Psychology Major Requirements- 11 courses

The major is devised to provide breadth and depth, a small group course in psychology, and familiarity with the quantitative techniques and research methods used in psychology.

- 1. **Psychology 101** Students who receive a score of 5 on the AP psychology test or a 7 on the IB psychology test will receive credit for PSY 101 and may not take it for credit at Duke. Students who receive a 4 on the AP or a 6 on the IB may choose to receive credit for PSY 101 or retake the course for credit at Duke in which case their AP/IB credit will be lost. Please note that students who receive AP/IB credit for Psychology 101 will need to complete a total of eleven courses in the major beyond Psychology 101. Thus, AP/IB credit allows you to place out of Psychology 101, but does not reduce the total number of courses you must take. Students who do not have credit for PSY 101 should take this class as their first psychology class at Duke.
- 2. The Breadth Requirement The student is required to take at least two survey courses that cover major areas of the field. One of these survey courses must be in the Natural Sciences perspective of psychology (PSY 106 Biological Bases of Behavior or PSY 102 Cognitive Psychology), and one must be in the Social Sciences perspective of psychology (PSY 103 Developmental Psychology, PSY 104 Social Psychology, or PSY 105 Abnormal Psychology). Students seeking additional breadth may count up to four of these survey courses towards the major. Introductory Psychology is strongly recommended as the first course taken in the major as it provides a foundation for all other courses; the survey courses should be taken next as they provide a foundation for additional courses in each area.
- 3. **The Depth Requirement** The student is required to complete at least 3 courses in 2 areas chosen to complete the breadth requirement. Students can also use one independent study course to count towards the depth requirement. To do so students should contact the Psychology Office of Undergraduate Studies to make the request as the IS will not be applied to this requirement automatically. For a list of courses by depth area check <u>here</u>.
- 4. The Stats Requirement The required course is Introduction to Statistical Methods in Psychology (201). The course completed to satisfy this requirement will also count as one of the eleven courses required for the major. The following courses are also acceptable: Mathematics 342, Statistical Science 101, 102, 111, or 250. Other courses may be substituted only with advance permission of the Director of Undergraduate Studies. Students who plan on taking courses in the Department of Statistics should consult with the Director of Undergraduate Studies in Psychology & Neuroscience prior to enrolling in their initial statistics class. Please note that students may not use multiple introductory-level statistics classes to satisfy elective requirements.
- 5. The Research Methods Requirement Each student will take Research Methods in Psychological Science (301), or one of the specialized research methods courses in the 301-315 series. Students are advised against enrolling in research methods prior to statistics.
- 6. **The Seminar Requirement** The student must take at least one seminar. It is recommended that the seminar be taken in an area where a survey course was completed.
- 7. The 11-course Requirement Additional courses at the 100-level or above. Courses cross-listed with other departments that are 100-level or above count towards the 11. Two independent study courses in psychology can count towards the 11-course requirement. The course taken to complete the Statistics requirement counts as one of the 11 required courses. If methods and/or seminar course are also used to meet the depth requirement, they only count as one course towards the required 11.

Of the eleven courses required for the major at least nine must be taken at Duke; others, if approved, may count toward the 34 credits needed for graduation but will not count towards the major.

Psychology AB Requirements Checklist (11 courses)
Introductory Psychology PSY 101or AP credit . Note : AP credit allows students to place out of PSY 101, but does not count as one of the eleven courses required for the major.
Breadth Requirements I : Natural Science Perspective of Psychology (choose ONE) PSY 106 (Biological) PSY 102 (Cognitive)
Breadth Requirement II : Social Science Perspective of Psychology (choose ONE) PSY 103 (Developmental) PSY 104 (Social) PSY 105 (Health/Abnormal)
Note on breadth requirement : Although only 2 of the above survey courses are required, up to 4 may count towards the 11 course total.
Depth Requirements : must complete at least 3 intermediate/advanced courses spread across 2 areas where the breath requirement was completed. Students can also count one Independent Study (IS) course towards the Depth Requirement. Students must notify the Psychology Office of Undergraduate Studies as the IS will not be applied to this requirement automatically.
Statistics – PSY 201, STA 101, 102, 111, 250 or MATH 342 (choose ONE)
Methods – Psychology courses numbered 301 to 315
Seminar – Any PSY course with an "S" suffix.
Additional Elective
Additional Elective
Additional Elective – If AP credit is used to place out of PSY 101

Requirements for the BS Degree – 17 courses

The B.S. degree requires completion of all requirements for the A.B. degree listed above plus one additional courses in the quantitative studies and five electives. Some flexibility is allowed in completing elective requirement, thus different students may follow different paths to the BS degree, considering the following:

- Students must take 3 electives from the approved list below from at least 2 departments outside of psychology. Courses in another department that are cross-listed with Psychology do not count as a different department. Thus, the minimum number of elective classes to be taken outside of psychology to satisfy the BS requirements is 3.
- At least three of the five courses should be at or above the 200-level.
- At least two courses in psychology must carry the NS code. If these are not used to satisfy the 11 course AB requirement, they can count as BS electives.
- Up to 2 <u>empirically oriented</u> independent study classes in psychology can count towards the five elective requirements if not used to satisfy the 11-courses AB requirement. The department will look at students proposal to determine whether the IS carries enough quantitative or natural science content to qualify.
- Additional Quantitative Study Math 112, Math 122, Stat 210, or Stat 340 (Choose ONE)
- **____ PSY Carrying NS Code I** (doesn't count towards the five electives if used for AB degree)
- **____ PSY Carrying NS Code II** (doesn't count towards the five electives if used for AB degree)
- **Elective I** from approved list and from at least 2 departments outside of psychology
- **Elective II** from approved list and from at least 2 departments outside of psychology
- **Elective III** 200 + level from approved list and from at least 2 departments outside of psychology
- ____ Elective IV 200+ level
- ____ Elective V 200+ level

