# Unofficial Degree Planning Worksheet Catalog Year: 2023 – 2024

# Major: BS in Biochemistry, ASMBM Accredited

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](https://ut.smartcatalogiq.com/current/catalog/).

## University Graduation Requirements

Students must earn 124 hours to be eligible for graduation.

Students must maintain an overall minimum GPA of 3.5 to be eligible for graduation with Honors Distinction.

Students must earn 100 [Academics, Community Service and Engagement](https://ut.smartcatalogiq.com/en/current/catalog/the-ut-academic-experience/honors-program/continuation-in-the-honors-program/) points per year.

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.

## Honors Requirements

### Fundamentum

| **Fundamentum Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 100 (2cr) – Via ad Honores  – must be taken in residency |  |  |
| AWR 101 (4cr) - Reading Locally & Globally  **or** AWR 110 (5cr) – Academic Writing for Multilingual Students |  |  |
| AWR 201 (4cr) – Writing and Research: The Local and the Global  *Pre-requisite (one of the following): AWR 101, AWR 110, or equivalent* |  |  |
| Math (4cr) Requirement (choose one):  MAT 155, MAT 160, or Higher | MAT 260 |  |

### Honors Core

| **Dialectic Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 220 (4cr) – Where have we been?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 230 (4cr) – Where are we now?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 240 (4cr) – Where are we going?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

| **Idea Labs Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 253 (4cr) – Idea Lab: Health Science or Natural Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 255 (4cr) – Idea Lab: Humanities/Fine Arts  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 257 (4cr) – Idea Lab: Social Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

### Honors Thesis

| **Honors Thesis Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 490 (6-10cr) – Thesis  *Pre-requisite: Students must be in good standing in the Honors Program and must have completed 60 credit hours of course work.* |  |  |

