## **Astrophysics Major Example Track**

The sequence outlined below shows one possible Astrophysics major track. The actual track you will follow will depend on your background and goals. Please always contact the Astronomy Department DUS for advising specific to your needs.

**Physics:** You may begin with either the 1400, 1600 or 2800 introductory physics sequence. We recommend the 1600 track if you have some background in physics from high school. This series always begins in the Fall semester. The upper level physics courses are also always offered in the semester noted below. BC3006 (Quantum Physics) and W4023 (Thermal and Statistical Physics) may be taken in place of W4021 and W4022 (Quantum Physics I and II).

On the track below we have the required physics courses completed by the end of Year 3 in order for you to be more prepared to take the Physics GRE in the fall of Year 4. The Physics GRE is required for most Astronomy/Astrophysics graduate programs.

**Mathematics:** Math courses are not included in the grid below, but you are required to take through Calculus IV (Math V1202). Linear Algebra (Math V2010) and Ordinary Differential Equations (Math V2030) are not required, but highly recommended if you have room in your schedule.

**Astronomy:** Though not required, it is recommended additional ASTR 3000+ classes are taken. See the bulletin for which classes are being offered in a given semester. In addition, the ASTR W3997-3998 sequence is recommended for those students who would like to do a research thesis (usually in Year 4).

| Year 1   |           | Year 2  |  | Year 3   |  | Year 4                           |                                  |
|--|-----------|---|--|--|--|----------------------------------|----------------------------------|
| Fall   | Spring    | Fall  | Spring   | Fall   | Spring   | Fall                             | Spring                           |
| (Mechanics and<br>Relativity) OR<br>PHYS W1401 | dynamics, | (Classical and<br>Quantum<br>Waves) OR            | PHYS W3003<br>(Mechanics)                          | PHYS<br>W3007<br>(Electricity<br>and<br>Magnetism) | PHYS<br>W3008<br>(Electro-<br>magnetic<br>Waves and<br>Optics) | ASTR<br>3000+<br>level<br>course | ASTR<br>3000+<br>level<br>course |
|  |           | ASTR W2001<br>(Introduction to<br>Astrophysics I) | ASTR W2002<br>(Introduction to<br>Astrophysics II) | PHYS<br>W4021<br>(Quantum<br>Mechanics<br>I)       | PHYS<br>W4022<br>(Quantum<br>Mechanics<br>II)                  |                                  |                                  |