PHYSICS B.S.

Secondary Education Option



ACADEMIC ADVISING

Partnering with students to successfully navigate collegeLocation:Main Hall 208Phone:719.255.3260Website:Academic Advising

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 124 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS

Connect With Your Advisor

Current UCCS Students

• Appointments: <u>www.uccs.edu/advising/current-students</u> Prospective Students: <u>www.uccs.edu/admissions/contact</u>

Student Responsibilities

Students are required to know and follow:

- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: <u>catalog.uccs.edu</u>
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

DEGREE REQUIREMENTS

Explore Physics: B.S. in Physics | Department of Physics & Energy Science (uccs.edu)

	Ν	1ajor Requirements					
Physics Major	Course/Area	Course Title	Credit Hours				
(40 hours)	PES 1050	General Astronomy I	3				
	PES 1060	General Astronomy II	3				
The Physics major requires a minimum of	PES 1110	General Physics I	4				
40 credit hours of PES course work, and	PES 1120	General Physics II	4				
an additional 30 hours of auxiliary	PES 1160	Advanced Physics Lab I	1				
coursework.	PES 2130	General Physics III	3				
	PES 2160	Advanced Physics Lab II	1				
	PES 3130 Modern Physics	3					
Requires a minimum of 21 credit hours of	PES 3170	Instrumentation Laboratory I	2				
upper-division (3000+ level) PES course work.	PES 3180	Instrumentation Laboratory II	2				
WORK.	PES 3210	Classical Mechanics	3				
All PES courses must have a grade of "C"	PES 4810	Senior Physics Seminar	2				
or better.	Electives	Complete 9 hours of upper-division (3000+ level) PES courses.	9				
or better.	Auxiliary Requirements						
All auxiliary requirements must be	BIOL 1300/1310	General Biology: Organismic Biology and Lab	4				
completed in addition to the required	BIOL 1350/1360	General Biology: Intro to the Cell and Lab	4				
major courses.	CHEM 1401/1402	General Chemistry I and Lab	5				
-	CHEM 1411/1412	General Chemistry I and Lab	5				
	MATH 1350	Calculus I	4				
	MATH 1360	Calculus II	4				
	MATH 2350	Calculus III	4				
UCCS Teach Courses	UTED 1030	Inquiry Approaches/Lesson Plan Design for Secondary Math/Science Teaching	3				
(33 hours)	UTED 2010	Knowing and Learning in Mathematics and Science	3				
	UTED 3020	Classroom Interactions	3				
A grade of "B-" or better must be earned	UTED 4710	Project-Based Instruction	3				
in all Education courses.	UTED 4720	Reading in the Content Area	3				
	UTED 4730	Apprentice Teaching UCCS Teach and Seminar	12				
Courses should be taken in the	uld be taken in the UTLS 3030 Perspectives on Science and Math						
appropriate semester. See the four-year plan for details.	UTLS 3040	Science Research Methods	3				

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G	eneral Education and Elective Re	equirements			
Core Writing Requirement (6 hours)	 ENGL 1310, 1308, or 1305 (Students choosing ENG ENGL 1410 PORT 3000 (0 Credits) – Writing Portfolio 	GL 1305 must complete ENGL 1300 first.)			
Reasoning Skills	 MATH 1350 (included in auxiliary requirements) UTLS 3040 (included in UCCS Teach requirements))			
Core Humanities (3 hours)	HUM 3990 This course also fulfills Navigate and o	ne Writing Intensive course.			
Natural Sciences Lab	CHEM 1402 (included in auxiliary requirements)				
Oral Communication	• UTED 4730 (Apprentice Teaching)				
LAS Language other than English Requirement	Complete two semesters of a language other than English equivalent to 1010 & 1020 with high school, transfer, placement exam, or UCCS coursework. <i>Courses taken to fulfill this requirement may also count toward Compass Curriculum Explore - Arts, Humanities and Cultures or general electives. See degree audit for details.</i>				
Compass Curriculum	Component	Course			
(6 12 hours) Explore and Navigate courses must be outside major and area requirements Writing Intensive, Inclusiveness, and Sustainability courses can count	Gateway	GPS 1010			
	Explore – Arts, Humanities and Cultures (2 courses)	See Degree Audit			
	Explore – Society, Behavior and Health (2 courses)	 UTED 1030 (included in UCCS Teach requirements) See Degree Audit 			
	Explore – Physical and Natural World (2 courses)	 BIOL 1350 (included in auxiliary requirements) CHEM 1401 (included in auxiliary requirements) 			
towards other requirements within	Navigate	HUM 3990 (included in LAS area requirements)			
degree.	Summit	UTED 4730 (included in UCCS Teach requirements)			
	Writing Intensive Courses (WIC) (2 courses) • HUM 3990 (inc	 HUM 3990 (included in LAS area requirements) UTED 4720 (included in UCCS Teach requirements) 			
	Inclusiveness (2 courses)	See Degree Audit			
	Sustainability	See Degree Audit			

FOUR-YEAR DEGREE PLAN

Please note that this is an example degree program and your program may vary. Students are responsible for completing all course prerequisites.

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
e		ENGL 1310	3		ENGL 1410	3
One		PES 1110/1160	5		PES 1120/2160	5
Ľ.		MATH 1350	4		MATH 1360	4
ea		GPS 1010	3		UTED 1030	3
~			3		Explore – Society, Behavior and Health (Inclusiveness)	3
		TOTAL	15		TOTAL	18

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
0		PES 2130	3		PES 3130	3
Š		CHEM 1401/1402	5		CHEM 1411/1412	5
		MATH 2350	4		PES 1060	3
ear		PES 1050	3		UTED 3020	3
~		UTED 2010	3		Arts, Humanities & Cultures (Sustainability)	3
		TOTAL	18		TOTAL	17

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
ee		PES 3170	2		PES 3180	2
hre		UTLS 3040 (Fall Only)	3		PES 3210	3
È		UTED 4720 (Fall Only)	3		UTLS 3030 (Spring Only)	3
ear		BIOL 1300/1310	4		BIOL 1350/1360	4
×		Explore – Arts, Humanities & Cultures (Inclusiveness)	3		Upper-Division (UD) PES Elective	3
		TOTAL	15		TOTAL	15

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
		PES 4810	2		UTED 4730	12
'n		UD Physics Elective	3			
Б		UD Physics Elective	3			
Year		UTED 4710	3			
		HUM 3990	3			
		TOTAL	14		TOTAL	12

NOTE: Students must complete all course requirements other than UTED 4730 before the final semester.