

Degree Worksheet for the College of Arts and Sciences: 2023-2024

B.A. MATHEMATICS with STATISTICS CONCENTRATION

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-for-students/language-requirement-information>

Credits Sem/Yr

UNIVERSITY CORE REQUIREMENTS:

► FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

<i>Writing</i>	Credits Sem/Yr
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3
<i>Reasoning</i>	
PHIL 101 Reasoning	3
<i>First Year Seminar</i>	
Dept. 193	3
<i>Communication & Speech</i>	
COMM 100 Communication & Speech	3
<i>Math</i>	
MATH (must be above Math 100)	3
<i>Scientific Inquiry (2cr + 1cr lab)</i>	
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3

Year 2: Being & Becoming

<i>Christianity & Catholic Traditions</i>	Credits Sem/Yr
RELI (see approved list)**	3
<i>Philosophy of Human Nature</i>	
PHIL 201 Philosophy of Human Nature	3

Year 3: Caring & Doing

<i>World/Comparative Religion</i>	Credits Sem/Yr
RELI (see approved list)** (fulfills 3cr Global Studies)*	3
<i>Ethics</i>	
PHIL 301 Ethics or RELI 330 Principles-Christian Morality	3

Year 4: Imagining the Possible

<i>Core Integration Seminar</i>	Credits Sem/Yr
Dept. 432	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	
	3

► REQUIRED COURSE DESIGNATIONS - see approved list**

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

****for list of approved RELI, Broadening & Designated courses, see :**

<https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-requirements-procedures/university-core>

B.A. MATHEMATICS:

40 CREDITS

with STATISTICS CONCENTRATION

LOWER DIVISION

12 Credits

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	

UPPER DIVISION

7 Credits

Course	Course Title	Credits	Grade
MATH 301	Fundamentals of Mathematics	3	
MATH 339	Linear Algebra	3	
MATH 499	Comprehensive-Math*	1	

* Majors take fall semester of their final year.

One of the following two courses:

3 Credits

Course	Course Title	Credits	Grade
MATH 413	Real Analysis I	3	
MATH 437	Abstract Algebra I	3	

One Mathematics 300-400 level elective:

3 Credits

Course	Course Title	Credits	Grade
MATH		3	

Cannot double count with a required course.

STATISTICS CONCENTRATION

15 Credits

	3 Credits
MATH 421 Probability Theory	3

Select one of the following two courses:

3 Credits

MATH 321	Statistics for Experimentalists	
MATH 422	Mathematical Statistics	

Select one of the following two courses:

3 Credits

MATH 425	Applied Statistical Models	
MATH 426	Experimental Design	

Two Statistics Electives:

6 Credits

MATH		

Cannot double-count with courses used elsewhere
At least one course must be MATH.

Statistics Electives: MATH 422, 423, 426, PHYS 323, PSYC 450, ECON 355, 451, 452, CPSC 322, 323, 324 These courses may have pre-requisites that are not part of this concentration.

MATH Electives:

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 Math electives: MATH 365 (may be taken for credit only once), MATH 390, 490, 497.