



**University of Hawai'i at Mānoa**  
**College of Tropical Agriculture and Human Resources Program Sheet 2015-2016**  
**Bachelor of Science (BS) in Molecular Biosciences and Biotechnology**

**Admissions: Open Process: Declaration**

**Min. Total Credits: 120 (105 in core & major + 15 in electives)**

<b>UHM General Education Core Requirements</b>
<b>Foundations</b>
<input type="checkbox"/> FW ENG 100, 100A, 190, or ESL 100
<input type="checkbox"/> FS MATH 215 or 241
<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
<input type="checkbox"/> DP CHEM 161
<input type="checkbox"/> DY CHEM 161L
<input type="checkbox"/> DS NREM 220
<input type="checkbox"/> DS
<i>* See degree, college and major requirements for courses that can also fulfill these.</i>
<b>UHM Graduation Requirements</b>
<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>
Hawaiian/Second Language Requirement is not required for students admitted to the Molecular Biosciences and Biotechnology program.
<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

<b>College Requirements</b>
<b>CTAHR Required Set of Interrelated Courses</b>
<input type="checkbox"/> NREM 310
<input type="checkbox"/> Internship or capstone course (MBBE/PEPS/TPSS 499)
<b>Credit Minimums</b>
• 120 total applicable

*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 Biosciences and Biotechnology

Admission: Open

Application: NA

Min. major credits: 72 (79 with related requirements)

Min. exit GPA: 2.0 in the major

### Requirements

#### Molecular Biosciences and Biotechnology Related Requirements (7 credits)

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

NREM 220\*<sup>DS</sup>

#### Molecular Biosciences and Biotechnology Core Courses (54 credits)

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

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

BIOL 275\*<sup>DB</sup> /  275L\*<sup>DY</sup>

BIOL 407

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

CHEM 162\*<sup>DP</sup> /  162L\*<sup>DY</sup>

CHEM 272\*<sup>DP</sup> /  272L\*<sup>DY</sup>

MBBE 304\*<sup>E</sup>

MBBE 401

MBBE 402

MBBE 408

MBBE 483

PHYS 100\*<sup>DP</sup> /  100L\*<sup>DY</sup> or  151\*<sup>DP</sup> /  151L\*<sup>DY</sup> and  152\*<sup>DP</sup> /  152L\*<sup>DY</sup>

MBBE/PEPS/TPSS 499 (6 credits)

#### General Biotechnology Elective Courses (18 credits)

18 credits of the following:

ANSC446

BE 420

BOT 101/101L

MBBE 412

MICR 485/485L

PEPS 421

ZOOL 320/320L

BE 150

BE 431

BOT 470/470L

MICR 351/351L

PEPS 363

PEPS 422

BE 373

BE 440

CHEM 273/273L

MICR 461

PEPS 371

TPSS 440

BE 410

BIOL 375

MBBE 402L

MICR 475

PEPS 405

TPSS 453

### Notes

CTAHR Academic Advising Office:

Gilmore 1<sup>st</sup> floor; [ctahradv@hawaii.edu](mailto:ctahradv@hawaii.edu)

Appointments are required to see an advisor; please visit [ctahradv.youcanbook.me/](http://ctahradv.youcanbook.me/) to schedule an appointment.

CTAHR Office of Academic and Student Affairs:

Gilmore 210, (808) 956-8183/(808) 956-6733; [www.ctahr.hawaii.edu/ugadvising](http://www.ctahr.hawaii.edu/ugadvising)