

**BIOLOGICAL SCIENCES ADVANCED PROGRAM**

Grade of C or better required in each course

**PHYSIOLOGY & NEUROBIOLOGY 0404E FALL 2004**

27 minimum required credits

**1. Required courses 16 credits**

Sem	Gr	Cr	
		3	BCHM461 Biochemistry I OR BCHM463 Biochemistry of Physiology
		4	BSCI230 Cell Biology and Physiology
		4	BSCI440 Mammalian Physiology
		3	BSCI453 Cellular Neurophysiology OR BSCI446 Neural Systems
		2	BSCI441 Mammalian Physiology Lab OR BSCI454 Neurobiology Lab

**2. PHNB Area courses 8 credits**

- At least one upper level lab from courses listed below.
- Lab courses offered as separate credit must be taken with lecture as co- or pre-requisite

Sem	Gr	Cr		Sem	Gr	Cr	
		3	BSCI338A Cognitive Neuroscience			3	BSCI447 Endocrinology
		3	BSCI338D Dev. Neurobiology			3	BSCI451 Phys. Chem. for Biologists
		3	BSCI360 Animal Behavior			3	BSCI453 Cellular Neurophysiology*
		3	BSCI370 Principles of Evolution			2	BSCI454 Neurobiology <b>Lab</b> *
		3	BSCI394 Vert. Form and Function			4	BSCI474 Mathematical Biology <b>Lab</b>
		3	BSCI410 Molecular Genetics			3	BCHM462 Biochemistry II
		3	BSCI414 Recombinant DNA <b>Lab</b>			3	BCHM464 Biochemistry <b>Lab</b>
		3	BSCI416 Biol. of Human Genome			3	BCHM465 Biochemistry III
		3	BSCI420 Cell Biology Lectures				<b>Statistics, one course maximum</b>
		4	BSCI421 Cell Biology <b>Lab</b>			3	BIOM 301 Introduction to Biometrics
		3	BSCI422 Principles of Immunology			3	STAT400 Applied Probability & Stat.
		2	BSCI423 Immunology <b>Lab</b>			3	STAT464 Introduction to Biostatistics
		3	BSCI426 Membrane Biophysics				
		3	BSCI430 Developmental Biology				
		3	BSCI433 Biology of Cancer		var.		<b>Special Topics Courses**</b>
		4	BSCI434 Mammalian Histology <b>Lab</b>				BSCI328 Special Topics ENTM Depart.
		2	BSCI441 Mammalian Physiology <b>Lab</b> *				BSCI338 Special Topics BIOL Depart.
		4	BSCI442 Plant Physiology <b>Lab</b>				BSCI348 Special Topics CBMG Depart.
		3	BSCI443 Microbial Physiology				<b>Departmental Honors Seminars***</b>
		3	BSCI446 Neural Systems*			1	BSCI378H
						1	BSCI398H

Total PHNB Area credits \_\_\_\_\_

\* courses taken as required credits above cannot also count as PHNB area credits

\*\* Special Topics courses are allowed if specifically approved for PHNB.

\*\*\* One credit of Honors seminar may be applied to major requirements. Additional Honors seminar credits count as electives.

**3. Enrichment**

Enrichment Course: \_\_\_\_\_

Minimum 3 credit from any 300 or 400 level BSCI, CHEM, or BCHM course.  
 Courses listed above can be used if they are not used to satisfy any category above.  
 Independent study or research credits are acceptable.

Total credits in Advanced Program: \_\_\_\_\_