

## University of Hawai'i at Mānoa – Four-Year Academic Plan 2016-2017 Colleges of Arts and Sciences

## **Bachelor of Science (BS) in Microbiology**

**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 or 172 (DB)	3	CHEM 272	3	MBBE 402 or BIOC 441	4	MICR 475 or 461	3
<b>BIOL 171L</b> or <b>172L</b> (DY)	1	CHEM 272L	2	MICR 461 or 475	3	Group 1	3
<b>CHEM 161</b> (DP)	3	PHYS 151/151L or	4	Group 2	2	Group 2	2
<b>CHEM 161L</b> (DY)	1	170/170L		DS	3	Group 2	2
MATH 215 or 241 or 251A (FS)	4	HSL 101	3	HSL 201	3	Elective	3
FW	3	FG (A/B/C)	3			DA/DH/DL	3
Credits	15	Cradita	15	Credits	15	Credits	16
	15	Credits	15		15		10
Spring		Spring		Spring		Spring	
<b>BIOL 172</b> or <b>171</b> (DB)	3		3		3	MICR 431	3
<b>BIOL 172L</b> or <b>171L</b> (DY)	1	BIOL 275L	1	MICR 351L	2	Group 3	3
CHEM 162	3	CHEM 273	3	HSL 202	3	Group 3	3
CHEM 162L	1	PHYS 152/152L or	4	DS	3	Elective	3
MATH 216 or 242 or 252A	3	272/272L		DA/DH/DL	3	Elective	3
FG (A/B/C)	3	HSL 102	3	Elective	2		
Credits	14	Credits	14	Credits	16	Credits	15
Summer		Summer		Summer		Summer	
Credits	0	Credits	0	Credits	0	Credits	0
Total Credits	29	Total Credits	58	Total Credits	89	Total Credits	120

## 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.

## **Microbiology 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; BIOL 375/375L, 407 or 408; BOT 430/430L or 480; CHEM 351, 352; FSHN 403 or 430; MICR 499; PEPS 405 or 486; PH 663; ZOOL 340/340L, 416, 417, 631, or 632; or additional courses with approval from a Microbiology advisor.