

CENTRO ESCOLAR UNIVERSITY
Manila
School of Science and Technology

FOUR-YEAR PROGRAM LEADING TO THE DEGREE
BACHELOR OF SCIENCE IN BIOLOGY
(SPECIALIZATION IN MICROBIOLOGY)
Effective School Year 2023-2024

FIRST YEAR
First Semester

Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCBO101	General Botany	3	2	0	5	3	6	0	9	NONE
PCCH100	Inorganic Chemistry	2	1	0	3	2	3	0	5	NONE
COMA11	Mathematics in the Modern World	3	0	0	3	3	0	0	3	NONE
COPY11	Understanding the Self	3	0	0	3	3	0	0	3	NONE
COPE21	PATH-FIT 1: Movement Competency Training	2	0	0	2	2	0	0	2	NONE
COSH11	Empowering the Self	2	0	0	2	2	0	0	2	NONE
COSH21	Religion: History and Texts	3	0	0	3	3	0	0	3	NONE
	TOTAL	18	3	0	21	18	9	0	27	

Second Semester

Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCCH103	Organic Chemistry	3	2	0	5	3	6	0	9	PCCH 100
PCZO101	General Zoology	3	2	0	5	3	6	0	9	NONE
COLA11	Purposive Communication	3	0	0	3	3	0	0	3	NONE
COLA31	Foreign Language 1	3	0	0	3	3	0	0	3	NONE
COLA51	Expository Writing for Global Communication	3	0	0	3	3	0	0	3	NONE
COSH31	Art Appreciation	3	0	0	3	3	0	0	3	NONE
COSH41	Readings in Philippine History	3	0	0	3	3	0	0	3	NONE
COPE22	PATH-FIT 2: Swimming/Recreation	2	0	0	2	2	0	0	2	NONE
	TOTAL	23	4	0	27	23	12	0	35	

**Those who want to take the Licensure Exam for Teachers (LET) may take 18 units of education subjects from SELAMS.*

SECOND YEAR
First Semester

Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCCH104	Biochemistry	3	2	0	5	3	6	0	9	PCCH 103
PCCH106	Analytical Chemistry with Instrumentation	3	2	0	5	3	6	0	9	NONE
PRBI132	Comparative Anatomy and Phylogeny of Vertebrates	3	2	0	5	3	6	0	9	PCZO 101
COLA32	Foreign Language 2	3	0	0	3	3	0	0	3	COLA 31
CONS21	Science, Technology and Society	3	0	0	3	3	0	0	3	NONE
COSH43	The Life and Works of Rizal	3	0	0	3	3	0	0	3	NONE
COPE23	PATH-FIT 3: Dance/Individual-Dual Sports	2	0	0	2	2	0	0	2	NONE
CONP11	NSTP 1	3	0	0	3	3	0	0	3	NONE
	TOTAL	23	6	0	29	23	18	0	41	

Second Semester

Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRBI121	Systematic Botany	3	2	0	5	3	6	0	9	PCBO 101
PRBI131	Systematic Zoology	3	2	0	5	3	6	0	9	PRBI 132
PRBI150	General Physiology	3	2	0	5	3	6	0	9	PCBO 101, PCZO 101
COSH32	Ethics	3	0	0	3	3	0	0	3	NONE
COSH42	The Contemporary World	3	0	0	3	3	0	0	3	NONE
COPE24	PATH-FIT 4: Team Sports/Games	2	0	0	2	2	0	0	2	NONE
CONP12	NSTP 2	3	0	0	3	3	0	0	3	CONP 11
	TOTAL	20	6	0	26	20	18	0	38	

THIRD YEAR										
First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCMA101	Biostatistics	3	0	0	3	3	0	0	3	COMA 11
PRBI133	Evolutionary Biology	3	2	0	5	3	6	0	9	PRBI 121, PRBI 131, *PRBI 160
PRBI134	Developmental Biology	3	2	0	5	3	6	0	9	PRBI 132, PRBI 150
PRBI160	Genetics	3	2	0	5	3	6	0	9	PCBO 101, PCZO 101
PRBI170	General Microbiology	3	2	0	5	3	6	0	9	PCBO 101, PCZO 101
	TOTAL	15	8	0	23	15	24	0	39	

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCBI111	Bioinformatics	2	1	0	3	2	3	0	5	PRBI 160, PRBI 133, *PRBI 161
PCPD102	Biophysics	2	2	0	4	2	6	0	8	NONE
PRBI141	Field Biology and Ecology	3	2	0	5	3	6	0	9	PRBI 170, PRBI 131, PRBI 160
PRBI152	Immunology	3	0	0	3	3	0	0	3	PRBI 150
PRBI161	Cell and Molecular Biology	3	2	0	5	3	6	0	9	PRBI 160
PRBI177	Parasitology	2	1	0	3	2	3	0	5	PRBI 170
COSH12	Living and Loving Relationships	2	0	0	2	2	0	0	2	COSH 11
COSH22	Man, Church and Society	3	0	0	3	3	0	0	3	NONE
	TOTAL	20	8	0	28	20	24	0	44	

Summer										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRBI183	Work Orientation Seminar / Practicum (200 hours)	-	-	4	4	2	0	40	42	All 3 rd Year Courses
	TOTAL	-	-	4	4	2	0	40	42	

FOURTH YEAR										
First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRBI171	Microbial Genetics	2	2	0	4	2	6	0	8	All 3 rd Year Courses
PRBI173	Microbial Physiology	2	1	0	3	2	3	0	5	All 3 rd Year Courses
PRBI176	Medical Microbiology	3	2	0	5	3	6	0	9	All 3 rd Year Courses
PRBI178	General Virology	3	0	0	3	3	0	0	3	All 3 rd Year Courses
PRBI191	Undergraduate Research 1	2	1	0	3	2	3	0	5	All 3 rd Year Courses
COLA21	Malikhaing Komunikasyon Gamit ang Panitikang Popular	3	0	0	3	3	0	0	3	NONE
	TOTAL	15	6	0	21	15	18	0	33	

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite / * Co-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRBI172	Microbial Diversity and Ecology	2	1	0	3	2	3	0	5	All 3 rd Year Courses
PRBI174	Food and Dairy Microbiology	3	2	0	5	3	6	0	9	All 3 rd Year Courses
PRBI175	Industrial and Applied Microbiology	2	2	0	4	2	6	0	8	All 3 rd Year Courses
PRBI192	Undergraduate Research 2	2	1	0	3	2	3	0	5	All 3 rd Year Courses
COCE51	Internet of Things	3	0	0	3	3	0	0	3	NONE
	TOTAL	12	6	0	18	12	18	0	30	

Total No. of Units: 197