



**University of Hawai'i at Mānoa – Four-Year Academic Plan 2016-2017**  
**Colleges of Arts and Sciences**  
**Bachelor of Science (BS) in Molecular Cell Biology**

**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	BIOL 407	3	BIOL 375	3
BIOL 171L (DY)	1	CHEM 272L	2	Group 1	3	BIOL 375L	2
CHEM 161 (DP)	3	PHYS 151	3	HSL 201	3	MCB 461	3
CHEM 161L	1	PHYS 151L	1	DA/DH/DL	3	DS	3
MATH 215 (FS)	4	HSL 101	3	DA/DH/DL	3	Elective	3
FW	3	FG (A/B/C)	3			Elective	1
Credits	15	Credits	15	Credits	15	Credits	15
Spring		Spring		Spring		Spring	
BIOL 172 (DB)	3	BIOL 275	3	BIOL 408	3	MCB 314 (DS)	1
BIOL 172L (DY)	1	BIOL 275L	1	BIOL 408L	2	MCB 472	3
CHEM 162	3	CHEM 273	3	MBBE 402 or BIOC 441	4	Group 1	4
CHEM 162L	1	PHYS 152	3	Group 1	3	Group 2	1
MATH 216	3	PHYS 152L	1	HSL 202	3	Elective	3
FG (A/B/C)	3	HSL 102	3	DS	3	Elective	2
Credits	14	Credits	14	Credits	18	Credits	14
Summer		Summer		Summer		Summer	
Credits	0	Credits	0	Credits	0	Credits	0
<b>Total Credits</b>	<b>29</b>	<b>Total Credits</b>	<b>58</b>	<b>Total Credits</b>	<b>91</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 incorporate all focus requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific.

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

**Molecular Cell Biology BS Group Electives\***

**10 credits from Group 1 and 2; minimum of 1 credit from Group 2)**

**Group 1:** ICS 475; MATH 304, 305; MICR 351, 431, 470, 475, 490, 499; MBBE 405; PHYL 301; ZOOL 420, 442; ZOOL 499

**Group 2:** MICR 351L, 431L, 461L, 475L, 485L, 490L; PHYL 301L; ZOOL 420L

\*Availability of courses may vary between years and/or semesters.

**SAMPLE**