

University of Hawai'i at Mānoa Colleges of Arts & Sciences Program Sheet 2017-2018 Bachelor of Science (BS) in Physics Admissions: Open Process: Declaration Min. Total Credits: 120 (110 in core & major + 10 in electives)

#### **UHM General Education Core Requirements**

Foundations
<b>FW</b> ENG 100, 100A, 190, ESL 100, or AMST 111
□ FS MATH 241
$\Box FG(A/B/C)$
$\Box FG(A/B/C)$

## Diversification

 $\Box DA/DH/DL$ DA/DH/DL

DB

**DP** CHEM 161 or 171, or PHYS 170

**DY** CHEM 161L or 171L, or PHYS 170L

D DS

DS DS

\* See degree, college and major requirements for courses that can also fulfill these.

## **UHM Graduation Requirements**

Focus
H
<b>E</b> (300+) PHYS 485 (recommended)
• O (300+)
□ W PHYS 274L
□ W MATH 311
□ W PHYS 480L
□ W (300+) PHYS 305 or 475 or 481L
□ W (300+) PHYS 305 or 475 or 481L
Hawaiian / Second Language
Hawaiian / Second Language
<b>1</b> 01
□ 101 □ 102
□ 101 □ 102 □ 201
□ 101 □ 102 □ 201
□ 101 □ 102 □ 201 □ 202
□ 101 □ 102 □ 201 □ 202 Credit Minimums
<ul> <li>□ 101</li> <li>□ 102</li> <li>□ 201</li> <li>□ 202</li> </ul> Credit Minimums <ul> <li>• 120 total applicable</li> </ul>

- 2.0 cumulative or higher (*Note: Other GPAs may be required.*)
- Good academic standing

This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements. Meet regularly with your major advisor. Advising is mandatory every semester for Physics majors.

#### **Degree Requirements**

## Bachelor of Science Requirements

- Calculus I
- Calculus II
- Chemistry I with lab

• Chemistry II with lab

- Physics I with lab
- Physics II with lab

*Refer to major requirements for the specific courses that satisfy these requirements.* 

#### **College Requirements**

#### **Credit Maximums**

• 8 KRS activity

- 9 Directed Reading / Research
- 12 Practicum / Internship

#### **Major Requirements for BS in Physics**

Admission: Open

Application: NA

Min. major credits: 49-51 in Physics courses (74-76 with related requirements)

Min. C grade (not C-) in all courses

#### **Requirements**

## **Physics Related Requirements (25 credits)**

□ CHEM  $161^{*DP}$  / □  $161L^{*DY}$ □ CHEM  $162^{*DP}$  / □  $162L^{*DY}$  or 171/171L or 181A/181L

□ MATH 241\*<sup>FS</sup>

**MATH 242** 

**MATH 243 MATH 244** 

**MATH 307 or 311** 

MATH 251A\*<sup>FS</sup>, 252A and 253A may be substituted for MATH 241-244.

MATH 215\*<sup>FS</sup> and 216 may be substituted for 241 and 242 with approval from physics advisor.

# Physics Core Courses (40 credits; see catalog for prerequisites)

□ PHYS 170\*<sup>DP</sup> / □ 170L\*<sup>DY</sup> □ PHYS 272\*<sup>DP</sup> / □ 272L\*<sup>DY</sup> □ PHYS 274\*<sup>DP</sup> / □ 274L\*<sup>DY</sup> **PHYS 310 PHYS 311 PHYS 350 PHYS** 400 **PHYS 430 PHYS 450** □ PHYS 480 / □ 480L **D** PHYS 481

#### Additional Courses (9-11 credits; see catalog for prerequisites)

**2 courses** from Group 1: PHYS 305, 475, 481L 

1 course from Group 2: PHYS 440, 460, 490

#### Notes

Department of Physics and Astronomy: Physics Undergraduate Advisors:

Student Academic Success Center; Keller 213; (808) 956-5911; cnsadvis@hawaii.edu; www.hawaii.edu/natsci/advising Watanabe 416; (808) 956-7087; physics@hawaii.edu; www.phys.hawaii.edu Eric Szarmes; Watanabe 212; (808) 956-2923; szarmes@hawaii.edu Michael Nassir; Watanabe 426; (808) 956-2922; nassir@hawaii.edu Chester Vause; Watanabe 434; (808) 956-2989; cvause@hawaii.edu