



Electives

2026/2027 Academic Year

This document is a guide. Always check your degree plan against official systems (e.g., DARS).

LEGEND

Physics
elective

Prerequisites

Exclusions

Physics flickering elective For flickering courses, year in parentheses indicates odd or even for the term in which it is offered. (e.g., Fall Even Year = Fall 2024, Winter Even Year = Winter 2024, Fall Odd Year = Fall 2025, Winter Odd Year = Winter 2025)

See Honours flowchart for more PHYC electives

	FALL	WINTER
1000-		<div style="border: 1px solid blue; padding: 5px; margin: 5px auto; width: 80%;"> PHYC 1600 Understanding Weather </div>
2000-	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2451 Solar System Astronomy & the Night Sky </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">1 first year science course</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 1400 and 1451</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2800 Climate Change </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">ECON 2850, PHYC 2850</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2250 Physics of Biological and Medical Tech </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1190/1290 or 1310/1320; MATH 1000</div> </div> </div>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2270 Intro Applied Geophysics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1190/1290 or 1310/1320; EARTH 1080; MATH 1000</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2452 Stellar & Galactic Astrophysics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">1 first year science course; and MATH (1000 or 1215 or 1500 or 1280)</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 1452 and 2450</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 2310 Energy and the Environment </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1190/1290 or 1310/1320; CHEM 1011; and MATH 1000 (or MATH 1215)</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 3330</div> </div> </div>
3000-	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 3303 Materials Science (CHEM 3305) </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">CHEM 1012; PHYC 3200 (can be coreq) or (CHEM 2301 & 2304) or (ERTH 2001 & 2002)</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">CHEM 3305</div> </div> <div style="text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 3540 Optics and Photonics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2150; PHYC 2510; MATH 2001; MATH 2120</div> </div> <div style="text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 3900 Soft matter physics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">MATH 2001; MATH 2120</div> </div> </div>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 3100 Contemporary Physics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">MATH 2001; at least one of PHYC 2510 or 2120</div> </div> <div style="text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 3210 Statistical Mechanics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 3200; MATH 2001; MATH 2120</div> </div> <div style="text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 3250 Computational Methods </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1190/1290 or 1310/1320; MATH 1000; PHYC 2050</div> </div> </div>
4000-	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="width: 30%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4160 Math Methods for Physics (MATH 4165) </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2060; MATH 2001; MATH 2120</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5160 and MATH 5165</div> </div> <div style="width: 30%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4650 General Relativity (MATH 4165) </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">MATH 3045</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5650 and MATH 4650</div> </div> <div style="width: 30%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4311 Fluid Dynamics I (OCEA 4311) </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">Instructor approval</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5311, OCEA 5311</div> </div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="width: 25%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4411 Atmospheric Dynamics I </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2060</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5411 OCEA 5411</div> </div> <div style="width: 25%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4520 Intro to Atmospheric Science </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2060</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5520 OCEA 5520</div> </div> <div style="width: 25%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4540 Synoptic Meteorology I </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 4411 (coreq) PHYC 3xxx</div> </div> <div style="width: 25%; text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4595 Atmospheric Chemistry </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1190/1290 or PHYC 1310/13020; MATH 1000; CHEM 1011/1012</div> </div> </div>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="width: 45%; text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 4230 Solid State Physics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 3640; PHYC 3210 (can be coreq)</div> <div style="border: 1px dotted gray; padding: 2px; font-size: x-small;">PHYC 5230</div> </div> <div style="width: 45%; text-align: center;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 4250 Numerical Computing </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 1290 or 1320; MATH 1010; PHYC 2050</div> </div> </div> <div style="text-align: center; margin-top: 10px;"> <div style="border: 1px dashed blue; padding: 5px; margin-bottom: 5px;"> PHYC 4460 Photons and Atoms </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 3640</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4412 Atmospheric Dynamics II </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 4411</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4505 Atmospheric Physics </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2060; PHYC 4520</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4550 Synoptic Meteorology II </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 4540</div> </div> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> PHYC 4570 Radiative Transfer </div> <div style="border: 1px solid gray; padding: 2px; font-size: x-small;">PHYC 2060; PHYC 2510</div> </div> </div>