Degree Worksheet for the College of Arts and Sciences: 2022-2023

B.A. PHYSICS

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

Writing	Credits	Sem/Yr
ENGL 101 Writing *(fulfills 3 credits Writing Enriched)**	3	
Reasoning		
PHIL 101 Reasoning	3	
First Year Seminar		
Dept. 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
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. PHYSICS: 54 CREDITS

The B.A. degree in Physics is intended to better allow College of Arts & Sciences students to complete double majors. Students who earn a B.A. in Physics must also be earning a B.A. in another College of Arts & Sciences Dept.

LOWER DIVISION — 34 Credits

Course	Course Title	Credits	Grade
PHYS 103	Scientific Physics I	4	
PHYS 103L	Scientific Physics I Lab	1	
PHYS 204	Scientific Physics II	4	
PHYS 204L	Scientific Physics II Lab	1	
PHYS 205	Modern Physics	3	
PHYS 208	Computational Physics	2	
PHYS 210	Introduction to Linear Electronics	2	
PHYS 217	Modern Physics Lab	2	
CHEM 101	General Chemistry	3	
CHEM 101L	General Chemistry Lab	1	
CPSC 121	Computer Science I	3	
MATH 157	Calculus & Analytical Geometry I	4	
MATH 258	Calculus & Analytical Geometry II	4	

UPPER DIVISION — 20 Credits

Course	Course Title	Credits	Grade
PHYS 300	Mathematical Methods	3	
PHYS 301	Intermediate Mechanics	3	
PHYS 306	Electricity & Magnetism	3	
PHYS 310	Intermediate Laboratory	2	
PHYS 464	Introduction to Quantum Physics	3	

Two of the following courses: — 6 Credits

Course	Course Title	Credits	Grade
PHYS 307	Optics	3	
PHYS 402	Advanced Mechanics	3	
PHYS 407	Electricity & Magnetism II	3	
PHYS 409	Nuclear & Particle Physics	3	
PHYS 412	Biophysics Systems & Modeling	3	
PHYS 415	Cosmology & Astrophysics	3	
PHYS 450	Statistical Physics	3	
PHYS 468	Solid State Physics	3	

Physics Majors are also encouraged to take:

Course	Course Title	Credits	Grade
MATH 259	Calculus/Analytical Geometry III	4	
MATH 260	Ordinary Differential Equations	3	
MATH 339	Linear Algebra	3	

and additional CPSC (Computer Science) *courses.*