

Degree Worksheet for the College of Arts and Sciences: 2019-2020

B.A. 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-for-students/language-requirement-information>

	Credits	Sem/Yr

UNIVERSITY CORE REQUIREMENTS:

► FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

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

Year 2: Being & Becoming

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

Year 3: Caring & Doing

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

Year 4: Imagining the Possible

	Credits	Sem/Yr
<i>Core Integration Seminar</i>		
Dept. 432	3	<input type="text"/>

NOTE: some courses have pre-requisites, check the catalog carefully!

► BROADENING COURSES - see approved list**

	Credits	Sem/Yr
Social & Behavioral Science	3	<input type="text"/>
Literature	3	<input type="text"/>
History	3	<input type="text"/>
Fine Arts & Design	3	<input type="text"/>

► REQUIRED COURSE DESIGNATIONS - see approved list**

	Credits	Sem/Yr
*Writing Enriched		
9 total		<input type="text"/>
Social Justice		
3 total		<input type="text"/>
*Global Studies		
6 total		<input type="text"/>

**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:

31 CREDITS

LOWER DIVISION

		12 Credits
Course	Course Title	Credits Grade
MATH 157	Calculus & Analytic Geometry I	4 <input type="text"/>
MATH 258	Calculus & Analytic Geometry II	4 <input type="text"/>
MATH 259	Calculus & Analytic Geometry III	4 <input type="text"/>

UPPER DIVISION

		7 Credits
Course	Course Title	Credits Grade
MATH 301	Fundamentals of Mathematics	3 <input type="text"/>
MATH 339	Linear Algebra	3 <input type="text"/>
MATH 499*	Comprehensive	1 <input type="text"/>

* 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 <input type="text"/>
MATH 437	Abstract Algebra I	3 <input type="text"/>

Any 400-Level Mathematics course:

		3 Credits
(does NOT include MATH 432)		
Course	Course Title	Credits Grade
MATH		3 <input type="text"/>

Mathematics Electives:

		6 Credits
Course	Course Title	Credits Grade
MATH		3 <input type="text"/>
MATH		3 <input type="text"/>

Minimum of 6 credits from the following*:

* One of these courses may be replaced by MATH 260
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 413	Real Analysis I
MATH 414	Real Analysis II
MATH 417	Complex Variables
MATH 421	Probability Theory
MATH 422	Mathematical Statistics
MATH 437	Abstract Algebra I
MATH 438	Abstract Algebra II
MATH 450-453	Selected Topics
MATH 454	Partial Differential Equations
MATH 457	Number Theory & Cryptography
MATH 459	Topology
MATH 490	Directed Reading
MATH 497	Mathematics Internship