## INSTITUTE OF ENVIRONMENTAL AND MARINE SCIENCES BACHELOR OF SCIENCE IN MARINE BIOLOGY

(2018 CURRICULUM)

## FIRST SEMESTER

	First Semester		•		Second Semester	
Subj Code	Course Title	Units		Subj Code	Course Title	Units
CHS 1	Reading & Interpreting of Hebrew Scriptures	3	1 [	CHS 2	Reading & Interpreting the Christian Scriptures	3
GE	(Select from choices, take GE10 before GE11)	3		GE	(Select from choices, take GE10 before GE11)	3
GE		3	1	GE		3
GE		3		Math 24	Calculus I	4
MB 11	Ecological Concepts	3		MB 12	Marine Botany	4
MB 13	Marine Invertebrates	4		MB 14	General Physiology	3
PE 1	Physical Fitness & Swimming	(2)		PE 2	Physical Education	(2)
NSTP 1	National Training Service Program	(3)		NSTP 2	National Training Service Program	(3)
PEP 1	Personality Enhacement Program			PEP 2	Personality Enhacement Program	
	TOTAL	19 (24)			TOTAL	20 (25)
		SECC	ONC	) YEAR		
GE	(Select from choices, take GE10 before GE11)	3		GE	(Select from choices, take GE10 before GE11)	3
GE		3	1	GE		3
MB 21	Analytical Chemistry	3	1	MB 22	Organic Chemistry	3
MB 23	Scientific Writing	3		MB 24	Inferential Statistics & Biometry	3
MB 25	Marine Ecology	4		MB 26	Chemical & Biological Oceanography	4
MB 27	Reproductive & Developmental Biology	3		MB 28	Cell & Molecular Biology	4
PE 3	Physical Education	(2)		PE 4	Physical Education	(2)
	TOTAL	19 (21)			TOTAL	20 (22)
			RD	YEAR		, ,
GE	(Select from choices, take GE10 before GE11)	3	] [	GE	(Select from choices, take GE10 before GE11)	3
GE		3		MB 32	Waves, Optics and Thermodynamics	3
MB 31	Mechanics, Electromag & Grav Theory	3		MB 34	Geological & Physical Oceanography	4
MB 33	Biochemistry	3		MB 36	Marine Microbiology & Fungi	4
MB 35	Basic Meteorology	3		MB 38	Elements of Research	3
MB 37	Coral Reefs	3		MB 40	Problem Development, Sampling	2
MB 39	Introduction to Genetics	4			Design & Method	
	TOTAL	22			TOTAL	19
	NOTE for Summer Term:				Summer	
Subjects with "R" can be enrolled in any semester				MB 41	Practicum (144 hr)	3
Subjects wi	ith "S" are only offered in summer term			MB 42R	Water Safety	3
	(unless for special cases).			MB 43R	Data Gathering & Analysis*	2*
MB 43R* is	only for students who have passed their				TOTAL	6 or 8
	colloquium and are gathering thesis data		L			1
		FOU	RTH	H YEAR		
MB 51	Systematics, Biodiv & Evolution	4	ן ן	MB Elec2	Marine Biology Elective -2	3
MB 53	Marine Vertebrates	4	1	MB Elec3	Marine Biology Elective -3	3
MB 55	Integrated Coastal/Marine Mgt	3	1 1	MB Elec4		3
MB Elec1	Marine Biology Elective-1	3	1	MB Elec5		3
MB 43R	Data Gathering & Analysis**	2**	1	MB 99	Thesis Write-up & Presentation	3
	~ /		1		-	
	**If not enrolled in previous summer term				of Results	

## GENERAL EDUCATION SUBJECTS (Includes University GE Requirements CHS)

- GE 1. Understanding the Self
  GE 2. Readings in Philippine History
  GE 3. The Contemporary World
  GE 4. Mathematics in the Modern World
  GE 5. Purposive Communication
  GE 6. Art Appreciation
  GE 7. Science, Technology & Society
- GE 8. Ethics GE 9. The Life and Works of Jose Rizal GE 10. Retorika: Sining ng Pagpapahayag GE 11. Panitikan GE 12/CHS 3. Christian and Peace Building CHS 1 - Reading & Interpreting the Hebrew Scriptures CHS 2 - Reading & Interpreting the Christian Scriptures

## MARINE BIOLOGY ELECTIVES

- MB 60. Ichthyology MB 61. Fishery Management MB 62. Mariculture/Silviculture MB 63. Marine Pollution MB 64. Pathology of Marine Organisms MB 65. Marine Birds MB 66. Marine Mammals MB 67. Sediment Ecology MB 68. Marine Plankton MB 69. Phycology
- MB 70. Marine Protected Areas MB 71. Scientific Diving
- MB 72. Remote Sensing and GIS
- MB 73. Marine Reptiles
- MB 74. Marine Natural Products
- MB 75. Marine Biogeography and Mapping
- MB 76. Ecosystem Remediation and Restoration
- MB 77. Insects & the Marine Ecosystem
- MB 78. Mangrove Forests
- MB 79. Special Topics in Marine Biology