NATURAL SCIENCES ELECTIVE OPTIONS (Last Revision 4/19/16)

Students may still petition for a course not listed here – contact the undergraduate office to find out how

- **Biology** 154 AIDS and Other Emerging Diseases Gateway to Biology: Molecular Biology 201L Gateways to Biology: Genetics and Evolution 202L 207 **Organismal Evolution** 215L Intro to Modeling in Mathematical Biology 223 Cellular and Molecular Neurobiology 250 **Population Genetics** 267D Behavioral Ecology and the Evolution of
- 267D Behavioral Ecology and the Evolution of Animal Behavior
- 311 Introduction to Systems Biology
- 329D Principles of Animal Physiology
- 330L Anatomy of Vertebrates
- 372LA Biochemistry of Marine Animals
- 373LA Sensory Physiology and Behavior of Marine Animals
- 411S Molecular Genetic Analysis
- 412S Sensory Signal Transduction
- 431S Human Embryology
- 567S Genetic Basis of Behavior
- 650 Molecular Population Genetics

Biochemistry

- 301 Intro Biochemistry I
- 302 Intro Biochemistry II
- 658 Structural Biochemistry I
- 659 Structural Biochemistry II

Biomedical Engineering

- 253L Biomedical Electronic Measurements I
- 354L Biomedical Electronic Measurements II
- 260L Modeling Cellular and Molecular Systems
- 271 Signals and Systems
- 307 Transport Phenomena in Biological Systems
- 502 Neural Signal Acquisition
- 503 Computational Neuroengineering
- 504 Fundamentals of Electrical Stimulation of the Nervous System
- 511 Theoretical Electrophysiology
- 513L Nonlinear Dynamics in Electrophysiology
- 515 Neural Prosthetic Systems
- 516 Computational Methods in Biomedical Engineering
- 527 Cell Mechanics and Mechanotransduction
- 560 Molecular Membrane Transport
- 566 Transport Phenomena in Cells and Organs

Cell Biology

503 Introduction to Physiology

Computer Science

101 Introduction to Computer Science

- 101L Introductions to Computer Science
- 201L Program Design and Analysis II
- 220 Introduction to Numerical Methods and Analysis
- 224 Introduction to Computer Modeling
- 230 Discrete Math for Computer Science
- 260 Introduction to Computational Genomics
- 270 Introduction to Artificial Intelligence
- 316 Introduction to Database Systems
- 516 Data-Intensive Computing Systems
- 520 Numerical Analysis
- 527 Computer Vision
- 528 Introduction to Computational Science
- 530 Design and Analysis of Algorithms
- 532 Approximation Algorithms
- 570 Artificial Intelligence
- 571 Machine Learning
- 662 Computational Systems Biology
- 663 Algorithms in Structural Biology and Biophysics

Evolutionary Anthropology

- 246 Sociobiology
- 285D Human Health in Evolutionary Perspective
- 330L Human Anatomy and Physiology
- 333L Human Body
- 341 Primate Sexuality
- 363S Evolution of Primate Social Cognition
- 546S Primate Social Evolution
- 560S Topics in Primate Cognition

Global Health

362 Introduction to Epidemiology Focus on Global Health

Linguistics

216S Neuroscience and Human Language

Math

- 216 Linear Algebra and Differential Equations
- 221 Linear Algebra and Applications
- 573S Modeling of Biological Systems

Modeling Biological Systems

- 215 Mathematical Biology
- 605S MatLab Modeling for Biology

Neurobiology

- 541 Theoretical Neuroscience
- 557 Vision
- 559 Biological Basis of Music

Physical Education

206 Exercise Physiology

Pharmacology		
350	Drug Actions and Reactions	
Psychology		
	Any NS course in Psychology	
Public Policy		
241	Methods Social Policy Research	
348	Science and Policy of Obesity	
Sociology		
332	Methods of Social Research***	
333	Quantitative Analysis of Sociological Data	
Statistics		
101	Data Analysis and Statistical Inference	
102	Introductory Biostatistics	
111		

111 Probability and Statistical Inference

- 130 Probability and Statistics in Engineering
- 210 Regression Analysis
- 230 Probability
- 250 Statistics
- 320 Statistics of Causal Studies
- 321 Statistics of Surveys
- 340 Statistical Decision Analysis
- 350S Statistical Methods in Bioinformatics
- 360 Bayesian and Modern Statistics
- 471S Computational Data Analysis
- 611 Introduction to Statistical Methods
- 622 Statistical Data Mining
- 623 Statistical Decision Theory

*** Denotes accepted methods courses outside Psychology

NOTE: Because additional NS courses in Psychology may count toward elective credits, courses cross-listed with Psychology are not listed here