Minor in Applied Neuroscience (rev. June 17, 2025)

Curriculum Outline		Hours
Neurobiological Core (choose 1):		3
BIO/PSY 3033 - Introduction to Neuroscience		
PSY 4403 - Biological Psychology		
NOTE: Students must receive a final grade of C or greater in all core courses.		
Neuropsychological Core (choose 1):		3
PSY 3713 - Cognitive Psychology		
PSY 4413 - Cognitive Neuroscience		
PSY 4423 - Sensation & Perception		
NOTE: If a student takes both PSY 4403 and BIO/PSY 3033, one of those courses may be used to satisfy this requirement. Students must receive a final grade of C or greater in all core courses.		
Elective Courses (choose 4):		12
ABE 3413 - Bioinstrumentation	CSE 4643 - AI Robotics	
ABE 4323 – Phy. Systems in Biomedical Eng.	CSE 4663 - Human-Computer Interaction	
ABE 4613 - Biomechanics	CSE 4683 - Machine Learning and Soft Computing	
ABE 4633 - Biomedical Signals and Sensors	EP 4703 - Neural Control & Human Movement	
ABE 4723 - Tissue Eng. and Regeneration	PE 3223 - Motor Development & Movement	
BCH 4013 - Principles of Biochemistry	PE 4853 - Motor Learning & Skill Analysis	
BCH 4713 - Molecular Biology	PHI 4223/PSY 4383 - Philosophy of Cognitive Science	
BIO 3004 - Human Anatomy	PSY 3713 - Cognitive Psychology	
BIO/PSY 3033 - Introduction to Neuroscience	PSY 4223 - Drug Use and Abuse	
BIO 3033 - Introduction to Neuroscience	PSY 4403 - Biological Psychology	
BIO 4133 - Human Genetics BIO 4503 - Vertebrate Histology	PSY 4413 - Cognitive Neuroscience PSY 4423 - Sensation & Perception	
BIO/PO 3103 - Genetics	PSY/CSE 4653 - Cognitive Science	
CSE 4433 - Virtual and Extended Reality	PSY 4713 - Language and Thought	
CSE 4633 - Artificial Intelligence	PSY 4733 - Memory	
NOTE: Students may choose to take a 4800 Undergraduate Research course or a Directed Individual Study where they engage in faculty-mentored, neuroscience-related research for up to 3 hours credit toward elective requirements. In order to utilize this option, students must submit a research plan signed by their faculty mentor for approval by the Applied Neuroscience Curriculum Committee.		
Electives must come from at least two departments. No more than 50% of the courses applied toward this minor may be core courses within a given student's major. Relevant electives not listed below must be approved before they can be applied toward course requirements.		
Other courses that can be reasonably justified as having neuroscience content may also be counted toward elective requirements with approval of the program coordinator. This must be completed and approved prior to applying for graduation.		
Core courses cannot be double counted as electives. However, core courses taken beyond the specified core requirements may be applied to fulfill the elective requirements.		
Students must receive a final grade of C or greater in all elective courses.		
Total Hours		18