Orientation Advising 2024
Physics & Astronomy

Academic Advisors:
Summer Cacciotti  s.cacciotti@austin.utexas.edu
Nathaniel Sulapas  nathaniel.sulapas@austin.utexas.edu
Fall Semester Courses
Sample Schedules
Will vary depending on assigned CNS Community

• M 408C - Calculus
• PHY 110C – Seminar for PHY majors
• UGS 302 or 303 – Core requirement
• CH 301 or AST 307 – Major requirement
• RHE 306 or other core (ex. MUS 307)
Physics Majors

M 408D
PHY 301 & 101L
PHY 110C
UGS 302 or 303
RHE 306 or other core course

For students who have credit for M 408C or M 408N (K) & S (L)

M 408M or M 427L-AP
PHY 316 & 116L
PHY 110C
UGS 302 or 303
RHE 306 or other core course

For students who have a 5 on Calculus BC and credit for PHY 301 & 101L
Astronomy Majors

M 408D
PHY 301 & 101L
AST 307
UGS 302 or 303

For students who have credit for M 408C or M 408N (K) & S (L)

M 408M or M 427L-AP
PHY 316 & 116L
AST 307
UGS 302 or 303

For students who have a 5 on Calculus BC and credit for PHY 301 & 101L
Mathematics Course Sequences

Traditional

- M408N (aka K): Differential Calculus
- M408S (aka L): Integral Calculus
- M408M: Multivariable Calculus

Accelerated

- M408C: Differential & Integral Calculus
- M408D: Integral & Multivariable Calculus

Physics and Astronomy degrees require M 408C & M 408D or M 408N (aka K), M 408S (aka L), and M 408M

M 427L-AP can count in place of M 408M or M 408D
Consider the Following Things When Choosing Fall Mathematics Course

Your choice is based on:

1) Your UTMA score
   70 or higher for M 408C or M 408N (78 recommended for M 408C)
   (55 or higher for M 305G)
2) **AP Credit**

<table>
<thead>
<tr>
<th>Score</th>
<th>Credit Earned</th>
<th>Fall Course Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB: 3 or 4</td>
<td>M 408N (K)</td>
<td>M 408N or M 408C or M 408S</td>
</tr>
<tr>
<td>AB: 5</td>
<td>M 408C</td>
<td>M 408D or M 408D-AP</td>
</tr>
<tr>
<td>BC: 3 or 4</td>
<td>M 408C</td>
<td>M 408C or M 408D or M 408D-AP</td>
</tr>
<tr>
<td>BC: 5</td>
<td>M 408C or M 408N (K) &amp; 408S (L)</td>
<td>M 408D or M 408M or M 427L-AP</td>
</tr>
</tbody>
</table>

(M 408N and M 408S are the College of Natural Sciences versions of M 408K & M 408L)

3) **Dual Credit**

- M 408N ➡ M 408S
- M 408N & 408S ➡ M 408M

4) **Confidence in your math skills**
Other Factors to Consider
(If you are eligible for calculus but close to the cut-off score of 70):

- No high school calculus
- You took calculus, but not AP, in high school
- Your gut says you are not prepared for college calculus

Preparation for Calculus (M 305G) is an option
If you decide to take calculus:

- Use the Math Readiness Package this summer
- Go to discussion sections in fall
- Make use of resources
  - Sanger Learning Center
  - CalcLab
  - Professor's office hours

Talk to an advisor if you are not sure which math course to take
Advanced Math

If you took math beyond the level of AP Calculus BC in high school, the Academic Advisor you meet with will refer you to the Math Faculty Advisor.
Physics Courses

- **PHY 110C** – Science of the Times seminar
  - Often the only PHY course in 1st semester
- **PHY 301 & PHY 101L** – Mechanics & lab
  - Prerequisite: credit with at least C- or registration in M 408D, 408L, or 408S and PHY 101L
- **PHY 316 & 116L** – Electricity and Magnetism & lab
  - Prerequisite: PHY 301 & 101L with at least C- in each; credit with at least C- or registration in M 408D or 408M, and PHY 116L
Other Science Courses

- **BS in Physics** requires CH 301 & 302 plus 6 hrs majors-level coursework in BIO, GEO, or AST (Biophysics requires BIO 311C & 311D)
- **BSA in Physics** requires 3 hrs majors-level coursework in AST, BIO, CH, CS, and GEO (can overlap with core Science & Tech Part II)
- **BS in Astronomy** requires AST 307; requires 6 hrs majors-level coursework in BIO, CH, CS, and/or GEO (Elements of Computing courses may be counted)
- **BSA in Astronomy** requires 12 hrs majors-level coursework from 1 or more of these areas: BIO, CH, CS, GEO, Mathematics, SDS
## Science Courses & AP Scores

