**Name:** **Date:** **Major Catalog: 20__**

**PeopleSoft ID:**

# Checklist for BS in Physics

## PHYSICS (42 Hours):

| Tr | UH | | |
|---|---|---|---|
| | | PHYS 2125 (1121) | University Physics Lab I |
| | | PHYS 2325 (1321) | University Physics I |
| | | PHYS 2126 (1122) | University Physics Lab II |
| | | PHYS 2326 (1322) | University Physics II |
| | | PHYS 3110 | Advanced Lab Analysis Fall |
| | | PHYS 3313 | Advanced Lab I ***(WID)** Fall |
| | | PHYS 3214 | Advanced Lab II Spring |
| | | PHYS 3309 | Intermediate Mechanics Fall |
| | | PHYS 3312 & PHYS 3112 | Modern Optics & Lab Fall Odd Yrs |
| | | **OR** PHYS 4421 | Electronic Devices & Applications Fall Even Yrs |
| | | PHYS 3315 | Modern Physics I Spring |
| | | PHYS 3316 | Modern Physics II Fall |
| | | PHYS 3327 | Thermal Physics Spring |
| | | PHYS 4321 | Intermediate Electromagnetic Theory I Fall |
| | | PHYS 4322 | Intermediate Electromagnetic Theory II Spring |
| | | PHYS _3__ | Advanced PHYS Elective - 3 hours |
| | | PHYS _3__ | Advanced PHYS Elective - 3 hours |

## CHEMISTRY (8 Hours):

| | | | |
|---|---|---|---|
| | | CHEM 1111 (1111) | Fundamentals of Chemistry Lab I |
| | | CHEM 1311 (1331) | Fundamentals of Chemistry I |
| | | CHEM 1112 (1112) | Fundamentals of Chemistry Lab II |
| | | CHEM 1312 (1332) | Fundamentals of Chemistry II |

## MATHEMATICS (24 Hours):

| | | | |
|---|---|---|---|
| | | MATH 2413 (1431) | Calculus I |
| | | MATH 2414 (1432) | Calculus II |
| | | MATH 2318 (2331) | Linear Algebra |
| | | MATH 2415 (2433) | Calculus III |
| | | MATH 3331 | Differential Equations |
| | | MATH 3363 | Intro to Partial Differential Equations |
| | | MATH 3364 | Complex Analysis Fall |

## NATURAL SCIENCES (6 Hours)**

| | | |
|---|---|---|
| | | Approved 3 hours: |
| | | Approved 3 hours: |

****CANNOT BE OTHER PHYSICS COURSES****

**CHECK UH CATALOG FOR ELIGIBILITY AND PRE-REQUISITES**

*Commonly-taken courses are:* *BIOL 1306, 1307, 2301, 2302*
*GEOL 1302, 1303, 1304, 1340, 1345, 1347*

## FREE ELECTIVES

(Additional hours to complete a total of **120 hours**, including at least **36 advanced hours**)

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## RULES YOU NEED TO KNOW:

***Numbers in parentheses indicate UH course numbers prior to Fall 2021.***

1. MINIMUM of a **2.00 GPA** in cumulative, major, and minor GPA to graduate
2. **C- RULE**: MAXIMUM of **6 hours of grades below C-** allowed in UH PHYS courses
3. **PRE-REQ RULE:** Must earn **C- or better** in pre-requisite for PHYS courses
4. LAST 30 hours must be exclusively completed at UH
5. MAXIMUM of 6 W's allowed during entire undergraduate career
6. MINIMUM of 36 advanced hours and 120 total hours to graduate
7. MAXIMUM of 66 lower level transfer hours may be applied towards UH degree

## APPROVED ADVANCED PHYSICS ELECTIVES

**(Check Catalog for Pre-Requisites)**

PHYS 3305: Introduction to Astrophysics Fall Odd Yrs
PHYS 3312: Modern Optics Fall Odd Yrs
PHYS 4337: Introduction to Solid State Physics Spring Odd Yrs
PHYS 4421: Electronic Devices & their Applications Fall Even Yrs
PHYS 4350: Computational Physics Spring Even Yrs
PHYS 4356: Introduction to Particle Physics Fall Even Yrs
PHYS 4360 Suborbital Methods in Space & Atmospheric Physics
PHYS 4370 Nanophysics
PHYS 4397: Selected Topics in Physics (With consent from the Physics Department)

***NOTE:** ***Students are required to take either PHYS 3312 and 3112 OR PHYS 4421; however, the course the student does not take CAN be taken as a Physics elective.***

***Students in catalogs before 2011 are required to complete MATH 3335 Vector Analysis. Students in the 2011-2012 Catalog are required to complete MATH 3364 Complex Analysis.***

## NSM CAPSTONE (Minimum 6 Advanced Hours):

Must choose from one of the following:

- ☐ Minor
- ☐ Double Major
- ☐ Dual Degree
- ☐ Senior Research Project
- ☐ Senior Honors Thesis
- ☐ teachHouston

| Tr | UH | |
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## CORE (Check UH catalog or Core Website for Pre-Requisites)

### COMMUNICATION (6 Hours):

| Tr | UH | |
|---|---|---|
| | | ENGL 1301 (1303) First Year Writing I |
| | | ENGL 1302 (1304) First Year Writing II |

### STATE REQUIREMENTS (12 Hours):

| | | |
|---|---|---|
| | | American History (3 Hours) |
| | | American History (3 Hours) |
| | | GOVT 2305 (POLS 1337) U.S. Government: Congress, President, and Court |
| | | GOVT 2306 (POLS 1336) U.S. and Texas Constitutions and Politics |

### FROM APPROVED CORE LIST (12 Hours): Choose from UH Core Website

| | | |
|---|---|---|
| | | Creative Arts (3 Hours) |
| | | Language, Philosophy & Culture (3 Hours) |
| | | Social & Behavioral Sciences (3 Hours) |
| | | **Satisfied by PHYS 3313** Writing in the Disciplines (3 Hours) *** |

Advisor: _____

3.23.2021 AC