

University of Hawai'i at Mānoa – Four-Year Academic Plan 2013-2014 Colleges of Tropical Agriculture and Human Resources Bachelor of Science (BS) in Molecular Biosciences and Biotechnology

Track: Environmental and Microbial Biotechnology

This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.

| Year 1 | | Year 2 | | Year 3 | | Year 4 | |
|-----------------------|-------------|-------------------------|----|-------------------------|----|---------------|-----|
| Fall | | Fall | | Fall | | Fall | |
| CHEM 161 (DP) | 3 | CHEM 272 | 3 | MBBE 402 | 4 | MBB Elective | 3 |
| CHEM 161L (DY) | 1 | CHEM 272L | 2 | MBBE 402L | 2 | MBB Elective | 3 |
| BIOL 171 (DB) | 3 | MATH 215 or 241 (FS) | 4 | PEPS 371 or BIOL 375 or | 3 | MBB Elective | 3 |
| BIOL 171L | 1 | MBBE 304 | 3 | ANSC 446 | | Elective | 3 |
| H/SL | 3 | PHYS 100/100L or | 4 | DA/DH/DL | 3 | | |
| FW | 3 | 151/151L and 152/152L | | Elective | 3 | | |
| FG (A/B/C) | 3 | | | | | | |
| Credits | 17 | Credits | 16 | Credits | 15 | Credits | 12 |
| Spring | | Spring | | Spring | | Spring | |
| CHEM 162 | 3 | CHEM 273 | 3 | MBBE 401 | 3 | MBB Elective | 3 |
| CHEM 162L | 1 | CHEM 273L | 1 | MICR 351 | 3 | MBB Elective | 3 |
| BIOL 172 | 3 | BIOL 275 | 3 | MICR 351L | 2 | DS | 3 |
| BIOL 172L | 1 | BIOL 275L | 1 | MBBE/PEPS/TPSS 499 | 6 | Elective | 3 |
| NREM 220 (DS) | 3 | NREM 310 | 3 | | | | |
| H/SL | 3 | DA/DH/DL | 3 | | | | |
| FG (A/B/C) | 3 | DS | 3 | | | | |
| Credits | 17 | Credits | 17 | Credits | 14 | Credits | 12 |
| Summer | mmer Summer | | | Summer | | Summer | |
| Cradita | 0 | Credits | 0 | Credits | 0 | Credits | 0 |
| Credits | | | | | | | 0 |
| Total Credits | 34 | Total Credits | 67 | Total Credits | 96 | Total Credits | 120 |

Notes:

Students must take placement exams to be able to register for CHEM 161 and MATH 215 or 241.

 $Students\ must\ take\ 15\ credits\ in\ Environmental\ and\ Microbial\ Biotechnology\ from\ the\ following:\ BE\ 431;\ CHEM\ 274/274L,\ CHEM\ 445;\ GEOG\ 101/101L;$

MICR 431/431L, MICR 461/461L, MICR 475/475L; PEPS 405; or MBBE/PEPS/TPSS 499 credits beyond 3.

Students must incorporate all focus requirements into this plan.

Minimum 45 upper division (300+ course) credits are required.