



**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: Aquaculture and Animal 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	MBBE/PEPS/TPSS 499	6
CHEM 161L (DY)	1	CHEM 272L	2	MBBE 402L	2	MBB Elective	3
BIOL 171 (DB)	3	MBBE 304	3	PEPS 371 or BIOL 375 or	3	PHYS 100/100L or	4
BIOL 171L	1	MATH 215 or 241 (FS)	4	ANSC 446		151/151L and 152/152L	
FW	3	DA/DH/DL	3	ZOOL 320	3		
FG (A/B/C)	3			ZOOL 320L	2		
H/SL	3			Elective	3		
Credits	17	Credits	15	Credits	17	Credits	13
Spring		Spring		Spring		Spring	
CHEM 162	3	BIOL 265	3	BE 431	3	MBB Elective	3
CHEM 162L	1	BIOL 265L	1	MBBE 401	3	MBB Elective	3
BIOL 172	3	BIOL 275	3	MBB Elective	3	MBB Elective	3
BIOL 172L	1	BIOL 275L	1	MBB Elective	3	DS	3
NREM 220 (DS)	3	NREM 310	3				
FG (A/B/C)	3	DS	3				
H/SL	3	DA/DH/DL	3				
Credits	17	Credits	17	Credits	12	Credits	12
Summer		Summer		Summer		Summer	
Credits	0	Credits	0	Credits	0	Credits	0
<b>Total Credits</b>	<b>34</b>	<b>Total Credits</b>	<b>66</b>	<b>Total Credits</b>	<b>95</b>	<b>Total Credits</b>	<b>120</b>

**Notes:**

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

Students must take 16 credits in Aquaculture and Animal Biotechnology from the following: ANSC 460; BE 460; BIOL 301/301L; OCN 210, 331; ZOOL 475/475L; 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.