective: The second elective must be outside of Division III (200 level or higher), and the case must be made (by the student to the advisor and/or program chair) that this course engages the major in philosophical, environmental, or socio-cultural discussions of science.

Current Dickinson courses that satisfy Elective 2

Amst 200 Health, Illness and Culture	Jdst 216 Jewish Medical Ethics
Amst 301 Race, Gender and Body	History 350 American Sci, Tech & Med
Anth 216 Medical Anthropology	LAWP 400 Biomed Tech, Policy & Law
Anth 218 Biosocial Aspect of Female Sexuality	Phil 220 Biomedical Ethics
Anth 225 Human Osteology	Phil 254 Philosophy of Science
Anth 229 Principles of Human Variation and Adaption	Phil 256 Philosophy of Mind
Anth 245 Medicine, Science & Society	Phil 391 Morality and Mind
Anth 245 Health & Healing in Africa	Phil 391 Free Will and Science
Anth 310 Nutritional Anthropology	Soc 228 Sociology of Sexuality
Anth 331 Principles of Human Evol	Soc 230 Soc of Health and Illness
Anth 375 Beauty	Span 239 Span for Health Profession
Engl 313 Linguistics, Scientific Study of Natural Human Language	Relgn 241 Care of the Soul
	Relgn 260 Spiritual Dimen of Healing

Other courses, not included on this list, may satisfy the elective as determined by the Neuroscience Program Director.

RESEARCH EXPERIENCE

The neuroscience research requirement may be met by a variety of experiences. For example, an independent research project, research with a Dickinson College faculty member during the summer, an off-campus internship with a significant research component, or a research experience not covered by the above but deemed equivalent.

* Two semesters of mathematical sciences (calculus and/or statistics), and two semesters of Organic Chemistry (CHEM 241 and 242) are strongly recommended for students intending graduate study toward an advanced degree in neuroscience or the health professions.

** Students may declare the major once they have successfully completed Psychology 125 or Biology 124.

STUDY ABROAD

Students who study abroad at the Dickinson Science Program in Australia, the Dickinson Science Program at the University of East Anglia (Norwich) or the Dickinson Program at the Danish Institute for Study Abroad (Copenhagen, Denmark) will find many course equivalents to required courses in the neuroscience major. For more information, see your Advisor, or contact a member of the Neuroscience Faculty.

NEUROSCIENCE CLUB

The mission of the Neuroscience Club at Dickinson College is to spread awareness of brain-related issues on campus, while providing a science community for Neuroscience, Psychology, Biochemistry & Molecular Biology, Chemistry, and Biology majors. All Neuroscience majors are encouraged to join and actively participate.

For more Information, See: <http://www.dickinson.edu/homepage/41/neuroscience>

Neuroscience Faculty Contact Information

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