

# Neuroscience (B.S.) – Pre-Medical Track

2025-2026 Academic Catalog, Bachelor of Science – Neuroscience, Pre-Medical Track

Academic Core for B.S.			44 Hours	Neuroscience		76 Hours
CHRISTIAN STUDIES			6	B.S. NEUROSCIENCE MAJOR REQUIRED COURSES		46
CSBS 1311	Engaging the Old Testament		3	BIOL 1350	Biology for Science Majors I	3
CSBS 1312	Engaging the New Testament		3	BIOL 1150	Biology for Science Majors I Lab	1
ENGLISH			9	BIOL 1360	Biology for Science Majors II	3
ENGL 1321	Rhetoric & Composition I		3	BIOL 1160	Biology for Science Majors II Lab	1
ENGL 1322	Rhetoric & Composition II		3	BIOL 2340	Human Anatomy & Physiology I	3
ENGL	Literature		3	BIOL 2140	Human Anatomy & Physiology I Lab	1
A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.				BIOL 2341	Human Anatomy & Physiology II	3
				BIOL 2141	Human Anatomy & Physiology II Lab	1
EXERCISE & SPORT SCIENCE – SELECT TWO DIFFERENT COURSES			2	BIOL 3310	Genetics	3
EXAC	Activity Course		1	BIOL 3110	Genetics Lab	1
EXAC	Activity Course		1	NSCI 3310	Neuroscience Foundations	3
FINE ARTS – SELECT ONE			3	NSCI 3320	Biological Basis of perception & Movement	3
ARTS 1310	Drawing I		3	NSCI 3330	Cognitive Neuroscience	3
ARTS 1320	Design		3	BIOL 4340	The Addicted Brain	3
ARTS 1350	Art Appreciation		3	NSCI 4180	Neuroscience Seminar	1
ARTS 2360	Ceramics I		3	NSCI 4180	Neuroscience Seminar	1
COMM 2335	Film Appreciation		3	NSCI 4180	Neuroscience Seminar	1
FINA 2330	Exploring the Fine Arts		3	NSCI 4180	Neuroscience Seminar	1
MUSI 1340	Music Appreciation		3	NSCI 4195	Neuroscience Capstone Seminar	1
THEA 2350	Theatre Appreciation		3	NSCI 4320	Clinical Neuropathology	3
WORLD CULTURES – SELECT ONE			3	MATH 1306	College Algebra or higher	3
ARTS 2354	World Art		3	PSYC 3315	Abnormal Psychology	3
EXSS 2353	Lifespan Nutrition		3	PRE-MEDICAL TRACK		26
GLBL 2310	Cultural Immersion		3	BIOL 2170	Research Methods	1
HIST 1311	History of World Civilizations to 1500		3	BIOL 2171	Research Methods II	1
HIST 1312	History of World Civilizations since 1500		3	BIOL 2380	Microbiology	3
HIST 2350	An Introduction to the Politics and Culture of Ancient Greece and Rome		3	BIOL 2180	Microbiology Lab	1
HUMA 2355	Foundations of the Humanities		3	CHEM 3410	Organic Chemistry I	4
MUSI 2358	World Music		3	CHEM 3420	Organic Chemistry II	4
PHIL 2315	Introduction to Philosophy		3	CHEM 4430	Biochemistry	4
LAB SCIENCE			8	PHYS 2411	General Physics I	4
CHEM 1410	General Chemistry I		4	PHYS 2412	General Physics II	4
CHEM 1420	General Chemistry II		4	Electives		4 Hours
PUBLIC SPEAKING			3	Electives		4
COMM 1320	Public Speaking		3	You need 4 additional hours to reach your minimum 120 required hrs.		
MATHEMATICS			3	Total Hours		
MATH 2303	Statistics		3	Academic Core for B.S.		44
RESEARCH METHODS OR INTERNSHIP			0	B.S. Neuroscience Major Required Courses		46
Fulfilled in the major				Pre-Medical Track		26
SOCIAL SCIENCE			3	Electives		4
PSYC 1301	General Psychology		3	Total hours required for graduation		120
US HISTORY OR US GOVERNMENT – SELECT ONE			3	Additional Graduation Requirements		
HIST 2311	American History to 1877		3	Minimum total earned hours		120
HIST 2312	American History since 1877		3	Minimum Upper Level hours		36
POLS 2305	United States Government		3	Minimum hours taken at UMHB		30
POLS 2306	Texas State and Local Government		3	Minimum Upper Level hours taken at UMHB		24
FRESHMAN SEMINAR			1	Minimum cumulative GPA		2.00
UMHB 1101	Freshman Seminar		1			
CHAPEL – 1 to 4 credits						
UMHB 1002	Chapel					
Fine Arts Experience – 2 to 8 credits						
UMHB 1005	Fine Arts Experience					

