



**University of Hawai'i at Mānoa**  
**Colleges of Arts & Sciences Program Sheet 2017-2018**  
**Bachelor of Science (BS) in Microbiology**  
**Admissions: Open Process: Declaration**  
**Min. Total Credits: 120 (109 in core & major + 11 in electives)**

UHM General Education Core Requirements
<b>Foundations</b>
<input type="checkbox"/> FW ENG 100, 100A, 190, ESL 100, or AMST 111
<input type="checkbox"/> FS MATH 215, 241, or 251A
<input type="checkbox"/> FG (A / B / C)
<input type="checkbox"/> FG (A / B / C)
<b>Diversification</b>
<input type="checkbox"/> DA / DH / DL
<input type="checkbox"/> DA / DH / DL
<input type="checkbox"/> DB BIOL 171, 172
<input type="checkbox"/> DP CHEM 161
<input type="checkbox"/> DY CHEM 161L, BIOL 171L, BIOL 172L
<input type="checkbox"/> DS
<input type="checkbox"/> DS
<i>* See degree, college and major requirements for courses that can also fulfill these.</i>
UHM Graduation Requirements
<b>Focus</b>
<input type="checkbox"/> H
<input type="checkbox"/> E (300+)
<input type="checkbox"/> O (300+)
<input type="checkbox"/> W
<input type="checkbox"/> W
<input type="checkbox"/> W
<input type="checkbox"/> W (300+)
<input type="checkbox"/> W (300+)
<b>Hawaiian / Second Language</b>
<input type="checkbox"/> 101
<input type="checkbox"/> 102
<input type="checkbox"/> 201
<input type="checkbox"/> 202
<b>Credit Minimums</b>
• 120 total applicable
• 30 in residence at UHM
• 45 upper division (300+ level) credits
<b>Grade Point Average</b>
• 2.0 cumulative or higher ( <i>Note: Other GPAs may be required.</i> )
• Good academic standing

Degree Requirements
<b>Bachelor of Science Requirements</b>
<input type="checkbox"/> Calculus I
<input type="checkbox"/> Calculus II
<input type="checkbox"/> Chemistry I with lab
<input type="checkbox"/> Chemistry II with lab
<input type="checkbox"/> Physics I with lab
<input type="checkbox"/> Physics II with lab
<i>Refer to major requirements for the specific courses that satisfy these requirements.</i>
College Requirements
<b>Credit Maximums</b>
• 8 KRS activity
• 9 Directed Reading / Research
• 12 Practicum / Internship

*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.*

## Major Requirements for BS in Microbiology

Admission: Open

Application: NA

Min. major credits: 29 (76-78 with related requirements)

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

### Requirements

#### Microbiology Related Requirements (47-49 credits)

BIOL 171<sup>\*DB</sup> /  171L<sup>\*DY</sup>

BIOL 172<sup>\*DB</sup> /  172L<sup>\*DY</sup>

BIOL 275 /  275L (Fall and Summer)

CHEM 161<sup>\*DP</sup> /  161L<sup>\*DY</sup>

CHEM 162 /  162L

CHEM 272 /  272L

CHEM 273

PHYS 151<sup>\*DP</sup> / 151L<sup>\*DY</sup> or  170<sup>\*DP</sup> / 170L<sup>\*DY</sup>

PHYS 152<sup>\*DP</sup> / 152L<sup>\*DY</sup> or  272<sup>\*DP</sup> / 272L<sup>\*DY</sup>

MBBE 402 or BIOC 441

MATH 215<sup>\*FS</sup> or 241<sup>\*FS</sup> or 251A<sup>\*FS</sup>

MATH 216 or 242 or 252A

#### Microbiology Core Courses (5 credits)

MICR 351 / 351L (Spring only)

#### Additional Courses (24 credits; see department for approved choices; see catalog for prerequisites)

##### Additional Microbiology Courses (9 credits)

MICR 431 (Spring only)

MICR 461 (Fall only)

MICR 475

**3 credits** from Group 1: MICR 361, 401, 463, 470, 485, or 490

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**6 credits** from Group 2: MICR 401L, 461L, 463L, 475L, 485L, 490L

\_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**6 credits** of approved Group 3 major electives:

\_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

### Notes

Department of Biology Advising: Edmondson 216; (808) 956-5911; [bioadvis@hawaii.edu](mailto:bioadvis@hawaii.edu)

To schedule an advising appointment, visit [manoa.hawaii.edu/biology/advising](http://manoa.hawaii.edu/biology/advising).

Microbiology Department: Snyder 207; (808) 956-8553; [www.hawaii.edu/microbiology/](http://www.hawaii.edu/microbiology/)

Microbiology Undergraduate Advisor: Jain Pak; (808) 956-8303; [jainpak@hawaii.edu](mailto:jainpak@hawaii.edu)