

Bachelor of Science in Biology

Biomedical Sciences Emphasis

2015 - 2016



GENERAL EDUCATION & INSTITUTIONAL REQUIREMENTS

	Requirement	Course	CR	Prerequisites & Notes	Grade	Semester
<input type="checkbox"/>	Computer Literacy	CIS 1200 <i>or</i> CIS 1201 <i>or</i> (CS 1400 and CS 1410)	0-6			
<input type="checkbox"/>	English	ENGL 1010 <i>or</i> ENGL 1010A <i>or</i> ENGL 1010D	0-4	See Catalog for prerequisites		
<input type="checkbox"/>	English	ENGL 2010 <i>or</i> ENGL 2010A	3	ENGL 1010/A/D (C or higher) or ACT \geq 28; pre/corequisite LIB 1010		
<input type="checkbox"/>	Information Literacy	LIB 1000 <i>or</i> LIB 1010	0-1	English placement score for class		
<input type="checkbox"/>	Mathematics	<i>recommended: MATH 1210</i>	3-5	Math placement score or prerequisite		
<input type="checkbox"/>	American Institutions		3-6	Reading placement score		
<input type="checkbox"/>	Life Sciences	<i>recommended: BIOL 1610</i>	3-10			
<input type="checkbox"/>	Physical Sciences	<i>recommended: CHEM 1210</i>	3-5			
<input type="checkbox"/>	Laboratory Science	<i>recommended: BIOL 1615</i>	0-1			
<input type="checkbox"/>	Fine Arts		3			
<input type="checkbox"/>	Literature / Humanities		3			
<input type="checkbox"/>	Social & Behavioral Sciences		3			
<input type="checkbox"/>	Exploration	<i>recommended: PHYS 2010 or 2210</i>	3-5	3-5 credits, prefix not used in other GE		
<input type="checkbox"/>	Global & Cultural Perspectives		0-3	- Complete two with different prefixes		
<input type="checkbox"/>	Global & Cultural Perspectives		0-3	- Can share credit with other GE		

OR

<input type="checkbox"/>	Associate of Arts or Associate of Science degree	Date:	USHE? Y / N
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BIOLOGY CORE REQUIREMENTS

17 credits

<input type="checkbox"/>	BIOL 1610/15 <i>or</i> 1610A/15A	Prin. of Biology I / Lab <i>or</i> Honors	4/1	GE: Life Sciences; GE: Laboratory Science		
<input type="checkbox"/>	BIOL 1620/25 <i>or</i> 1620A/25A	Prin. of Biology II / Lab <i>or</i> Honors	4/1	BIOL 1610/15 or BIOL 1610A/15A (both \geq C)		
<input type="checkbox"/>	BIOL 3010	Evolution	3	BIOL 1620/25 or BIOL 1620A/25A (both \geq C)		
<input type="checkbox"/>	BIOL 3030	Molecular Genetics	4	BIOL 1620/25 or BIOL 1620A/25A (both \geq C)		

MATHEMATICS & PHYSICAL SCIENCE REQUIREMENTS

38 credits

<input type="checkbox"/>	CHEM 1210/15	Principles of Chemistry I / Lab	4/1	MATH 1050 (grade \geq C) or plcmnt score		
<input type="checkbox"/>	CHEM 1220/25	Principles of Chemistry II / Lab	4/1	CHEM 1210/15 (grade \geq C)		
<input type="checkbox"/>	CHEM 2310/15	Organic Chemistry I / Lab	4/1	CHEM 1220/25 (Grade C or higher)		
<input type="checkbox"/>	CHEM 2320/25	Organic Chemistry II / Lab	4/1	CHEM 2310/15 (Grade C- or higher)		
<input type="checkbox"/>	CHEM 3510	Biochemistry I	3	BIOL 1610/15 (or hon) & CHEM 2320/25		
<input type="checkbox"/>	MATH 1210	Calculus I	5	See Catalog for prereq; GE: Math		

Complete *one (1)* of the following series of courses:

<input type="checkbox"/>	PHYS 2010/15 <i>and</i> PHYS 2020/25	College Physics I / Lab <i>and</i> College Physics II / Lab	4/1 4/1	MATH 1060 <i>or</i> MATH 1065 PHYS 2010		
<i>Or</i>						
<input type="checkbox"/>	PHYS 2210/15 <i>and</i> PHYS 2220/25	Physics/Sci Engineers I / Lab <i>and</i> Physics/Sci Engineers II / Lab	4/1 4/1	MATH 1210 <i>or</i> MATH 1220 MATH 1220 <i>and</i> PHYS 2210		