# Neuroscience (B.S.) – Pre-Medical Track

2025-2026 Academic Catalog, Bachelor of Science – Neuroscience, Pre-Medical Track – DEGREE SEQUENCE

## FRESHMAN FALL 15 Hours

BIOL 1350/1150	Biology for Science Majors I	4
CHEM 1410	General Chemistry I	4
MATH 1306	College Algebra	3
ENGL 1321	Rhetoric & Composition I	3
UMHB 1101	Freshman Seminar	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## FRESHMAN SPRING 15 Hours

BIOL 1360/1160	Biology for Science Majors II	4
CHEM 1420	General Chemistry II	4
PSYC 1301	General Psychology	3
ENGL 1322	Rhetoric & Composition II	3
EXAC	Activity Course	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## SOPHOMORE FALL 15 Hours

BIOL 2380/2180	Microbiology	4
<b>NSCI 3310</b>	<b>Neuroscience Foundations*</b>	<b>3</b>
NSCI 4180	Neuroscience Seminar	1
<b>CHEM 3410</b>	<b>Organic Chemistry I</b>	<b>4</b>
ENGL	Literature	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## SOPHOMORE SPRING 16 Hours

BIOL 2170/2171	Research Methods	2
<b>NSCI 3320</b>	<b>Biol Basis of Percept. and Movement*</b>	<b>3</b>
NSCI 4180	Neuroscience Seminar	1
<b>CHEM 3420</b>	<b>Organic Chemistry II</b>	<b>4</b>
MATH 2303	Statistics	3
	Fine Arts	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

## JUNIOR FALL 16 Hours

BIOL 2340/2140	Human A & P I	4
BIOL 3310/3110	Genetics	4
<b>PHYS 2411</b>	<b>General Physics I</b>	<b>4</b>
<b>NSCI 3330</b>	<b>Cognitive Neuroscience*</b>	<b>3</b>
NSCI 4180	Neuroscience Seminar	1
UMHB 1005	Fine Arts Experience	0

## JUNIOR SPRING 16 Hours

BIOL 2341/2141	Human A&P II	4
CHEM 4430	Biochemistry	4
<b>PHYS 2412</b>	<b>General Physics II</b>	<b>4</b>
NSCI 4180	Neuroscience Seminar	1
<b>NSCI 4320</b>	<b>Clinical Neuropathology*</b>	<b>3</b>
UMHB 1005	Fine Arts Experience	0

*Take MCAT or DAT in Spring of Junior year  
Apply to Medical schools in May*

## SENIOR FALL 14 Hours

	Electives (BIOL 3375/3175 recommended)	4
COMM 1320	Public Speaking	3
EXAC	Activity Course	1
	World Cultures	3
CSBS 1311	Engaging the Old Testament	3
UMHB 1005	Fine Arts Experience	0

*Medical school interviews  
before Christmas*

## SENIOR SPRING 13 Hours

<b>BIOL 4340</b>	<b>The Addicted Brain</b>	<b>3</b>
NSCI 4195	Neuroscience Capstone Seminar	1
PSYC 3315	Abnormal Psychology	3
CSBS 1312	Engaging the New Testament	3
	US History or Government	3
UMHB 1005	Fine Arts Experience	0

*Receive acceptance letters from  
Medical schools to start next Fall*

- All courses in BOLD are offered only in the Fall or Spring semester as indicated.
- All courses with an asterisk are offered online through LCMC/RIZE
- Precalculus is a corequisite for PHYS 2411/2412. You must have an ACT math score of at least 24 or a New SAT math score of at least 570 to be able to take this as your first math class at UMHB. Otherwise, you must take MATH 1306 (College Algebra) first. Enrolling in College Algebra requires ACT Math ≥22, New SAT Math ≥530, or Math Review.

**Total Credit Hours: 120**