# Unofficial Degree Planning Worksheet Catalog Year: 2023 – 2024

# Major: BS in Physics

This worksheet is designed to help you plan and track your progress toward your degree. It lists all graduation requirements. Course descriptions are available in the current catalog. More detailed descriptions of the program can be found in the [2023 – 2024 catalog](http://www.ut.edu/catalog).

## University Graduation Requirements

Students must earn 124 hours to be eligible for graduation.

Students must maintain an overall minimum GPA of 2.0 to be eligible for graduation.

Students must maintain a major minimum GPA of 2.0 to be eligible for graduation.

Students must complete 31 credit hours in residency at UT to be eligible for graduation.

Students must complete 15 credit hours in residency at UT in their major coursework.

## Spartan Studies Requirements

### First-Year

| **First-year Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| UTAMPA 101 (1cr)/102 (1cr) – First-Year seminar two semester sequence **or** UTAMPA 103 (2cr) – Transfer student seminar  **or** UTAMPA 104 (2cr) Veteran student seminar  – must be taken in residency |  |  |
| AWR 101 (4cr) - Reading Locally & Globally  **or** AWR 110 (5cr) – Academic Writing for Multilingual Students |  |  |
| Math (4cr) Requirement (choose one):  MAT 155, MAT 160, MAT 170, MAT 201, MAT 225, MAT 260, MAT 261 | MAT 260 |  |

### Core

| **Core Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| AWR 201 (4cr) – Writing and Research: The Local and the Global  *Pre-requisite (one of the following): AWR 101, AWR 110, or equivalent* |  |  |
| [Core Humanities](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_CoreHumanitiesLink.pdf) (4cr) – must be taken in residency, AWR 201 is a prerequisite or must be taken concurrently |  |  |
| [Core Social Science](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_CoreSocialSciencesLink.pdf) (4cr) – must be taken in residency, AWR 201 is a prerequisite or must be taken concurrently |  |  |
| UTAMPA 200 (1cr) Digital Literacy: Coding  **or** one of the following: CSC 101, ITM 251, MAT 285, PHY 180 |  |  |
| UTAMPA 201 (0cr) Career Readiness |  |  |
| Spartan Studies Culminating Experience (4cr)  – must be taken in residency  *Pre-requisite: all other Spartan Studies course requirements; individual courses may have additional pre-requisites* |  |  |

### Distribution Requirements

Note that **one** of the distribution requirements may also be used to meet requirements in the major if there is overlap.

| **Distribution Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| [Social or Behavioral Science](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_SocialScienceDistributionLink.pdf) (4cr) |  |  |
| [Visual and Performing Arts](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_VisualandPerformingArtsLink.pdf) (3cr) |  |  |
| [Text-Based Humanities](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_Text-BasedHumanitiesDistributionLink.pdf) (4cr) |  |  |
| [Natural Science](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/Spartanstudies_NaturalScienceDistributionLink.pdf) (4cr) | PHY 205 |  |

## Physics Requirements (69-72 Credits)

### Physics Requirements

| **Physics Requirements (57-60 Credits)** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| PHY 205 (4cr) – General Physics with Calculus I (1) (Can fulfill Spartan Studies Distribution Requirement)  *Pre-requisite: MAT 170 or equivalent*  *Co-requisite: MAT 260 and PHY 205L* |  |  |
| PHY 205L (0cr) – General Physics with Calculus I (1) Laboratory  *Co-requisite: PHY 205* |  |  |
| PHY 206 (4cr) – General Physics with Calculus II (2)  *Pre-requisite: MAT 260 and PHY 205 (with a grade of “C” or better)*  *Co-requisite: PHY 206L* |  |  |
| PHY 206L (0cr) – General Physics with Calculus II (2) Laboratory  *Co-requisite: PHY 206* |  |  |
| PHY 280 (4cr) – Mathematical Methods for Physics  *Pre-requisite: PHY 205 and PHY 206 (with a grade "C" or better)* |  |  |
| PHY 307 (4cr) – Modern Physics  *Pre-requisite: MAT 260, PHY 201 or PHY 206 (with a grade "C" or better)* |  |  |
| PHY 320 (4cr) – Classical Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 340 (4cr) – Electricity and Magnetism  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 350 (4cr) – Advanced Physics Lab  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 360 (4cr) – Quantum Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| PHY 430 (4cr) – Thermodynamics and Statistical Mechanics  *Pre-requisite: PHY 307 (with a grade of “C” or better) and PHY 360 (with a grade of “C” or better)* |  |  |
| PHY 451 (1-4cr) – Physics Capstone Research  *Pre-requisite: PHY 307 (with a grade of “C” or better)* |  |  |
| AST 300 (4cr) – Astrophysics  *Pre-requisite: PHY 307* |  |  |
| MAT 260 (4cr) – Calculus I (1) (Can fulfill Spartan Studies Mathematics Requirement)  *Pre-requisite: MAT 170 with a grade of “C” or higher, or equivalent* |  |  |
| MAT 261 (4cr) – Calculus II (2)  *Pre-requisite: MAT 260 with a grade of “C” or higher* |  |  |
| MAT 262 (4cr) – Calculus III (3)  *Pre-requisite: MAT 261 with a grade of “C” or higher* |  |  |
| MAT 300 (4cr) – Differential Equations  *Pre-requisite: MAT 262 with a grade of “C” or higher* |  |  |

### Physics Elective Requirement

| **Physics Elective Requirement (8 Credits)**  Three (3) additional PHY or AST courses above the 300-Level | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| Physics Elective (4cr) |  |  |
| Physics Elective (4cr) |  |  |
| Physics Elective (4cr) |  |  |

### Additional Note

| **Additional Note** |
| --- |
| To meet the requirements of the physics major, all required and elective courses must be completed with a grade of “C” or better. |