



Republic of the Philippines  
**MINDANAO UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
 Lapanan, Cagayan De Oro City

**COLLEGE OF SCIENCE AND MATHEMATICS**

**B.S. in Chemistry**  
**REVISED 2008**

SUBJECT CODE	DESCRIPTIVE TITLE	H O U R		U N I T		PRE-REQUISITE	CO-REQUISITE
		LAB	LEC	LAB	LEC		
<b>1ST YEAR - 1ST SEMESTER</b>							
CHEM10c	General Chemistry 1-Chem	6.0	3.0	2.0	3.0	5.0	MATH13a
MATH13a	College Algebra	0.0	5.0	0.0	5.0	5.0	
ENGL11	Study and Thinking Skills	0.0	3.0	0.0	3.0	3.0	
SS10a	New Constitution	0.0	3.0	0.0	3.0	3.0	
SS20a	Rizal's Life, Works & Writings	0.0	3.0	0.0	3.0	3.0	
PD10	Essence of Personality	0.0	1.0	0.0	1.0	1.0	
NSTP10	ROTC/CWTS/LTS 1	0.0	3.0	0.0	3.0	3.0	
NSTP10a	ROTC1	0.0	0.0	0.0	3.0	3.0	
NSTP10b	CWTS 1	0.0	0.0	0.0	3.0	3.0	
		6.0	21.0	2.0	27.0	29.0	
<b>1ST YEAR - 2ND SEMESTER</b>							
CHEM11c	General Chemistry 2	6.0	3.0	2.0	3.0	5.0	CHEM10c
BIO12	Essentials of Biological Sciences	3.0	3.0	1.0	3.0	4.0	
MATH17	Plane Trigonometry	0.0	3.0	0.0	3.0	3.0	MATH13a
COMP21	Computer Programming 1	3.0	3.0	1.0	3.0	4.0	MATH13a
ENGL20	Writing Across Disciplines	0.0	3.0	0.0	3.0	3.0	ENGL11
PD20	Social Graces & Social Relations	0.0	1.0	0.0	1.0	1.0	PD10
NSTP20	ROTC/CWTS/LTS 2	0.0	3.0	0.0	3.0	3.0	NSTP10
ENV110	Environmental Science	0.0	3.0	0.0	3.0	3.0	CHEM10c
		12.0	22.0	4.0	22.0	26.0	
<b>2ND YEAR - 1ST SEMESTER</b>							
MATH32b	Differential Calculus w/ Analytic Geometry	0.0	5.0	0.0	5.0	5.0	MATH13a, MATH17
COMP22	Computer Programming 2	3.0	3.0	1.0	3.0	4.0	COMP21
ENGL30	Speech & Oral Communication	0.0	3.0	0.0	3.0	3.0	
CHEM22c	Organic Chemistry 1-Chemistry	6.0	3.0	2.0	3.0	5.0	CHEM11c
CHEM30b	Inorganic Chemistry (residency)	3.0	3.0	2.0	3.0	5.0	
CHEM30c	Inorganic Chemistry - Chemistry	6.0	3.0	2.0	3.0	5.0	CHEM11c
CHEM22a	Organic Chemistry (residency)	3.0	3.0	2.0	3.0	5.0	
		21.0	23.0	9.0	23.0	32.0	
<b>2ND YEAR - 2ND SEMESTER</b>							
CHEM23c	Organic Chemistry 2-Chemistry	6.0	3.0	2.0	3.0	5.0	CHEM22c
PHYS10a	General Physics 1 - Mechanics and Heat	3.0	3.0	1.0	3.0	4.0	MATH13a, MATH17
COMP23	Computer programming 3	3.0	3.0	1.0	3.0	4.0	COMP22
ENGL40	Technical Writing & Reporting	0.0	3.0	0.0	3.0	3.0	ENGL20
MATH34a	Integral Calculus	0.0	5.0	0.0	5.0	5.0	MATH32b
SS30	General Economics, Taxation & Agrarian Reform	0.0	3.0	0.0	3.0	3.0	
		12.0	20.0	4.0	20.0	24.0	
<b>3RD YEAR - 1ST SEMESTER</b>							
CHEM24	Spectroscopy in Organic Chemistry(elec)	3.0	1.0	1.0	1.0	2.0	CHEM23c
CHEM25	Chemistry of Lipids(Elec)	0.0	2.0	0.0	2.0	2.0	CHEM23c
CHEM41	Analytical Chemistry 1	6.0	3.0	2.0	3.0	5.0	MATH13a, CHEM11c
CHEM50c	Biochemistry - Chemistry	6.0	3.0	2.0	3.0	5.0	CHEM23c
BIO50	Oleocrop Science(Elec)	3.0	2.0	1.0	2.0	3.0	CHEM11c, BIO12
PHYS11a	General Physics 2 - Electricity and Magnetism	3.0	3.0	1.0	3.0	4.0	PHYS10a
MATH20	Elementary Statistics	0.0	3.0	0.0	3.0	3.0	
CHEM50d	Biochemistry (residency)	3.0	3.0	2.0	3.0	5.0	
		24.0	20.0	9.0	20.0	29.0	

