MARSHALL UNIVERSITY-BIOLOGICAL SCIENCES MAJOR

Biology Requirements – Major GPA Requirement is a 2.0 in ALL courses below					rade	Credits
BSC120 Principles of Biology I (fall & spring)						4
BSC121 Principles of Biology II (fall & spring)						4
BSC 491 Capstone (junior/senior year)						2
(For an area of emphasis option see below) Choose three of the following: BSC302 Microbiology, BSC320 Ecology, BSC322 Cell Biology, BSC324 Genetics		1				
		SC320 Ecology, BSC322	2			
			3			
In addition to the required						
study, is required to earn th						
to graduate.						
Chemistry Requirement TOT					OGY CR	EDITS
CHM211 Principles of Che	mistry I and CHM217 I Lab.	(prereq. ACT 23 or CHM 1	111)			3, 2
CHM212 Principles of Chemistry II and CHM218 II Lab						3, 2
CHM355 Organic Chemistry I						3
CHM356 Organic Chemistry II and CHM361 Organic Chemistry Lab						3, 3
Mathematics Requiremen	t (depending on ACT/SAT s	core)		r		Γ
MTH 229; OR MTH 132 A	ND MTH 140; OR MTH 122	AND 127/130, AND 140				
Physics Requirement Pre	erea _MTH 122 & 127 130 or 14	10 OR MTH 132 OR MTH 220				
PHY201 College Physics I	and PHY 202 Lab					3 1
PHY 203 College Physics II and PHY 204 Lab						3,1
1111 200 Conege 1 hysics 1.	The following areas of emphasi	s are optional reautring the co	ourses listed under each l	headino		0,1
Cell/Molecular/Medical Biology	Ecology and Evolutionary Biology	Microbiology	Natural History and Conse	ervation	Plant Biolo	gy
BSC302 Microbiology (f & s)	BSC320 Ecology	BSC302 Microbiology (f & s)	BSC320 Ecology (f & s)		BSC322 Ce	ll Biology (f & s)
BSC310 Comp Vertebrate Anat. (s) BSC322 Cell Biology (f & s)	BSC413 Organic Evolution (f) BSC417 Biostatistics (f & s)	BSC304 Microbiology Lab (f & s) BSC324 Genetics (f & s)	BSC413 Organic Evolution BSC417 Biostatistics (f & s)	(f)	BSC416 Pla BSC420 Pla	nt Taxonomy (f) nt Physiology (s)
BSC324 Genetics (f & s)	BSC425 Biosystematics (f)	BSC442 Advanced Microbiology	BSC425 Biosystematics (f)		BSC420 Plant Ecology (s) BSC430 Plant Ecology (s)	
Prereq. is BSC 322	Plus <u>two of</u> :	CHM365 Biochemistry (f)	Wildlife	1		
CHM365 Biochemistry	BSC302 Microbiology (f & s) BSC322 Cell Biology (f & s)	Plus one of:	Plus two of:		Plus two of	
Plus <u>one</u> of:	BSC324 Genetics (f & s)	BSC320 Ecology (f & s)	BSC302 Microbiology (f &	s)	BSC302 Mi	crobiology (f & s)
BSC420 Plant Physiology (s) BSC422 Animal Physiology	Plus four of:	BSC322 Cell Biology (f & s)	BSC322 Cell Biology (f & s BSC324 Genetics (f & s))	BSC320 Ec BSC324 Ge	ology (f & s) netics (f & s)
	BSC302 Microbiology					Ċ
Plus three of:	BSC304 Microbiology Lab BSC310 Comp Vertebrate Anat. (s)	Plus <u>three</u> of: BSC417 Biostatistics (f & s)	Plus <u>three</u> of: BSC302 Microbiology (f &	s)	BSC302 Mi	f: crobiology (f & s)
BSC301 Vertebrate Embryology	BSC312 Invertebrate Zoology (f)	BSC418 Medical Mycology	BSC304 Microbiology Lab	(f & s)	BSC304 Mi	crobiology Lab (f & s)
BSC304 Microbiology Lab BSC413 Organic Evolution (f)	BSC405 Economic Botany (s) BSC406 Herpetology (f)	BSC424 Animal Parasitology (s) BSC438 Emerging Infect Diseases	BSC310 Comp Vertebrate A BSC312 Invertebrate Zoolog	znat. (s) zy (f)	BSC405 EC BSC410 Re	mote Sensing (f)
BSC417 Biostatistics f & s)	BSC408 Ornithology (s)	(f)	BSC405 Economic Botany (s)	BSC411 Di	gital Image Processing (s)
BSC424 Animal Parasitology (s) BSC426 Medical Entomology	BSC410 Remote Sensing (I) BSC411 Digital Image Processing	BSC440 Medical Microbiology BSC448 Immunology	BSC406 Herpetology BSC408 Ornithology		BSC412 Bio BSC445 Mi	ogeograpny crobial Ecology
BSC428 Neuroscience (s)	(s)	BSC481 DNA Cloning	BSC410 Remote Sensing		BSC460 Co	nservation
BSC438 Emerging Infect Diseases (f)	BSC416 Plant Taxonomy (f) BSC422 Animal Physiology	CHM467 Intermediate Biochem. (s) Prereg. is CHM 365 Biochemistry	BSC411 Digital Image Proce BSC416 Plant Taxonomy	essing	BSC481 DN *CHM365 I	A Cloning (s) Biochemistry (f)
BSC442 Advanced Microbiology	BSC424 Animal Parasitology (s)	i i i i i i i i i i i i i i i i i i i	BSC422 Animal Physiology		*Prereq. is	CHM 356
BSC448 Immunology BSC454 Advanced Molecular Bio	BSC430 Plant Ecology (s) BSC456 Genes & Development (s)		BSC424 Animal Parasitolog BSC430 Plant Ecology (s)	y (s)		
BSC456 Genes & Development (s)	BSC460 Conservation		BSC456 Genes & Develop (s)		
	CHM365 Biochemistry (f)		*CHM365 Biochemistry (f) *Prereq. is CHM 356)			
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*<u>Typically</u> offered (f) = fall (s) = spring

