Degree Worksheet for the College of Arts and Sciences: 2021-2022 **B.S. APPLIED MATHEMATICS - Biology Concentration**

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COLLEGE of ARTS & SCIENCES

Language Requirement

All students who major in the College of Arts & Sciences are required to APPLIED MATHEMATICS demonstrate competence in a second language. For complete details: https://www.gonzaga.edu/college-of-arts-sciences/about/information-forstudents/language-requirement-information

Credits Sem/Y

B.S. APPLIED MATHEMATICS: 68 CREDITS Biology Concentration

34 Credits

	LOWEF	18 Credits				
	Course	Course Title	Credits	Credits Grade		
	MATH	157 Calculus & Analytic Geometry I	4			
/Yr	MATH	258 Calculus & Analytic Geometry II	4			
	MATH	259 Calculus & Analytic Geometry III	4			
	MATH	260 Ordinary Differential Equations	3			
	CPSC	121 Computer Science I	3			

UNIVERSITY CORE REQUIREMENTS: FUNDAMENTAL CORE COURSES

ENGL 101 Writing (fulfills 3 credits Writing Enriched)* 3 MATH 350 Elementary Numerical Analysis 3 Reasoning MATH 413 Real Analysis I 3 3 PHIL 101 Reasoning 3 MATH 413 Real Analysis I 3 PHIL 101 Reasoning 3 MATH 413 Real Analysis I 3 First Year Seminar 0 MATH 496 Comprehensive-Applied Math 1 Dept. 193 3 One of the following two courses: 3 Credits Communication & Speech 3 MATH 422 Mathematical Statistics 3 1 COMM 100 Communication & Speech 3 MATH 422 is chosen, then one MATH 400 level elective may be replaced by a MATH 300 level elective. 3 1 MATH (must be above Math 100) 3 3 3 1 Scientific Inquiry (2cr + 1cr lab) BIOL or CHEM or PHYS 104/104L (taken year 1 or 2) 3 3 0 3 3 3 1 Year 2: Being & Becoming Credits Sem/Yr MATH 440 Foundations of Applied Math 3 1 3 1 Philosophy of Human Nature 3 MATH 442 Nathematics 400 Level Electives: 6 Credits 6 Credits	FUNDAMENTAL CORE COURSES			UPPER DIVISION	13 (C <u>redits</u>
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https://my.gonzaga.edu/academics/undergraduate-programs/general-degree- BIOL 206/206L Ecology/Lab 4				_		Credits
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requirements-procedures/university-core BIOL 207/207L Genetics/Lab 4		<u>neral-de</u>	<u>gree-</u>		4	
	<u>requirements-procedures/university-core</u>			BIOL 207/207L Genetics/Lab	4	

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Degree Worksheet for the College of Arts and Sciences: 2021-2022 B.S. APPLIED MATHEMATICS - Biology Concentration

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Biology 300 BIOL	6С 3	credits				
BIOL		3				
Cann	Cannot double count with another requirement.					
BIOL 303	Population Ecology					
BIOL 313	Animal Behavior					
BIOL 323	Conservation Biology					
BIOL 331	Parasitology					
BIOL 333	Community Ecology					
BIOL 334	Advanced Evolution					
BIOL 335	Advanced Genetics: Selected Topics					
BIOL 337	Developmental Biology					
BIOL 338	Histology					
BIOL 340	Field Botany					
BIOL 341	Human Physiology					
BIOL 343	Plant Community Ecology					
BIOL 344	GIS & Ecological Techniques					
BIOL 357	Principles of Wildlife Management					
BIOL 360	Plant Biology					
BIOL 367	Entomology					
BIOL 371	Vertebrate Biology & Anatomy					
BIOL 399	Advanced Topics					
BIOL 403	Marine Biology					
BIOL 420	Physiological Ecology					
BIOL 441	Advanced Physiology					
BIOL 451	Comparative Endocrinology					
(other cou	irses may be considered on a case-by-case bo	ısis)				

Check the catalog for pre-requisites when selecting electives