Physics: Astronomy and Astrophysics Option (2021-2022)

**Freshman**
- Fall: M181 or M171 Honors/Calc I (4-F)
- Spring: M182 or M172 Honors/Calc II (4-S)

**Sophomore**
- Fall: M283 or M273 Honor/MVCalc (4-F)
- Spring: PHSX301 IntroTheory (3-S)

**Junior**
- Fall: PHSX490R UG Research (2-SFSu) (completed before 499R)
- Spring: PHSX499R SenCapPres (1-S)

**Senior**
- Fall: PHSX425 E&M II (3-F)
- Spring: ASTR 476 Astrophysics (3-S)

**Technical Electives**
- 7 credits of Technical Electives and 6 credits of Directed Electives

**Directed Electives**
- ASTR 475 Obs Astr (4-F-odd years)
- 1st ASTR475: F23

**Technical Electives**
- ASTR 373 Ex-Gal Astr (3-F-even years)
  - 1st ASTR373: F22

**Directed Electives**
- ASTR 371 Solar Sys (3-F)
- ASTR 372 Stars & the MW (3-S)
- ASTR 373 Ex-Gal Astr (3-F-even years)
- ASTR 375 Obs Astr (4-F-odd years)
- 1st ASTR475: F23

**Technical Electives and Directed Electives**
- Maximum of 4 credits of the combination of PHSX 494, PHSX 492, and PHSX 490R.
- Technical Electives and Directed Electives elective can include no more than 1 credit of PHSX 494, 3 credits of PHSX 492, or 3 credits of PHSX 490R, Technical Electives and Directed Electives elective can include no more than 4 credits of the combination of PHSX 494, PHSX 492, and PHSX 490R.
- PHSX 401, PHSX 402, PHSX 403, and PHSX 405 can not be counted towards Technical Electives and Directed Electives. A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above. A student changing majors or with unusual circumstances can substitute PHSX 220 for PHSX 240 or PHSX 222 for PHSX 242 with academic advisor's approval.

**NOTE:** ASTR 373 and 475 are taught alternate years. Solid (dashed) lines for ASTR courses: If student will be a junior in Fall of an even (odd) year.