

PSY Bachelor of Science STEM Requirements
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Actual Subject Code	CourseNumber	Title	Credits	Prerequisite	Restriction
ANS	427	Environmental Toxicology and Society	3	ISB 200 or ISB 202 or ISB 204 or BMB 200 or BS 161 or BS 181H or LB 145 or BS 162 or BS 182H or LB 144	
ANTR	350	Human Gross Anatomy for Pre-Health Professionals	3	BS 161 or BS 181H or LB 145	Not open to freshmen or approval of department.
ANTR	355	Human Gross Anatomy Laboratory	1	ANTR 350 or concurrently	Approval of department.
ANTR	440	Human Anatomic Variation	2	ANTR 350 or KIN 216 or IBIO 328	
BLD	204	Mechanisms of Disease	3	PSL 310 or PSL 431	Not open to seniors.
BS	161	Cell and Molecular Biology	3	(CEM 141 or concurrently) or (CEM 151 or concurrently) or (LB 171 or concurrently) or (CEM 181H or concurrently)	
BS	162	Organismal and Population Biology	3	BS 161 or BS 181H or LB 145	
BS	181H	Honors Cell and Molecular Biology	3	(CEM 141 or concurrently) or (CEM 151 or concurrently) or (CEM 181H or concurrently) or (LB 171 or concurrently)	
BS	182H	Honors Organismal and Population Biology	3	None	
CEM	141	General Chemistry	4	((MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently)) or designated score on Mathematics Placement test	
CEM	142	General and Inorganic Chemistry	3	CEM 141 or CEM 151 or CEM 181H or LB 171	
CEM	151	General and Descriptive Chemistry	4	((MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently)) or designated score on Mathematics Placement test	
CEM	152	Principles of Chemistry	3	CEM 151 or CEM 181H or LB 171	
CEM	181h	Honors Chemistry I	4	(MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently)	Approval of department.
CEM	182h	Honors Chemistry II	4	(CEM 151 or CEM 181H or LB 171) and ((MTH 126 or concurrently) or (MTH 133 or concurrently) or (MTH 153H or concurrently) or (LB 119 or concurrently))	Approval of department.
CMSE	201	Introduction to Computational Modeling	4	MTH 124 or MTH 132 or MTH 152H or LB 118	
CMSE	202	Computational Modeling Tools and Techniques	4	CMSE 201	
CSE	101	Computing Concepts and Competencies	3	None	
CSE	131	Technical Computing and Problem Solving	3	(MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently)	
CSE	201	Fundamentals of Information Technology	3	(CSE 101 or CSE 131) and (MTH 103 or MTH 116 or MTH 124 or MTH 132 or MTH 152H or LB 118)	
CSE	231	Introduction to Programming I	4	(LB 118 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 152H or concurrently)	
ECE	201	Circuits and Systems I	3	((CSE 131 or concurrently) or (CSE 231 or concurrently) or (EGR 102 or concurrently) or (CSE 220 or concurrently)) and ((MTH 234 or concurrently) or (MTH 254H or concurrently) or (LB 220 or concurrently))	

