## DEGREE REQUIREMENT CHECKLIST

This checklist below provides a summary of the requirements for the degree and major indicated above. For complete information, you should consult the Undergraduate Catalog, 2002 – 2004 or 2004 – 2006. If you have any questions, please speak with an academic advisor at RLM 4.101.

### PRESCRIBED WORK: THESE COURSES MUST BE TAKEN ON A LETTER-GRADE BASIS.

1. **English:**
   - RHE 306
   - E 316K
   - Substantial Writing Component:
     - One upper-division course*
     - One additional course
   *This requirement can be fulfilled by completion of PHY 453. These two courses may satisfy other degree requirements. They can be any number of semester hours. Consult the Course Schedule for a complete listing of writing component courses for a particular semester.

2. **Foreign Language:**
   - Choose from one of the following options:
     - Second semester proficiency in a single foreign language at the college level:
       - 506 and 507 (or equivalent) or
       - 506 and One 3 hour foreign culture course from the same culture area, or
     - Two 3 hour foreign culture courses from approved list

3. **Government:**
   - GOV 310L (or GOV 3 TX in transfer)
   - GOV 312L (or GOV 3 US in transfer)

4. **U.S. History:**
   - 6 semester hours of American History (3 hours of Texas History may be used toward one of the U.S. History requirements)

5. **3 semester hours chosen from the following areas:**
   - Anthropology
   - Economics
   - Geography
   - Linguistics
   - Psychology
   - Sociology

6. **3 semester hours chosen from the following areas:**
   - Architecture
   - Classics Department
   - College of Fine Arts
   - Philosophy (not logic)

### PRESCRIBED WORK: ALL MAJOR REQUIREMENTS MUST BE TAKEN ON A LETTER-GRADE BASIS. A GPA OF AT LEAST 2.0 IN THE FOLLOWING PHYSICS AND ASTRONOMY COURSES IS REQUIRED.

- Six semester hours of biology, chemistry, computer science, or geology.

  (Chemistry 301 and the courses in the Elements of Computing Program may be counted toward this requirement; any other course to be counted must meet major requirements in the department that offers it.)

- M 408C
- M 408D
- M 427K
- M 427L
- M 340L

### LOWER-DIVISION ASTRONOMY AND PHYSICS

- PHY 301 Mechanics
- PHY 316 Electricity & Magnetism
- PHY 315 Wave Motion & Optics

### UPPER-DIVISION ASTRONOMY AND PHYSICS

- 19 semester hours of upper-division physics courses consisting of:
  - PHY 336K Classical Dynamics I
  - PHY 352K Classical Electrodynamics
  - PHY 453 Modern Physics I: Introduction to Quantum Phenomena
  - PHY 373 Modern Physics II: Quantum Mechanics
  - PHY 369 Thermodynamics and Statistical Mechanics
  - PHY 362K Modern Physics III: Applications of Quantum Mechanics (offered only during the fall semester)

- 12 semester hours of upper-division courses in astronomy, including the following:
  (Note: AST 351 is recommended.)
  - AST 352K General Stellar Astronomy
  - AST 353 Astrophysics
  - AST 358 Galaxies and the Universe

- 9 semester hours of upper division astronomy and/or physics coursework:

  (No more than 6 of the hours counted toward the major requirement may be conference courses.)
# SAMPLE COURSE PLAN

## FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 408C</td>
<td>M 408D</td>
</tr>
<tr>
<td>AST 307 (or 3 hrs elective)(^1)</td>
<td>PHY 301 and PHY 101L</td>
</tr>
<tr>
<td>AST 104 (or 1 hr elective)(^2)</td>
<td>General Culture Requirement (3 HRS)</td>
</tr>
<tr>
<td>RHE 306</td>
<td>3 hrs major level BIO, CH, CS, or GEO</td>
</tr>
<tr>
<td>Social Science requirement (3 hrs)</td>
<td>(CH 301/CS 303E o.k.)</td>
</tr>
</tbody>
</table>

## SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 427K</td>
<td>M 427L</td>
</tr>
<tr>
<td>PHY 316 and PHY 116L</td>
<td>PHY 315 and PHY 115L</td>
</tr>
<tr>
<td>E 316K</td>
<td>AST 352K</td>
</tr>
<tr>
<td>Social Science requirement (HIS/GOV)</td>
<td>Social Science requirement (HIS GOV)</td>
</tr>
<tr>
<td>3 hrs major level BIO, CH, CS, or GEO</td>
<td>Foreign Language/Foreign Culture</td>
</tr>
</tbody>
</table>

## JUNIOR YEAR

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M 340L</td>
<td>AST 358</td>
</tr>
<tr>
<td>AST 353</td>
<td>PHY 352K</td>
</tr>
<tr>
<td>PHY 453(^3)</td>
<td>PHY 373</td>
</tr>
<tr>
<td>PHY 336K</td>
<td>Social Science requirement (HIS GOV)</td>
</tr>
<tr>
<td>Social Science requirement (HIS/GOV)</td>
<td>Foreign Language/Foreign Culture</td>
</tr>
</tbody>
</table>

## SENIOR YEAR

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 3UDV or PHY 3UDV</td>
<td>AST 3UDV</td>
</tr>
<tr>
<td>AST 3UDV or PHY 3UDV</td>
<td>PHY 369</td>
</tr>
<tr>
<td>PHY 362K</td>
<td>AST 3UDV or PHY 3UDV</td>
</tr>
<tr>
<td>Elective (3 hrs)</td>
<td>Elective (3 hrs)</td>
</tr>
<tr>
<td>Elective (3 hrs)</td>
<td>Elective (3 hrs)</td>
</tr>
</tbody>
</table>

## NOTES

1. This course is a suggested prerequisite for upper-division major requirements and counts as elective hours.
2. This course is recommended. It counts as elective hours.
3. This course is traditionally offered as a writing component and will fulfill the upper division writing component requirement. One additional writing component course is required for this degree.

## ELECTIVES

- Electives are necessary to complete the 123 semester hour requirement for the B.S. in Astronomy.
- Once 30 semester hours of college credit is earned, up to 16 hours of electives may be taken pass/fail.
- Only two courses per semester may be taken pass/fail.

## GENERAL DEGREE REQUIREMENTS

- Minimum cumulative UT GPA of 2.0
- 60 semester hours must be completed in residence (in the classroom at UT).
- 18 semester hours, including at least 12 semester hours in physics and astronomy, must be completed in residence
- 12 semester hours of the major must be upper-division
- 6 upper-division semester hours of the major must be in residence
- 36 upper-division semester hours
- 18 upper-division semester hours must be completed in residence
- 24 of the last 30 semester hours counted toward the degree must be in residence

The following courses will not count toward this degree: mathematics courses below the level of calculus, KIN 119 or PED one-hour activity courses. No more than 12 semester hours of Bible coursework may be counted toward the degree. See catalog for restrictions about using ROTC coursework.