Degree Worksheet for the College of Arts and Sciences: 2021-2022

B.S. MATHEMATICS

COLLEGE of ARTS & SCIENCES Language Requirement

All students who major in the College of Arts & Sciences are required to 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/Yr

B.S. MATHEMATICS:

LOWER DIVISION

		12 C	redits
Course	Course Title	Credits	Grade
MATH	157 Calculus & Analytic Geometry I	4	
MATH	258 Calculus & Analytic Geometry II	4	
MATH	259 Calculus & Analytic Geometry III	4	

40 CREDITS

9 Credits

UNIVERSITY CORE REQUIREMENTS:

FUNDAMENTAL CORE COURSES				UPPER DIVISION		
Year 1: Understanding & Creating		_				
Writing	Credits Se	m/Yr	Course	Course Title		
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3		MATH	301 Fundamentals		
Reasoning			MATH	339 Linear Algebra		
PHIL 101 Reasoning	3 🗆		MATH	413 Real Analysis I		
First Year Seminar			MATH	437 Abstract Algeb		
193	3		MATH	499* Comprehensi		
Communication & Speech				*Majors take fall sem		
COMM 100 Communication & Speech	3					
Math			Any tv	vo 400-Level Math		
MATH (must be above Math 100)	3		•	(does NOT in		
Scientific Inquiry (2cr + 1cr lab)			Course	Course Title		
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3		MATH			
Year 2: Being & Becoming			MATH			
Christianity & Catholic Traditions	Credits Se	m/Yr				
RELI (see approved list)**	3					
Philosophy of Human Nature			Mathe	matics Electives:		
PHIL 201 Philosophy of Human Nature	3 [Course	Course Title		
Year 3: Caring & Doing			MATH			
World/Comparative Religion	Credits Se	m/Yr	MATH			
RELI (see approved list)** (fulfills 3cr Global Studies)		1	MATH			
Ethics			1417 (1111	Minimum of 9 cre		
PHIL 301 Ethics or RELI 330 Principles-Christian Morali	tv 3			* One of these courses		
Year 4: Imagining the Possible	ty J			(does NOT in		
Core Integration Seminar	Credits Se	m/Yr		Cannot double count		
492	3		МАТН	321 Statistics for Ex		
NOTE: some courses have pre-requisites, check the catalo		,		328 Operations Res		
THO 12. Some courses have pre requisites, theek the cutulo	g carejany			341 Modern Geom		
► BROADENING COURSES - see approved list**				350 Elementary Nu		
Social & Behavioral Science	Credits Se	m/Vr		351 Combinatorics		
Social & Bellaviolal Science	3	111/11		360-363 Selected T		
Literature	<u> </u>			413 Real Analysis I		
Literature	3 🗆			414 Real Analysis II		
History				417 Complex Varia		
History	3 🗆			421 Probability The		
Fine Auto 9 Decima	3			421 Probability The		
Fine Arts & Design	2 □					
	3			423 Stochastic Prod		
A DECUMEN COURSE DECICULATIONS	11 * *			437 Abstract Algeb		
REQUIRED COURSE DESIGNATIONS - see approve				438 Abstract Algeb		
*Writing Enriched	Credits Se	m/Yr		440 Foundations of		
	9 total			450-453 Selected T		
Social Justice				454 Partial Differen		
	3 total			457 Number Theor		
*Global Studies				459 Topology		
	6 total			490 Directed Readi		
** for list of approved PELL Broadening & Designated co.	urcac caa.		$\Lambda\Lambda\Lambda$	107 Mathematics I		

UPPER DIVISION

			13 Credits		
	Course	Course Title	Credits	Credits Grade	
1	MATH	301 Fundamentals of Mathematics	3		
	MATH	339 Linear Algebra	3		
	MATH	413 Real Analysis I	3		
	MATH	437 Abstract Algebra I	3		
	MATH	499* Comprehensive-Math	1		
- 1					

^{*}Majors take fall semester of their final year

Any two 400-Level Mathematics courses: **6 Credits**

(does NOT include MATH 432)

Course	Course Title	Credits Grade
MATH		3
MATH		3

1	Minimum of 9 credits from the following*:				
1	MATH		3		
	MATH		3		
	MATH		3		
l	Course	Course Title	Credits Grade		

* One of these courses may be replaced by MATH 260 (does NOT include MATH 432)

Cannot double count with a course used above

MATH 321 Statistics for Experimentalists

MATH 328 Operations Research

MATH 341 Modern Geometry

MATH 350 Elementary Numerical Analysis

MATH 351 Combinatorics & Graph Theory

MATH 360-363 Selected Topics

MATH 417 Complex Variables

MATH 421 Probability Theory

MATH 422 Mathematical Statistics

MATH 423 Stochastic Processes

MATH 437 Abstract Algebra I

MATH 438 Abstract Algebra II

MATH 440 Foundations of Applied Math

MATH 450-453 Selected Topics

MATH 454 Partial Differential Equations

MATH 457 Number Theory & Cryptography

MATH 490 Directed Reading

MATH 497 Mathematics Internship

**for list of approved RELI, Broadening & Designated courses, see : https://my.gonzaga.edu/academics/undergraduate-programs/general-degreerequirements-procedures/university-core