# Degree Worksheet for the College of Arts and Sciences: 2023-2024 **B.S. MATHEMATICS**

COLLEGE of	ARTS 8	& SCIENCES
Language	Requir	rement

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

6 total

#### **B.S. MATHEMATICS: 40 CREDITS**

#### **LOWER DIVISION**

		12 Cr	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	

## **UNIVERSITY CORE REQUIREMENTS:**

### **FUNDAMENTAL CORE COURSES**

TONDAMENTAL CORE COORSES			
Year 1: Understanding & Creating			
Writing	Credits Sem/Yr		
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3		
Reasoning			
PHIL 101 Reasoning	3		
First Year Seminar			
193	3		
Communication & Speech			
COMM 100 Communication & Speech	3		
Math			
MATH (must be above Math 100)	3		
Scientific Inquiry (2cr + 1cr lab)			
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3		
Year 2: Being & Becoming			
Christianity & Catholic Traditions	Credits Sem/Yr		
RELI (see approved list)**	3		
Philosophy of Human Nature			
PHIL 201 Philosophy of Human Nature	3		
Year 3: Caring & Doing			
World/Comparative Religion	Credits Sem/Yr		
RELI (see approved list)** (fulfills 3cr Global Studies)*	3		
Ethics			
PHIL 301 Ethics or RELI 330 Principles-Christian Morality	3		
Year 4: Imagining the Possible			
Core Integration Seminar	Credits Sem/Yr		
492	3		
NOTE: some courses have pre-requisites, check the catalog carefully!			

► BROADENING COURSES - see approved list**		
Social & Behavioral Science	Credits Sem/Yr	
	3	
Literature		
	3	
History		
	3	
Fine Arts & Design		
	2	

### ► REQUIRED COURSE DESIGNATIONS - see approved list\*\*

*Writing Enriched	Credits Sem/Yr
	9 total
Social Justice	
	3 total
*Global Studies	

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

#### **UPPER DIVISION**

			13 CI	eaits
	Course	Course Title	Credits	Grade
	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				

<sup>\*</sup>Majors take fall semester of their final year

]	Select	one of the following five (5) courses:	3 C	redits
	Course	Course Title	Credits	Grade
	MATH	414 Real Analysis II		
	MATH	417 Complex Variables		
	MATH	438 Abstract Algebra II		
	MATH	457 Number Theory & Cryptography		
	MATH	459 Topology		, in the second

r	Select two 300-400 level MATH electives:	6 Cı	redits
	(these may also come from the list of 5 above)	Credits	Grade
	MATH	3	
٦	MATH	3	

Cannot double count with a course used above

### Select two 400-level MATH electives:

	Credits Grade
MATH	3
MATH	3

**6 Credits** 

MATH 260 may be used as one 300-400 level elective.

MATH 335, 432, and 496 cannot be used for MATH electives.

A maximum of three (3) credits from the following courses may be counted toward Mathematics electives:

MATH 365 Math Seminar (may be taken for credit only once)

MATH 390 Directed Reading

MATH 490 Directed Reading

MATH 497 Mathematics Internship