



**University of Hawai'i at Mānoa – Four-Year Academic Plan 2013-2014**  
**Colleges of Arts and Sciences**  
**Bachelor of Science (BS) in Molecular Cell Biology**

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	NI CHEM 272	3	NI BIOL 407	3	NI BIOL 375	3
BIOL 171L (DY)	1	NI CHEM 272L	2	NI Group 1	3	NI BIOL 375L	2
CHEM 161 (DP)	3	PHYS 151	3	NI HSL 201	3	NI MCB 461	3
CHEM 161L	1	PHYS 151L	1	DA/DH/DL	3	NI DS	3
NI 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	3	NI BIOL 275	3	NI BIOL 408	3	NI MCB 314	1
BIOL 172L	1	NI BIOL 275L	1	NI BIOL 408L	2	NI MCB 472	3
CHEM 162	3	NI CHEM 273	3	NI MBBE 402 or BIOG 441	4	NI Group 1	3
CHEM 162L	1	PHYS 152	3	NI Group 1	3	NI Group 2	1
NI MATH 216	3	PHYS 152L	1	NI HSL 202	3	Elective	3
FG (A/B/C)	3	HSL 102	3	DS	3	Elective	3
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.
- 60 non-introductory credits are required for A&S Natural Sciences majors.

## **Molecular Cell Biology BS Group Electives**

**Biochemistry (one of the following):** MBBE 402 or BIOC 441

**Group 1 (3 credits of the following):** MICR 361, 401, 463, 470, 485, or 490

**Group 2 (6 credits of the following):** MICR 401L, 431L, 461L, 463L, 470L, 475L, 485L, or 490L

**Group 3 (6 credits of the following):** Any 300+ level MICR course not used to satisfy Group 1 or 2; ICS 475; MATH 304, 305; PHYL 420/420L; ZOOL 420/420L, 422; MOT/MICR/ZOOL 499 or additional courses with approval from a Microbiology advisor.