



**University of Hawai'i at Mānoa – Four-Year Academic Plan 2017-2018**  
**Colleges of Tropical Agriculture and Human Resources**  
**Bachelor of Science (BS) in Molecular Biosciences and Biotechnology**

**SAMPLE**

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	
BIOL 171 (DB)	3	CHEM 272	3	MBBE 402	4	MBBE/PEPS/TPSS 499	3
BIOL 171L	1	CHEM 272L	2	MBB Elective	3	PHYS 100 or 151 and 152	3
CHEM 161 (DP)	3	MATH 215 or 241 (FS)	4	MBB Elective	3	PHYS 100L or 151L and 152L	1
CHEM 161L (DY)	1	MBBE 304	3	Elective 300+	3	MBB Elective	3
NREM 220 or ECON 130	3	DA/DH/DL	3			MBB Elective	3
FW	3					Elective	2
FG (A/B/C)	3						
Credits	17	Credits	15	Credits	13	Credits	15
Spring		Spring		Spring		Spring	
BIOL 172	3	BIOL 275	3	MBBE 401	3	MBBE/PEPS/TPSS 499	3
BIOL 172L	1	BIOL 275L	1	MBBE 483	3	MBB Elective	3
CHEM 162	3	NREM 310	3	MBB Elective	3	MBB Elective	3
CHEM 162L	1	DS	3	MBB Elective	3	NREM 220 or ECON 130	3
FG (A/B/C)	3	DA/DH/DL	3	Elective	3		
Elective	3	Elective	3				
Elective	3						
Credits	17	Credits	16	Credits	15	Credits	12
Summer		Summer		Summer		Summer	
Credits		Credits	0	Credits	0	Credits	0
<b>Total Credits</b>	<b>34</b>	<b>Total Credits</b>	<b>65</b>	<b>Total Credits</b>	<b>93</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 24 credits in General Biotechnology from the following: ANSC 446, ANSC/OCN 450; BE 150, 260, 373, 410, 420, 431, 440; BIOL 375, 407, BIOL/MCB 472; BOT 102/102L, 420; CHEM 273/273L; MBBE 402L, 408, 412; MICR 351/351L, 461, 470, 475/475L, 485/485L, 490; PHRM 201, 203; PEPS 363, 371, 405, 421, 422; TPSS 440, 453, 470/470L; or ZOO 320/320L. Minimum 45 upper division (300+ course) credits are required.

Students must incorporate all focus requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific.