Electives

2025/2026 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

1000-

WINTER

PHYC 1600 Understanding Weather

2000-

FALL

PHYC 2451 Solar System Astronomy & the Night Sky
- 1 first year science course
- PHYC 1400 and 1451

PHYC 2800 Climate Change
- ECON 2850, PHYC 2850

WINTER

PHYC 2270 Intro Applied Geophysics
- PHYC 1190/1290 or 1310/1320; ERTH 1080; MATH 1000

PHYC 2452 Stellar & Galactic Astrophysics
- 1 first year science course; and MATH (1000 or 1215 or 1500 or 1280)
- PHYC 1452 and 2450

PHYC 2310 Energy and the Environment
- PHYC 1190/1290 or 1310/1320; CHEM 1011; and MATH 1000 (or MATH 1215)
- PHYC 3330

3000-

FALL

PHYC 3303 Materials Science (CHEM 3305)
- CHEM 1012; PHYC 3200 (can be coreq) or (CHEM 2301 & 2304) or (ERTH 2001 & 2002)
- CHEM 3305

PHYC 3340 Electronics
- PHYC 2150 or ENGI 2001
- PHYC 3000

PHYC 3540 Optics and Photonics (Even Year)
- PHYC 2150; PHYC 2510; MATH 2001; MATH 2120

PHYC 3900 Soft matter physics (Odd Year)
- MATH 2001; MATH 2120

WINTER

PHYC 3180 Contemporary Physics (Even Year)
- MATH 2001; at least one of PHYC 2515 or 2150

PHYC 3250 Computational Methods (Even Year)
- PHYC 1190/1290 or 1310/1320; MATH 1000; PHYC 2050

4000-

FALL

PHYC 4160 Math Methods for Physics (MATH 4165)
- PHYC 2060; MATH 2001; MATH 2120
- PHYC 5160 and MATH 5165

PHYC 4411 Atmospheric Dynamics I
- PHYC 2060
- PHYC 5411 OCEA 5411

PHYC 4520 Intro to Atmospheric Science
- PHYC 2060
- PHYC 5520 OCEA 5520

PHYC 4540 Synoptic Meteorology I
- PHYC 4411 (coreq) PHYC 3xxx

PHYC 4595 Atmospheric Chemistry
- PHYC 1190/1290 or PHYC 1310/13020; MATH 1000; CHEM 1011/1012

WINTER

PHYC 4230 Solid State Physics (Even Year)
- PHYC 3640; PHYC 3210 (can be coreq)
- PHYC 5230

PHYC 4250 Numerical Computing (Even Year)
- PHYC 1290 or 1320; MATH 1010; PHYC 2050

PHYC 4460 Photons and Atoms (Odd Year)
- PHYC 3640

PHYC 4311 Fluid Dynamics I (OCEA 4311)
- Instructor approval
- PHYC 5311, OCEA 5311

PHYC 4412 Atmospheric Dynamics II
- PHYC 4411

PHYC 4505 Atmospheric Physics
- PHYC 2060; PHYC 4520

PHYC 4550 Synoptic Meteorology II
- PHYC 4540

PHYC 4570 Radiative Transfer
- PHYC 2060; PHYC 2510