



University of Science and Technology of Southern Philippines

Alubijid | Cagayan de Oro | Claveria | Jasaan | Oroquieta | Panaon

BACHELOR OF SCIENCE IN CHEMISTRY

per BOR Resolution No. 04, s. 2018

FIRST YEAR - First Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
SS	101	Understanding the Self	3	0	3	3	None	None
Fil	101	Wika	3	0	3	3	None	None
Eng	101	Purposive Communication	3	0	3	3	None	None
Eng	102	Art Appreciation	3	0	3	3	None	None
Math	101	Mathematics in the Modern World	3	0	3	3	None	None
Chem	100	Principles of Chemistry (Lec)	3	0	3	3	None	None
Chem	100.2	Principles of Chemistry (Lab)	0	6	6	2	None	None
PE	101	Physical Education 1	2	0	2	2	None	None
NSTP	101	ROTC/CWTS/LTS	3	0	3	3	None	None
Total					29	25		

FIRST YEAR - Second Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
SS	102	Readings in Philippine History	3	0	3	3	None	None
Fil	102	Panitikan	3	0	3	3	Fil 101	None
SS	104	Ethics	3	0	3	3	None	None
Math		Calculus 1	3	0	3	3	None	None
Phys	121	Mechanics and Heat (Lec)	3	0	3	3	None	None
Phys	121.1	Mechanics and Heat (Lab)	0	3	3	1	None	None
Chem	121	Inorganic Chemistry 1 (Lec)	2	0	2	2	Chem 100	Chem 121.1
Chem	121.1	Inorganic Chemistry 1 (Lab)	0	3	3	1	Chem 100	Chem 121
PE	102	Physical Education 2	2	0	2	2	None	None
NSTP	102	ROTC/CWTS/LTS	3	0	3	3	None	None
Total					28	24		

SECOND YEAR - First Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
ES	101	Science, Technology, and Society	3	0	3	3	None	None
SS	201	The Entrepreneurial Mind	3	0	3	3	None	None
Math		Calculus 2	3	0	3	3	Math 121	None
Phys	212	Electricity, Magnetism, and Optics (Lec)	3	0	3	3	Phys 121	None
Phys	212.1	Electricity, Magnetism, and Optics (Lab)	0	3	3	1	Phys 121.1	None
Chem	212	Organic Chemistry 1 (Lec)	3	0	3	3	Chem 100	Chem 212.2
Chem	212.2	Organic Chemistry 1 (Lab)	0	6	6	2	Chem 100	Chem 212
Chem	213	Analytical Chemistry 1 (Lec)	3	0	3	3	Chem 100	Chem 213.2
Chem	213.2	Analytical Chemistry 1 (Lab)	0	6	6	2	Chem 100	Chem 213
PE	103	Physical Education 3	2	0	2	2	None	None
Total					35	25		

SECOND YEAR - Second Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
SS	103	The Contemporary World	3	0	3	3	None	None
SS	105	Life and Works of Rizal	3	0	3	3	None	None
Chem	226	Chemical Entrepreneurship	3	0	3	3	SS 201	None
Chem	222	Organic Chemistry 2 (Lec)	3	0	3	3	Chem 212	Chem 222.2
Chem	222.2	Organic Chemistry 2 (Lab)	0	6	6	2	Chem 212	Chem 222
Chem	223	Analytical Chemistry 2 (Lec)	3	0	3	3	Chem 212 Chem 213	Chem 223.2
Chem	223.2	Analytical Chemistry 2 (Lab)	0	6	6	2	Chem 212 Chem 213	Chem 223
Chem	224	Physical Chemistry 1 (Lec)	3	0	3	3	Math 212 Chem 212 Chem 213	None
PE	104	Physical Education 4	2	0	2	2	None	None
Total					32	24		

THIRD YEAR - First Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
Chem	224.2	Physical Chemistry 1 (Lab)	0	6	6	2	Chem 224	None
Chem	311	Inorganic Chemistry 2 (Lec)	3	0	3	3	Chem 121 Chem 224	Chem 224.2
Chem	313	Analytical Chemistry 3 (Lec)	2	0	2	2	Chem 223	NONE
Chem	314	Physical Chemistry 2 (Lec)	3	0	3	3	Chem 224	Chem 314.2
Chem	314.2	Physical Chemistry 2 (Lab)	0	6	6	2	Chem 224	Chem 314
Chem	315	Biochemistry 1 (Lec)	3	0	3	3	Chem 222	Chem 315.2
Chem	315.2	Biochemistry 1 (Lab)	0	6	6	2	Chem 222	Chem 315
Chem	316	Industrial Quality Management	3	0	3	3	Chem 213	None
Total			32			20		

THIRD YEAR - Second Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
Chem	323	Analytical Chemistry 4 (Lec)	3	0	3	3	Chem 213	Chem 323.1
Chem	323.1	Analytical Chemistry 4 (Lab)	0	3	3	1	Chem 213	Chem 323
Chem	324	Physical Chemistry 3	3	0	3	3	Chem 224	NONE
Chem	325	Biochemistry 2 (Lec)	3	0	3	3	Chem 315	NONE
Chem	326	Industrial Microbiology (Lec)	1	0	1	1	Chem 315	Chem 326.2
Chem	326.2	Industrial Microbiology (Lab)	0	3	3	1	Chem 315	Chem 326
Chem	327	Environmental Chemistry	2	0	2	2	Chem 222 Chem 313	None
Chem	328	Chemical Jurisprudence and Intellectual Property	1	0	1	1	None	None
Chem	320	Research Methods in Chemistry	1	0	1	1	Chem 222 Chem 313 Chem 224	None
Total			21			16		

THIRD YEAR - Summer

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
OJT	330	Professional Engagement				4	100 units completed	None
Total						4		

FOURTH YEAR - First Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
Chem	401	Chemistry Seminar 1	0	3	3	1	Chem 331 Chem 325	None
Chem	417	Organic Chemistry 3	2	0	2	2	Chem 222	None
	418	Computational Chemistry	1	3	4		Chem 324	None
Chem	410	Undergraduate Thesis 1	1	6	7	3	Chem 320	None
Total						6		

FOURTH YEAR - Second Semester

Course Code		Description	No. of Hours			Units	Prerequisites	Co-requisites
			Lec	Lab	Total			
Chem	402	Chemistry Seminar 2	0	3	3	1	Chem 323 Chem 324	None
Chem	426	Industrial Chemistry	2	0	2	2	Chem 213 Chem 222 Chem 311	None
Chem	420	Undergraduate Thesis 2	1	6	7	3	Chem 410	None
Total						6		