

NEUROSCIENCE OPTION

This option is offered within the following major(s):

- Biochemistry and Biophysics - College of Science (<http://catalog.oregonstate.edu/college-departments/science/school-life-sciences/biochemistry-biophysics/biochemistry-biophysics-bs-hbs>)

The Neuroscience option is designed for students interested in combining foundational training in chemistry, biology, mathematics, physics, biochemistry, and biophysics with training in psychology, neuroscience, and anatomy and physiology to deepen their understanding of the brain and the nervous system. This option supports students who want to pursue graduate work in neuroscience, biophysics, bioinformatics, and pharmaceutical research as well as work in health professions. Students are strongly encouraged to participate in undergraduate research, and up to three research credits can be applied to the Upper-division Science Elective requirements. Faculty advisors work with students to help them identify electives, research opportunities, and professional internships that align with their interests.

Option Code: 926

Options in the Biochemistry and Biophysics major require a minimum of twenty-one credits to complete in addition to the Biochemistry and Biophysics major. Most students can complete the major and Neuroscience option requirements in four years.

Students may either pursue the Neuroscience, Advanced Biophysics, or Pre-medicine/Biochemistry and Biophysics option with the Biochemistry and Biophysics major - no dual combinations are permitted.

For further information, see MyDegrees or the Department of Biochemistry and Biophysics (<https://biochem.science.oregonstate.edu>) website (<https://biochem.science.oregonstate.edu>).

Code	Title	Hours
Option Core		
BB 360	INTRODUCTION TO NEUROSCIENCE	3
BB 361	NEUROSCIENCE OF SENSORY AND MOTOR SYSTEMS	3
PSY 201	*GENERAL PSYCHOLOGY	3
PSY 202	*GENERAL PSYCHOLOGY	3
Options Science Electives		
Select a minimum of 12 credits from the following:		12
BB 486	ADVANCED MOLECULAR GENETICS	
BB 401	UNDERGRADUATE RESEARCH (1-3 credits allowed) ¹	
or BB 410	INTERNSHIP	
BI 331 & BI 341	ADVANCED HUMAN ANATOMY AND PHYSIOLOGY and ADVANCED HUMAN ANATOMY AND PHYSIOLOGY LABORATORY ²	
CH 441	PHYSICAL CHEMISTRY	
or PH 423	PARADIGMS IN PHYSICS: ENERGY AND ENTROPY	
CH 442	PHYSICAL CHEMISTRY	
or PH 425	PARADIGMS IN PHYSICS: QUANTUM FUNDAMENTALS	
MTH 253	INFINITE SERIES AND SEQUENCES	
or MTH 256	APPLIED DIFFERENTIAL EQUATIONS	
or MTH 264	INTRODUCTION TO MATRIX ALGEBRA	
PSY 330	BRAIN AND BEHAVIOR	
PSY 433	PSYCHOPHARMACOLOGY	
PSY 432	PHYSIOLOGICAL PSYCHOLOGY	
Z 438	BEHAVIORAL NEUROBIOLOGY	

Total Hours

24

* Baccalaureate Core Course (BCC)

¹ BB 401 or BB 410 for 1-3 credits can be taken with approval from the Biochemistry and Biophysics Lead Advisor

² Z 431 may be taken in place of (BI 331 and BI 341)

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