ADDITIONAL BIOLOGY REQUIREMENTS

17 credits

<input type="checkbox"/>	BIOL 2320/25	Human Anatomy/Lab	3/2	recommended: BIOL 1610/15		
<input type="checkbox"/>	BIOL 2420/25 <i>or</i> BIOL 4500/05	Human Physiology / Lab Comparative Vertebrate Phys / Lab	3/1	recommended: BIOL 1610/15 BIOL 3010, 3030; CHEM 1220 (all \geq C)		
<input type="checkbox"/>	BIOL 3150/55	Biostatistics / Lab	2/1	BIOL 3010, 3030, 3040/45; MATH 1050 (all \geq C)		
<input type="checkbox"/>	BIOL 3450/55 <i>or</i> BIOL 3550/55	General Microbiology / Lab <i>or</i> Eukaryotic Cell Biology / Lab	3/1	BIOL 3010, 3030, CHEM 2310/15 (all \geq C)		

ADDITIONAL BIOLOGY REQUIREMENTS continued						
	Course Number	Description	CR	Prerequisites & Notes	Grade	Semester
<input type="checkbox"/>	BIOL 4910 <i>or</i> 4920	Senior Seminar I <i>or</i> Senior Seminar II	1	ENGL 2010/A, & Advanced Standing		
SOCIAL & BEHAVIORAL SCIENCES						9 credits
<input type="checkbox"/>	PSY 3400	Psychology of Abnormal Behavior	3	PSY 1010/A & (PSY 2000 or BIOL 3110) (all ≥C)		
<input type="checkbox"/>	PSY 3460	Health Psychology	3	PSY 1010/A & (PSY 2000 or BIOL 3110) (all ≥C)		
<input type="checkbox"/>	PSY 3710	Behavioral Neuroscience	3	See Catalog		
BIOLOGY ELECTIVES						12 credits
Complete <i>12 credits</i> from the following or from any upper-division BIOL course listed above not already used to fulfill a requirement. At least <i>4 credits</i> must have a BIOL prefix.						
<input type="checkbox"/>	BIOL 3000R	Rural Health Scholars	1	2 credits maximum		
<input type="checkbox"/>	BIOL 3040/45	General Ecology / Lab	3/1	BIOL 1620/25 <i>or</i> BIOL 1620A/25A (both ≥C)		
<input type="checkbox"/>	BIOL 3100	Bioethics	3	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3110	Scientific Writing	2	See Catalog		
<input type="checkbox"/>	BIOL 3140/45	Comp. Vertebrate Anatomy / Lab	3/1	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3200/05	Invertebrate Zoology / Lab	3/1	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3230R	Cadaver Practicum	2	BIOL 2320/25 and instructor permission		
<input type="checkbox"/>	BIOL 3250	Cancer Biology	2	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3360	Developmental Biology	3	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3460	Biology of Infectious Disease	3	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 3470	Introduction to Immunology	3	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 4190/95	Mammalian Histology / Lab	3/1	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 4230/35	General Parasitology / Lab	3/1	BIOL 3010, BIOL 3030 (all ≥C)		
<input type="checkbox"/>	BIOL 4400	Pathophysiology	3	BIOL 2320/25 and BIOL 2420/25 (all ≥C)		
<input type="checkbox"/>	BIOL 4520/25	Psychobiology/Lab	3/1	See Catalog		
<input type="checkbox"/>	BIOL 4930R	Senior Thesis	1-4	Senior, inst perm, BIOL 3110 (or concurrent)		
<input type="checkbox"/>	PSY 3040	Psychology of Gender	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3200	Development in Infancy & Childhood	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3220	Adolescence & Emerging Adulthood	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3230	Adult Development & Aging	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3400	Psychology of Abnormal Behavior	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3410	Social Psychology	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3420	Psychology of Culture & Diversity	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3440	Child & Family Mental Health	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3450	Into Child Life Theory & Practice	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3460	Health Psychology	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 3720	Psychopharmacology	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 4130	Interpersonal Neuroscience	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 4140	Cognitive Neuroscience	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 4145	Cognitive Neuroscience of Attention	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 4150	Sensation & Perception	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	PSY 4440	Addiction	3	See Catalog for PSY prerequisites		
<input type="checkbox"/>	CHEM 3510/15	Biochemistry I / Lab	3/1	BIOL 1610/A, BIOL 01615A, CHEM 2320/25		
<input type="checkbox"/>	CHEM 3520/25	Biochemistry II / Lab	3/1	CHEM 33510/15 (C or higher)		
GRADUATION REQUIREMENTS						
Subtract duplicated and developmental (0990 and below) credits. Minimum 120 college-level credits (1000 and above). At least 40 upper-division credits (3000 and above). At least 30 upper-division credits at DSU for institutional residency Cumulative GPA 2.0 or higher. Grade C or higher required (not C-) in each Program Requirement, Core Discipline Requirement, and Biology Elective Requirement course. Maximum 6 total credits of BIOL 4810R, BIOL 4820R, BIOL 4830R, and/or BIOL 4930R may be used toward Biology requirements.						