

# University of Hawai'i at Mānoa – Four-Year Academic Plan 2022-2023

## School of Ocean and Earth Science and Technology

### Bachelor of Science (BS) in Earth Sciences, **Basic Science & Research Concentration**

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		Required EARTH and other courses	
Fall		Fall		Fall		Fall		Required EARTH/GenEd double-dip	
ERTH 101/103/104/106/130 (DP)	3	ERTH 201 <sup>2</sup>	3	ERTH 333	4	ERTH 398	3	Science elective (see list below)	
ERTH 101L (DY)	1	ERTH 250 / EE 160	3	PHYS 272	3	ERTH 410 (E, O focus)	2	Upper Division elective (any topic)	
MATH 241 (FQ)	4	BIOL 171 (DB) <sup>3</sup>	3	PHYS 272L	1	ERTH 499	3	Lower Division elective (any topic)	
OEST 100	1	BIOL 171L <sup>3</sup>	1	DA/DL	3	DS	3	UHM GenEd/Graduation requirements	
CHEM 161	3	OCN 105 (FG) <sup>1</sup>	3	Science Elective	3	Science Elective	3	Support courses	
CHEM 161L	1			Elective 300+	3	Elective 300+	3		
FW	3								
Credits	16	Credits	13	Credits	17	Credits	17		
Spring		Spring		Spring		Spring			
ERTH 200 <sup>2</sup> (W focus)	4	PHYS 170	4	ERTH 413	3	ERTH 499	3		
MATH 242	4	PHYS 170L	1	DS	3	Science Elective	3		
CHEM 162	3	BIOL 172 <sup>3</sup>	3	Science Elective	3	Elective 300+	3		
CHEM 162L	1	BIOL 172L <sup>3</sup>	1	Science Elective	3	Elective	3		
ERTH 135 (FG) <sup>1</sup>	3	HWST 107 (DH, H-focus) <sup>4</sup>	3	Elective 300+	3				
		Elective	3						
Credits	15	Credits	15	Credits	15	Credits	12		
Summer		Summer		Summer		Summer			
Credits	0	Credits	0	Credits	0	Credits	0		
<b>Total Credits</b>	<b>31</b>	<b>Total Credits</b>	<b>59</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 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.

The following may fulfill upper-division Science elective requirements: any 300+ level EARTH, EPET, ATMO, or OCN course, plus GEO 370, 388, 405; NREM 301, 302, 477; PEPS 451 or alternative science elective approved by the student's advisor after consultation with the student's research mentor, with EARTH461/ NREM 477/ GEO 388 strongly recommended.

<sup>1</sup> or other FG course

<sup>2</sup> either EARTH 200 (Spring only) or EARTH 201 (Fall only) can fulfill this requirement. Whichever of these courses is not taken can be replaced by an Elective (either 3 or 4 credits, respectively).

<sup>3</sup> other accepted DB courses in lieu of BIOL 171, 171L, 172, 172L are any combination of the following totaling 8 credits: BE 120; BIOC 441; BOT 101; MICR 130; NREM 210, 251; OCN 102; OEST 103; ZOOL

<sup>4</sup> or other DH course