## Biochemistry, ASMBM Accredited Requirements (74 Credits)

### Biochemistry Requirements

| **Biochemistry Requirements (70 Credits)** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| BIO 198 (3cr) – General Biology I (1)  *Pre/Co-requisite: CHE 152 and CHE 153L*  *Co-requisite: BIO 198L* |  |  |
| BIO 198L (1cr) – General Biology I (1) Laboratory  *Pre/Co-requisite: CHE 152 and CHE 153L*  *Co-requisite: BIO 198* |  |  |
| BIO 199 (3cr) – General Biology II (2)  *Pre/Co-requisite: BIO 198 and BIO 198L (both with a grade of “C” or better)*  *Co-requisite: BIO 199L* |  |  |
| BIO 199L (1cr) – General Biology II (2) Laboratory  *Pre/Co-requisite: BIO 198 and BIO 198L (both with a grade of “C” or better)*  *Co-requisite: BIO 199L* |  |  |
| BIO 200 (4cr) – Genetics  *Pre-requisite: Biology Lower Core*  *Co-requisite: BIO 200L* |  |  |
| CHE 152 (3cr) – General Chemistry I (1)  *Pre-requisite: MAT 160*  *Pre/Co-requisite: CHE 153L (with a grade of “C” or better)* |  |  |
| CHE 153L (1cr) – General Chemistry I (1) Laboratory  *Pre/Co-requisite: CHE 152 (with a grade of “C” or better)* |  |  |
| CHE 154 (3cr) – General Chemistry II (2)  *Pre-requisite: CHE 152 and CHE 153L (both with a grade of “C” or better)*  *Pre/Co-requisite: CHE 155L (with a grade of “C” or better) and MAT 170* |  |  |
| CHE 155L (1cr) – General Chemistry II (2) Laboratory  *Pre-requisite: CHE 152 and CHE 153L (both with a grade of “C” or better)*  *Pre/Co-requisite: CHE 154 (with a grade of “C” or better)* |  |  |
| CHE 232 (3cr) – Organic Chemistry I (1)  *Pre-requisite: CHE 154 and CHE 155L (both with a grade of “C” or better)*  *Pre/Co-requisite: CHE 233L (with a grade of “C” or better)* |  |  |
| CHE 233L (1cr) – Organic Chemistry I (1) Laboratory  *Pre/Co-requisite: CHE 232 (with a grade of “C” or better)* |  |  |
| CHE 234 (3cr) – Organic Chemistry II (2)  *Pre-requisite: CHE 232 and CHE 233L (both with a grade of “C” or better)*  *Pre/Co-requisite: CHE 235L (with a grade of “C” or better)* |  |  |
| CHE 235L (1cr) – Organic Chemistry II (2) Laboratory  *Pre/Co-requisite: CHE 234 (with a grade of “C” or better)* |  |  |
| CHE 305 (3cr) – Applied Physical Chemistry  *Pre-requisite: MAT 260 (with a grade of "C" or better) and either PHY 200 or PHY 205.*  Pre/Co-requisite: CHE 310 (with a grade of “C” or better) |  |  |
| CHE 310 (4cr) – Analytical Chemistry  *Pre-requisite: CHE 154 and CHE 155L (both with a grade of “C” or better)*  *Co-requisite: CHE 310L* |  |  |
| CHE 310L (0cr) – Analytical Chemistry Laboratory  *Co-requisite: CHE 310* |  |  |
| CHE 320 (3cr) – Biochemistry  *Pre-requisite: CHE 234 and CHE 235L (both with a grade of “C” or better)* |  |  |
| CHE 320 (1cr) – Biochemistry Laboratory  *Pre/Co-requisite: CHE 320 (with a grade of “C” or better)* |  |  |
| CHE 325 (3cr) – Biochemistry of Metabolism  *Pre-requisite: CHE 320 (with a grade of “C” or better)* |  |  |
| CHE 420 (4cr) – Advanced Biochemistry  *Pre-requisite: CHE 320 and CHE 320L (both with a grade of “C” or better)* |  |  |
| CHE 451 (1-2cr) – Capstone Chemical Research  *Pre-requisite: Consent of Instructor*  *3 cumulative credits of CHE 451 are required* |  |  |
| CHE 454 (1cr) – Capstone Chemical Communication  *Pre-requisite: Completion of at least two hours of CHE 451.* |  |  |
| CHE 470 (4cr) – Tissue Culture  *Pre-requisite: CHE 320 and CHE 320L (both with a grade of “C” or better) and BIO 198* |  |  |
| CHE 490 (4cr) – Molecular Basis of Cancer  *Pre-requisite: CHE 320 and CHE 320L (each with a grade of “C” or better); CHE 470 is also preferred.* |  |  |
| PHY 205 (4cr) – General Physics with Calculus I (1)  *Pre-requisite: MAT 170 or equivalent*  *Co-requisite: MAT 260 and PHY 205L* |  |  |
| 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* |  |  |
| MAT 260 (4cr) – Calculus I (1) (Can fulfill Honors 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* |  |  |

### Biology Lecture/Laboratory Elective Requirement

| **Biology Lecture/Laboratory Elective Requirement (4 Credits)**  Refer to catalog for the [Biology Lecture/Laboratory Options](https://ut.smartcatalogiq.com/en/current/catalog/college-of-natural-and-health-sciences/department-of-chemistry-biochemistry/biochemistry/biochemistry-bs/).  *Pre-requisites will depend on the course chosen.* | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| Biology Lecture/Laboratory Elective |  |  |

### Additional Notes

| **Additional Notes** |
| --- |
| Students can also earn an additional ASBMB certification to their B.S. Biochemistry, ASBMB-accredited degree by passing an ASBMB certification exam during their final year of study. Students that take this course of study, pass the ASBMB-certification exam with distinction, have a minimum 3.4 GPA and meet some other requirements are eligible to be inducted into the [ASBMB National Honor Society](https://www.asbmb.org/education/student-chapters/honor-society/). |
| PHY 205/PHY 205L can substitute for PHY 200/PHY 200L, and PHY 206/PHY 206L can substitute for PHY 201/PHY 201L. |