<table>
<thead>
<tr>
<th>AP Chemistry, 4-5</th>
<th>Chemistry – CH 301, 302 &amp; 204</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Physics 1, 3-5 <em>(PHY/AST Majors should not claim this credit!)</em></td>
<td>Physics (algebra-based) – PHY 302K &amp; 105M</td>
</tr>
<tr>
<td>AP Physics 2, 3-5. <em>(PHY/AST Majors should not claim this credit!)</em></td>
<td>Physics (algebra-based) – PHY 302L &amp; 105N</td>
</tr>
<tr>
<td>AP Physics C-Mechanics, 3-5</td>
<td>Physics (calculus-based) - PHY 301 &amp; 101L (or PHY 303K &amp; 105M)</td>
</tr>
<tr>
<td>AP Physics C-Elect. &amp; Magnetism, 3-5</td>
<td>Physics (calculus-based) - PHY 316 &amp; 116L (or PHY 303L &amp; 105N)</td>
</tr>
<tr>
<td>AP Biology, 3-4; AP Biology 5</td>
<td>Biology – BIO 311C; BIO 311C &amp; 311D</td>
</tr>
</tbody>
</table>
UGS 302 or 303: Signature Course

- Topic based
- 302 - writing based, small
- 303 - larger, less writing
- Must take in first 2 semesters
- Have several back up topics in mind!
### Core Courses & AP Credit

[https://ugs.utexas.edu/core/requirements/current](https://ugs.utexas.edu/core/requirements/current)

(Talk to your Academic Advisor before claiming credit)

<table>
<thead>
<tr>
<th>Course/Requirement</th>
<th>Equivalent AP Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHE 306 – Composition 1</td>
<td>AP Language, 3-5 or SAT Writing &amp; Lang, 33+</td>
</tr>
<tr>
<td>E 316L, M, N, or P - Literature</td>
<td>AP Literature, 4-5</td>
</tr>
<tr>
<td>US History, 6 hrs</td>
<td>AP US History, 3-5: HIS 315L</td>
</tr>
<tr>
<td>Government, 6 hrs</td>
<td>AP Government, 3-5: GOV 310L</td>
</tr>
<tr>
<td>Social &amp; Behavioral Science, 3 hrs</td>
<td>AP PSY, ECO, GRG, 3-5</td>
</tr>
<tr>
<td>Visual &amp; Performing Arts, 3 hrs</td>
<td>AP Art History or Music Theory, 3-5</td>
</tr>
</tbody>
</table>
Course Flags
Courses with content that fulfill core curriculum skills & competencies

6 Flag types:
Writing – need 2 total, 1 upper-division (one cannot overlap with a core course)
Quantitative Reasoning – built in
Independent Inquiry
Global Cultures – UGS 302/303, History courses, VAPAs, Literature, electives
Cultural Diversity – UGS 302/3, History courses, VAPAs, electives
Ethics – UGS 302/3, Government, Business minor courses, electives
CNS Cornerstones Communities

Most common:

- FIG – First-Year Interest Group
- Includes UGS 018 & NSC 109 Seminars
- Course(s) taken by all FIG members

Group of about 20-25 that meets weekly with an Advisor and a Student Mentor
Get to know other people with similar interests
Share 1 or more courses – reserved seats
Informal meeting with a professor, help with registration, study skills information, fun, etc.
Free food

Add "98" number first when you register
Other Courses That May Be Part Of Your Schedule

- FRI (Research Methods Course)
- UTeach (UTS 101)
- Foreign Language or Foreign Culture courses (B.S. degrees)
- Special programs may require certain courses (Jefferson Scholars, University Leadership Network, Plan II, etc.)
Possible Interest in Teaching?

• See Orientation Schedule for several UTeach info sessions and events
• Check out UTeach Palooza on Day 2, 2-3:30 PM on the Painter front lawn
• Visit uteach.utexas.edu for other UTeach information
Minors & Certificates

- Required only for BSA degrees
- Optional for other degrees
- Another option for a BSA degree is 15 hrs in a single subject
- Transcripted minor or certificate: specific guidelines & classes
- Claiming a minor or certificate does not guarantee access to all classes that can count

https://cns.utexas.edu/students/degrees-majors-advising/transcripted-certificates

https://cns.utexas.edu/students/degrees-majors-advising/transcripted-minors
Interactive Degree Audit

Excellent way to see how courses count and what requirements you still have

**Interactive Degree Audit (IDA)**

IDA is the interactive degree audit system for students pursuing degrees at UT Austin. Using IDA, you may request and view your degree audit online. IDA provides you with a report of your progress toward completion of the requirements for a specific program. If there have been any changes to your record since you last ran an audit, you must rerun an audit for those changes to be included in the audit.

In addition to using the information available in IDA, students are encouraged to meet regularly with their academic advisers. The degree audit is not a substitute for required registration advising, filing for an official degree audit, or filing an application for graduation at the beginning of your final semester. These are the responsibilities of all students at the University of Texas. Contact your academic adviser to determine when advising is offered, then prepare for your advising appointment by viewing your degree audit.
Registration

Before Registration
• Be thinking about which math & science courses you want to take
• Have a 1-on-1 meeting with an Academic Advisor (Day 2)
• Advisor will provide information about reserved course(s) in your CNS community
• Choose 2-3 more courses (for many, UGS 302 or 303 should be one of these)
• Have back-up courses in mind
• Check your Registration Information Sheet (RIS) for holds

Registration on Day 3
• Meet with faculty advisor PMA 5.124 10:00am
• Academic Advisors will be available by email; phone or Zoom as needed
• Follow Advisor’s instructions about adding reserved courses first
Registration can be stressful, but remember:

We are here to help

You will get what you need (not always exactly what you want)

Things change, especially in August:
• Use wait lists when you can
• Make changes during add & drop periods in August & Sept.

It's the beginning of your UT adventure!