2017-18

MARSHALL UNIVERSITY CORE REQUIREMENTS

Must have a GRADE in ALL required courses (except for AP credit)

A 2.00 GPA is required for graduation

	3 hours, First Year Seminar
	6 hours, Critical Thinking (CT) (May be satisfied with major coursework)
ORE II,	25 CREDIT HOURS – Must be 100 – 299 level
	6 hours, Composition (Must earn a C or better) ENG101/101A/101P 3 hrs AND ENG 102/201 3 hrs OR ENG 200H/201H 6 hrs
	3 hours, Communications (Choose one) CMM 103 CMM 104H CMM 207
	3 hours, Fine Arts (<i>Choose one</i>) ART 112 MUS 142 MUS 200 MUS 210* THE 112
	For a complete listing visit http://muww-new.marshall.edu/gened/core-ii-courses/ .Offerings vary each semester.CL 210*, 230, 231, 232*, 233*, 234, 235, 236*, 237*, 250CMM 205*, 239, 240ENG 200*, 200H*, 202, 203, 205*, 206, 209, 210, 211, 212, 213, 214, 215, 220, 221, 225, 231, 232, 235, 240, 241, 242FRN 240GER 240HON 200JMC 101JPN 240, 245*, 250*PHL 200, 200H, 201, 250RST 205, 206, 220, 225, 250SPN 240, 245*
	3 hours, Math (COS requires MTH 140 or MTH 229*. CJ Majors - MTH 160* and NRRM majors - MTH 127/130 or MTH 160)
	 4 hours, Natural or Physical Sciences (Choose one from list below) For a complete listing visit http://muwww-new.marshall.edu/gened/core-ii-courses/.Offerings vary each semester. BSC 104, 105, 120, 121, 228, 250 CHM 109, 211 AND 217, 212 AND 218 GLY 100 AND 210L; 110 AND 210L; 150 AND 150L; 200 AND 210L IST 111, 224 PHY 101 AND 101L, 201 AND 202, 203 AND 204, 211 AND 202 or 212, 213 AND 204 or 214 PS 109 AND 109L, 110 AND 110L
	3 hours, Social Science (Choose one from list below) For a complete listing visit http://muwww-new.marshall.edu/gened/core-ii-courses/.Offerings vary each semester. ANT 201*, 201H* CJ 200, 211, 221, 231 CMM 213, 255 GEO 100*, 203, 206, 222 HST 101*, 102, 103*, 103H*, 125, 200, 205, 206, 208*, 219*, 220, 221, 223, 230*, 231*, 231H, 250*, 260, 265 PSC 104* 105* 202 207* 209* 211 233 PSX 201* 201H* 223 SOC 200* 200H*

 5 nours, Municultural <i>or</i> International studies
 6 hours, Writing Intensive (WI) (May be satisfied with major coursework)
 Capstone 2 – 3 hours (Will be satisfied in the major)

TOTAL HOURS REQUIRED – AT LEAST **120** OF WHICH **40** MUST BE 300 – 499 LEVEL (transfer courses may not count as upper level) Cannot use the same course twice to count toward the 120 credit hour requirement.

Total Hours Completed

300-400 level hours Completed

(must manually subtract repeated courses)

 300-400 level hours Needed
 JDE

 300-400 level hours Needed
 SDE

Catalog Year: 2017 - 2018

Students are responsible for knowing graduation requirements and tracking their progress.

This document is for advising purposes only, and shall not be construed to bind the University, except to the extent that it accurately reflects policies and procedures that the University may from time to time establish or modify. Consult the Marshall University's Undergraduate Catalog for official policies, procedures, and requirements.