

Physics, B.S. 2022-2023 Catalog

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The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. These plans include the recommended sequences of courses. Individual plans will vary based on previously earned credit such as Dual Enrollment and AP credit as well as student's academic goals. Students will work with an Academic Advisor to develop a more individualized plan to complete their degree.

The GC Journeys Program will transform your way of thinking and experiencing college. By participating in five inside and outside the classroom transformative experiences during your time at Georgia College, you will step outside of your usual surroundings, gain authentic experiences, solve problems, become a leader, participate in real-world settings and put ideas into action.

All students will complete the First-Year Experience, Career Planning Milestones, and a Capstone course in your major. Students will choose two additional experiences from: Intensive Leadership Experiences, Mentored Undergraduate Research, Community-Based Engaged Learning, Internships, and Study Abroad/Study Away.

This recommended Four-Year Plan is applicable to students admitted during the 2022-2023 academic year.

Total Credits Required: 120 credits

Required GPA for Graduation: 2.0 (overall)

Legend is available on the last page of this document.

	Year 1									
Fall					Spring					
Course	Title	Hours	Area	√	Course	Title	Hours	Area	✓	
PHYS 0001	First-Year Academic Seminar	1			PHYS 2211	Principles of Physics I	3	D/F		
ENGL 1101	English Composition I	3	Α		PHYS 2211L	Principles of Physics I Lab	1	D/F		
PHYS 1012	Techniques of Phyics II	4	F		MATH 1262	Calculus II	4	D		
MATH 1261	Calculus I	3	Α		ENGL 1102	English Composition II	3	Α		
GC1Y 1000	Critical Thinking	3	В		CHEM 1211K	Principles of Chemistry I	4	F		
Semester Hours 14			Semester Hours	15						
Summer	Summer Summer is a good time to get ahead on courses. Several core courses are offered online over the summer terms.									
Notes:	Area A and GC1Y 1000 must be completed by 30 earned hours. PHYS 0001 does not count toward 120 hours required for graduation.									

				Ye	ar 2				
Fall				Spring					
Course	Title	Hours	Area	✓	Course	Title	Hours	Area	✓
PHYS 2920	Sophomore Seminar*	0	Major		MATH 4340	Differential Equations	3	Major	
PHYS 2212	Principles of Physics II	3	D/F		PHYS 3005	Mechanics**	3	Major	
PHYS 2212L	Principles of Physics II Lab	1	D/F		PHYS 3100L	Electronics Lab**	1	Major	
MATH 2263	Calculus III	4	Major		GC2Y 2000	Global Perspectives	4	В	
MATH 2150	Linear Algebra	3	Major		Core Choice	Area C2: Fine Arts	3	С	
Core Choice	Area C1: Humanities & Ethics	3	C		Elective	Any 1000-4000 level electives	2	Elective	
Elective	Any 1000-4000 level electives	2	Elective						
	Semester Hours	16				Semester Hours	16		
Notes:	Student must complete a Foreign Lang (https://www.gcsu.edu/artsandsciences GC2Y 2000 must be taken between 30 *Only offered in the Fall **Only offered in the Spring	s/wlc/test	ing) to dete						

	Year 3								
Fall					Spring				
Course	Title	Hours	Area	✓	Course	Title	Hours	Area	✓
PHYS 3920	Physics Seminar I*	0	Major		PHYS 4999	Research	0	Major	
PHYS 3010	Modern Physics*	3	Major		PHYS 3321	Introduction to Quantum Physics**	3	Major	
PHYS 3100	Electricity and Magnetism*	3	Major		PHYS 4100	Advanced Electricity & Magnetism**	3	Major	
PHYS 3600L	Advanced Skills Lab*	3	Major		PHYS 4600L	Advanced Physics Lab**	3	Major	
Foreign Lang	Foreign Lang. 1001 or Electives	3	Elective		Foreign Lang	FORL 1002	3	Major	
Elective	Any 1000-4000 level electives	3	Elective		Core Choice	Area E: Social Science Choice 1	3	Е	
	Semester Hours 15					Semester Hours	15		
Notes:	*Only offered in the Fall **Only offered in the Spring								

				Ye	ar 4				
	Fall	Spring							
Course	Title	Hours	Area	✓	Course	Title	Hours	Area	√
PHYS 4999	Research	0	Major		PHYS 4999	Research	0		
PHYS 4321	Advanced Quantum Physics*	3	Major		PHYS 4920	Senior Seminar**	0		
PHYS 3140	Thermodynamics*	3	Major		PHYS 4140	Statistical Mechanics**	3		
Capstone	Capstone Course	3	Major		Capstone	Capstone Course	3		
Core Choice	Area E: Social Science Choice 2	3	Е		Capstone	Capstone Course	3		
Core Choice	Area E: Social Science Choice 3	3	E		Capstone	Capstone Course	3		
					Elective	Any 1000-4000 level electives	3		
	Semester Hours	15				Semester Hours	15		
	Capstone Course Options:						<u> </u>		-

ASTR: 3020, 3400 CHEM: 4212, 4212L MATH: 4081, 4261, 4262, 4300, 4650,

Notes:

*Only offered in the Fall
**Only offered in the Spring

	Legend
Area	This section of the plan references the area of the curriculum the course fulfills.
Α	Core Area A: Communication and Quantitative Skills
В	Core Area B: Institutional Options
С	Core Area C: Humanities and Fine Arts
D	Core Area D: Science, Technology, and Math
E	Core Area E: Social Sciences
F	Core Area F: Major Directed Core
Major	Major Required Course
Elective (Elec)	Course(s) a student selects. Hours are needed meet overall graduation hours. Number of electives varies per major. Electives can be used towards GC Journeys, minors, professional/graduate school pre-requisites or to take courses of interest.
Cognate	Cognate courses are required courses within a students curriculum. These courses are connected to the major but may be from other academic disciplines.