### UHM General Education Core Requirements

**Foundations**
- FW
- FS
- FG (A / B / C)
- FG (A / B / C)

**Diversification**
- DA / DH / DL
- DA / DH / DL
- DB
- DP
- DY
- DS
- DS

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

### UHM Graduation Requirements

**Focus**
- H
- E (300+)
- O (300+)

- W
- W
- W (300+)
- W (300+)

**Hawaiian / Second Language**
- 101
- 102
- 201
- 202

**Credit Minimums**
- 124 total applicable
- 30 in residence at UHM

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

### Degree Requirements

**Bachelor of Arts Requirement (Can also fulfill FS)**
- MATH 100, 112, 140, 161, 203, 215, 241, 251A; PHIL 110, 111; BUS 250; ICS 141, 241; NREM 203; or SOCS 150

**Bachelor of Science Requirements**
- MATH 215*FS or 241*FS
- MATH 216 or 242
- DB course
- CHEM 161*DP / 161L*DY
- CHEM 162*DP / 162L*DY
- PHYS 151*DP or 170*DP / 151L*DY or 170L*DY
- PHYS 152*DP or 272*DP / 152L*DY or 272L*DY

**College Requirements**

#### A & S Options – Complete at least one option
*(BA Courses cannot double count with Gen. Ed. Core)*

- **Bachelor of Arts Breadth (3 credit each)**
  - AH
  - LLL
  - NS
  - SS

- **Bachelor of Arts Depth** – see list of A & S depts.
  - Minor
  - Certificate
  - 2nd A & S Major

- **Bachelor of Science**
  - See degree requirements above.

**Credit Minimums**
- 60 non-introductory

**Credit Maximums**
- 8 KRS activity
- 9 Directed Reading / Research
- 12 Practicum / Internship

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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 BA or BS in Microbiology**

**Admission:** Open  
**Application:** NA  
**Min. major credits:** BA = 27 (67 with related requirements); BS = 36 (76 with related requirements)  
**Min. C grade (not C-) in all prerequisite courses**

**Requirements**

### Microbiology Related Requirements (40-41 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171<em>DB / 171L</em>DY</td>
<td>Fall and Summer</td>
</tr>
<tr>
<td>BIOL 172<em>DB / 172L</em>DY</td>
<td>Spring and Summer</td>
</tr>
<tr>
<td>BIOL 275<em>DB / 275L</em>DY</td>
<td>Spring and Summer</td>
</tr>
<tr>
<td>CHEM 161<em>DP / 161L</em>DY</td>
<td></td>
</tr>
<tr>
<td>CHEM 162<em>DP / 162L</em>DY</td>
<td></td>
</tr>
<tr>
<td>CHEM 272<em>DP / 272L</em>DY</td>
<td></td>
</tr>
<tr>
<td>CHEM 273*DP</td>
<td></td>
</tr>
<tr>
<td>PHYS 151<em>DP / 151L</em>DY or 170<em>DP / 170L</em>DY</td>
<td></td>
</tr>
<tr>
<td>PHYS 152<em>DP / 152L</em>DY or 272<em>DP / 272L</em>DY</td>
<td></td>
</tr>
</tbody>
</table>

### Microbiology Core Courses (5 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 351 / 351L</td>
<td></td>
</tr>
</tbody>
</table>

**BA only (22 credits; see department for approved choices; see catalog for prerequisites)**

9 credits from: MICR 361, 401, 431, 461, 463, 470, 475, 485, 490

4 credits from: MICR 401L, 431L, 461L, 463L, 475L, 485L, 490L

9 credits of approved major electives:

4 credits from: MATH 215* or 216* or 241* or 242*

**BS only (31 credits; see department for approved choices; see catalog for prerequisites)**

### Additional Related Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBE 402 or BIOC 441</td>
<td></td>
</tr>
<tr>
<td>MATH 215 and 216 or 241 and 242/242L or 251A and 252A</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Microbiology Courses (12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 431</td>
<td></td>
</tr>
<tr>
<td>MICR 461</td>
<td></td>
</tr>
<tr>
<td>MICR 475</td>
<td></td>
</tr>
<tr>
<td>MICR 361, 401, 463, 470, 485, 490</td>
<td></td>
</tr>
</tbody>
</table>

6 credits from: MICR 401L, 431L, 461L, 463L, 475L, 485L, 490L

6 credits of approved major electives:

### Notes

Colleges of Arts and Sciences Student Academic Services: QLCS 113; (808) 956-8755  
Microbiology Department: Snyder 207; (808) 956-8553; uhmicro@hawaii.edu; www.hawaii.edu/microbiology  
Microbiology Undergraduate Chair: Paul Patek, PhD; Snyder 318; (808) 956-7025; patek@hawaii.edu  
http://www.advising.hawaii.edu/artsci/pages/resources/lib_art_degrees/majorskills/majorskills_micr.asp#MICR_SCHED

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