**Bachelor of Science (BS) in Molecular Cell Biology**

**Admissions:** Open  **Process:** Declaration  
**Min. Total Credits:** 120 (109 in core & major + 11 in electives)

### UHM General Education Core Requirements

**Foundations**
- FW: ENG 100, 100A, 190, or ESL 100
- FS: MATH 215, 241, or 251A
- FG (A/B/C)
- FG (A/B/C)

**Diversification**
- DA/DH/DL
- DB: BIOL 171, 172
- DP: CHEM 161
- DY: BIOL 171L, 172L, CHEM 161L
- DS: MCB 314
- 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
- W (300+)
- W (300+)

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

**Credit Minimums**
- 120 total applicable
- 30 in residence at UHM
- 45 upper division (300+ level) credits

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

### 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

---

*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 Molecular Cell Biology

**Admission:** Open

**Application:** NA

**Min. major credits:** BS = 46 (74 with related requirements)

**Min. C grade (not C-):** in all prerequisite courses

### Requirements

#### Molecular Cell Biology Core Requirements (36 credits)
- BIOL 171*DB /
- BIOL 171L*DY
- BIOL 172*DP /
- BIOL 172L*DY
- BIOL 275 /
- BIOL 275L
- BIOL 375 /
- BIOL 375L
- BIOL 407
- BIOL 408 /
- BIOL 408L
- Biochemistry (MBBE 402 or BIOC 441)
- MCB 314*DS
- MCB 461
- MCB 472

#### Molecular Cell Biology Related Requirements (10 credits from Group 1 and 2, minimum of 1 credit from 2)

##### Group 1 Courses

**10 credits** from: ICS 475, MATH 304, 305, MICR 351, 431, 470, 475, 490, MBBE 405, PHYL 301, ZOOL 420, 442, MICR/BOT/ZOOL 499
- [ ]
- [ ]
- [ ]
- [ ]

##### Group 2 Courses

- MICR 351L, 431L, 461L, 475L, 490L, PHYL 301L, ZOOL 420L
- [ ]
- [ ]
- [ ]
- [ ]

**Related Major Courses**
- MATH 215, 241, or 251A *FS
- MATH 216, 242, or 252A
- CHEM 161*DP /
- CHEM 161L*DY
- CHEM 162/
- CHEM 162L
- CHEM 272/
- CHEM 272L
- CHEM 273
- PHYS 151/
- PHYS 151L or 170/
- PHYS 152/
- PHYS 152L or 272/

### Notes

Department of Biology Advising: Edmondson 216; (808) 956-8303; bioadvis@hawaii.edu

To schedule an advising appointment, visit manoa.hawaii.edu/biology/advising.

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

Microbiology Undergraduate Advisor: Cheri Kau; (808) 956-6174; cherikau@hawaii.edu

Rev. SD 5/15