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HNF	385	Public Issues in Nutrition and Health	3	(HNF 150) and ((STT 200 or concurrently) or (STT 201 or concurrently) or (STT 224 or concurrently) or (STT 231 or concurrently) or (STT 421 or concurrently) or (STT 464 or concurrently) or approval of department)	Not open to freshmen.
HNF	456	Eating Disorders	3	HNF 150 or HNF 260	
HNF	457	Sports and Cardiovascular Nutrition	3	(HNF 150) and (PSL 250 or PSL 310 or PSL 431) and (BMB 200 or BMB 401 or BMB 461 or KIN 310)	
HNF	375	Community Nutrition	3	HNF 150	Open to sophomores or juniors or seniors.
IBIO	150	Integrating Biology: From DNA to Populations	3	((MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (LB 118 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test	Not open to undergraduate students in the Department of Integrative Biology.
IBIO	313	Animal Behavior	3	BS 162 or LB 144 or BS 182H	Not open to freshmen.
IBIO	341	Fundamental Genetics	4	(BS 161 or LB 145 or BS 181H) and (BS 162 or LB 144 or BS 182H)	
IBIO	403	Integrative Neurobiology	3	IBIO 402 or PSY 209	
IBIO	320	Developmental Biology	4	(BS 161 or LB 145 or BS 181H) and (BS 162 or LB 144 or BS 182H)	
IBIO	328	Comparative Anatomy and Biology of Vertebrates (W)	4	BS 162 or LB 144 or BS 182H	
IBIO	365	Biology of Mammals	4	BS 162 or LB 144 or BS 182H	
IBIO	402	Neurobiology	3	No longer being offered	
IBIO	405	Neural Basis of Animal Behavior	3	(BS 161 or LB 145 or BS 181H) and (BS 162 or LB 144 or BS 182H)	
IBIO	415	Ecological Aspects of Animal Behavior (W)	3	(IBIO 313) and completion of Tier I writing requirement	
IBIO	445	Evolution (W)	3	(IBIO 341 or CSS 350) and completion of Tier I writing requirement	Not open to freshmen.
LB	144	Biology I: Organismal Biology	4	None	Open to students in the Lyman Briggs College.
LB	145	Biology II: Cellular and Molecular Biology	5	{LB 144 or (BS 162 and BS 172) or (BS 182H and BS 192H)} and (LB 171 or CEM 141 or CEM 181H or CEM 151)	Open to students in the Lyman Briggs College.
LB	155	Introduction to Quantitative Science and Research	3	(MTH 1825 or concurrently) or (MTH 103 or concurrently)	Open to freshmen in the Lyman Briggs College.
LB	171	Principles of Chemistry I	4	MTH 114 or (MTH 116 or concurrently) or (MTH 132 or concurrently) or (MTH 133 or concurrently) or (MTH 152H or concurrently) or (LB 118 or concurrently) or (LB 119 or concurrently)	Open to students in the Lyman Briggs College.
LB	172	Principles of Chemistry II	3	LB 171 or CEM 141 or CEM 151 or CEM 181H	Open to students in the Lyman Briggs College.
MMG	141	Introductory Human Genetics	3	None	Not open to students in many of the sciences. See official description.
MMG	404	Human Genetics	3	IBIO 341	
MMG	404	Human Genetics (Interim Change)	3	IBIO 341	
NEU	215	Neuroscience and Society	3	Completion of Tier I Writing Requirement	

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NEU	310	Psychology and Biology of Human Sexuality	3	(PSY 101 or concurrently) and ((BS 161 or concurrently) or (BS 162 or concurrently) or (LB 144 or concurrently) or (LB 145 or concurrently) or (BS 181H or concurrently) or (BS 182H or concurrently))	
NEU	416	Development of the Nervous System Through the Lifespan	3	NEU 302 or ZOL 402 or PSY 209	Open to undergraduate students in the Program in Neuroscience or in the Department of Integrative Biology or in the Department of Psychology or in the Lyman Briggs Neuroscience Major or in the Lyman Briggs Zoology Coordinate Major.
NEU	301	Introduction to Neuroscience I	3	(BS 161 or BS 181H or LB 145) and (BS 162 or BS 182H or LB 144)	Open to undergraduate students in the Lyman Briggs College or in the College of Natural Science or in the Program in Neuroscience.
NEU	302	Introduction to Neuroscience II	3	NEU 301	Open to undergraduate students in the Lyman Briggs College or in the College of Natural Science or in the Program in Neuroscience.
NEU	311L	Neuroscience Laboratory (W)	2	((NEU 301 or concurrently) and completion of Tier I writing requirement) and (STT 201 or STT 231 or STT 421) and (BS 171 or BS 191H or LB 145)	Open to undergraduate students in the Program in Neuroscience.
NEU	417	Instrumental Methods of Analysis in Neuroscience	3	{{(CEM 251 and CEM 252) or (CEM 351 and CEM 352)} and (PHY 231 and PHY 232)} or (PHY 183 and PHY 184) or (PHY 193H and PHY 294H) or (LB 273 and LB 274)	
NEU	420	Neurobiology of Disease	3	NEU 301 and NEU 302	Open to undergraduate students in the Lyman Briggs College or in the College of Natural Science or in the Program in Neuroscience.
NEU	425	Computational Modeling in Neuroscience	3	NEU 302	Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Major.

