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

# **B.S. PHYSICS**

**LOWER DIVISION** 

### **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

## **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				
<i>Dept.</i> 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			

World/Compa	rative Religion		Credits	Sem/Yr
RELI	(see approved list)**	(fulfills 3cr Global Studies)*	3	
Ethics				
PHIL 301 Ethi	cs or RELI 330 Princ	iples-Christian Morality	3	
	Year 4: Imagin	ing the Possible		
Core Integration	on Seminar		Credits	Sem/Yr
Dent 122			2	

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

#### RECLURED COLLEGE DESIGNATIONS - see approved list\*\*

REQUIRED COOKSE DESIGNATIONS - See approved list		
*Writing Enriched	Credits Sem/Yr	
	9 total	
Social Justice		
	3 total	
*Global Studies		
	6 total	

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

#### **B.S. PHYSICS: 54 CREDITS**

34 Credits

Course T	tle	Credits	Grade
103 Scie	entific Physics I	4	
103L Sci	entific Physics I Lab	1	
204 Scie	entific Physics II	4	
204L Sci	entific Physics II Lab	1	
205 Mo	dern Physics	3	
208 Cor	nputational Physics	2	
210 Inti	oduction to Linear Electronics	2	
217 Mo	dern Physics Lab	2	
101 Gei	neral Chemistry	3	
101L Ge	neral Chemistry Lab	1	
121 Cor	nputer Science I	3	
157 Cal	culus & Analytical Geometry I	4	
258 Cal	culus & Analytical Geometry II	4	·
	103 Scie 103L Scie 204 Scie 204L Scie 205 Mo 208 Con 210 Intr 217 Mo 101 Ger 101L Ger 121 Con 157 Calc	204 Scientific Physics II 204L Scientific Physics II Lab 205 Modern Physics 208 Computational Physics 210 Introduction to Linear Electronics 217 Modern Physics Lab 101 General Chemistry 101L General Chemistry Lab	103Scientific Physics I4103LScientific Physics I Lab1204Scientific Physics II4204LScientific Physics II Lab1205Modern Physics3208Computational Physics2210Introduction to Linear Electronics2217Modern Physics Lab2101General Chemistry3101LGeneral Chemistry Lab1121Computer Science I3157Calculus & Analytical Geometry I4

#### **UPPER DIVISION** 20 Credits

Course	Cou	ırse 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 c	of the following courses:	6 Cre	dits
Course	Course Title	Credits G	rade
PHYS	307 Optics	3	
PHYS	402 Advanced Mechanics	3	
PHYS	407 Electricity & Magnetism II	3	
PHYS	409 Nuclear & Particle Physics	3	
PHYS	412 Biophysics	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.