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NEU	430	Genomics of Brain Development, Learning, and Behavior	3	(IBIO 341) and (NEU 302 or concurrently)	
NEU	435	Ion Channels of Excitable Membranes	3	(NEU 302 and NEU 311L) or IBIO 402	Open to undergraduate students in the Neuroscience Major or in the Bachelor of Science in Zoology or in the Lyman Briggs Neuroscience Major or in the Lyman Briggs Zoology Coordinate Major.
NEU	440	Synaptic Transmission	3	NEU 301	Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Major.
NEU	445	Analysis of Neural Activity Data (W)	3	((NEU 301 and (NEU 302 or concurrently)) and completion of Tier I writing requirement) and (MTH 124 or MTH 132 or MTH 152H or LB 118) and (STT 201 or STT 231 or STT 421 or PSY 295)	
PHM	211	Pharmacology and Toxicology in Society	2	None	
PHM	431	Pharmacology of Drug Addiction	3	Rec: Background in Zoology, Human Bio, PSY, BioCEM, or PSL	
PHM	440	Principles of Drug Action	1	Rec: Background in CEM, Molecular Bio, BioCEM, PSL and/or Human Bio	Not open to master's students in the Integrative Pharmacology Major or in the Pharmacology and Toxicology Major.
PHM	450	Introduction to Chemical Toxicology	3	(BS 161 and BS 162 and CEM 251) or (LB 144 and LB 145 and CEM 251)	Not open to freshmen or sophomores.
PHM	350	Introductory Human Pharmacology	3	(PSL 250 or PSL 310) or (PSL 431 and PSL 432)	Not open to freshmen.
PHM	321	Common Drugs	3	(PSL 250) or (PSL 431 and PSL 432) or PSL 310	Open to juniors or seniors or approval of department.
PHM	351	Fundamentals of Drug Safety	2	(BS 161 and BS 162) or (LB 144 and LB 145) or (BS 181H and BS 182H)	Open to juniors or seniors or approval of department.
PHM	421	Clinical Toxicology	3	{{(CEM 251 or CEM 351) and PSL 310} or (PSL 431 and PSL 432)	Open to seniors or approval of department.
PHM	422	Fundamentals of Neuropharmacology	2	NEU 301 or PSL 250 or PSL 310 or PSL 431	Open to juniors or seniors or approval of department.
PLB	400	Introduction to Bioinformatics	3	(STT 200 or STT 201 or STT 231 or STT 421) and (PLB 203 or MMG 201 or BMB 200 or BS 161)	
PLB	400	Introduction to Bioinformatics	3	(STT 200 or STT 201 or STT 231 or STT 421) and (PLB 203 or MMG 201 or BMB 200)	

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PSL	250	Introductory Physiology	4	None	Not open to students in the Physiology major.
PSL	310	Physiology for Pre-Health Professionals	4	BS 161 or BS 181H or LB 145 or ANTR 350	
PSL	429	Biomedical Imaging Methods	3	(CEM 142 or CEM 152 or CEM 182H or LB 172) and (PHY 184 or PHY 184B or PHY 232 or PHY 294H or LB 274)	
PSY	333	The Neurobiology of Food Intake and Overeating	3	PSY 101	
PSY	413	Laboratory in Behavioral Neuroscience (W)	4	(PSY 209 or IBIO 402) and ((PSY 295 or STT 231) and completion of Tier I writing requirement)	
STT	464	Statistics for Biologists	3	MTH 103 or MTH 110 or MTH 116 or MTH 132	
STT	301	Computational Methods for Data Science	3	(MTH 132 or LB 118 or MTH 152H) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 421 or STT 441)	