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		LAB	LEC	LAB	LEC		
<b>3RD YEAR - 2ND SEMESTER</b>							
CHEM26	Chemistry of Oleochemicals(Elec)	0.0	2.0	0.0	2.0	2.0	CHEM25
CHEM27	Synthetic & Preparative Methods of Organic Chemistry 1(Elec)	6.0	1.0	2.0	1.0	3.0	CHEM23c
CHEM42	Analytical Chemistry 2	6.0	3.0	2.0	3.0	5.0	CHEM41
CHEM55	Industrial Microbiology	3.0	3.0	1.0	3.0	4.0	BIO12, CHEM50c
CHEM61	Physical Chemistry 1	0.0	3.0	0.0	3.0	3.0	CHEM41, PHYS11a
CHEM90	Industrial Quality Assurance 1(Lec)	0.0	3.0	0.0	3.0	3.0	CHEM41, MATH20
CHEM61a	Physical Chemistry 1(Residency)	0.0	0.0	0.0	3.0	3.0	
CHEM 42a	Analytical Chemistry 2(Residency)	6.0	3.0	2.0	3.0	5.0	
		21.0	18.0	7.0	21.0	28.0	
<b>3RD YEAR - SUMMER</b>							
HUM11b	Logic & Ethics	0.0	3.0	0.0	3.0	3.0	
ENGL54	Culture, Arts & Literature	0.0	3.0	0.0	3.0	3.0	
		0.0	6.0	0.0	6.0	6.0	
<b>4TH YEAR - 1ST SEMESTER</b>							
CHEM28	Synthetic & Preparative Methods of Organic Chemistry 2	6.0	1.0	2.0	1.0	3.0	CHEM27
CHEM61L	Physical Chemistry 1	6.0	0.0	0.0	2.0	2.0	CHEM61
CHEM62	Physical Chemistry 2	0.0	3.0	0.0	3.0	3.0	CHEM61
CHEM71	Industrial Chemistry 1	3.0	3.0	1.0	3.0	4.0	CHEM30c, CHEM23c
CHEM80	Environmental Chemistry(Elec)	0.0	3.0	0.0	3.0	3.0	CHEM23c, ENVI10
CHEM91	Industrial Quality Assurance 2(Elec)	0.0	3.0	0.0	3.0	3.0	CHEM90
CHEM92	Statistical Methods for the Chemical Sciences	3.0	2.0	1.0	2.0	3.0	MATH20, CHEM42
CHEM63	Physical Chemistry 3 (Quantum Chemistry)	0.0	3.0	0.0	3.0	3.0	CHEM22c, MATH34a, CHEM41
		18.0	18.0	4.0	20.0	24.0	
<b>4TH YEAR - 2ND SEMESTER</b>							
CHEM45	Industrial & Commercial Methods of Analysis(Elec)	6.0	2.0	2.0	2.0	4.0	CHEM42
CHEM62L	Physical Chemistry 2	6.0	0.0	2.0	0.0	2.0	CHEM61L, CHEM62
CHEM72	Industrial Chemistry 2	3.0	3.0	1.0	3.0	4.0	CHEM71
CHEM93	Research Methods for Chemists	0.0	3.0	0.0	3.0	3.0	
MATH43	Linear Algebra	0.0	3.0	0.0	3.0	3.0	MATH13a
BTECH 10	Agro Industrial Biotechnology	3.0	2.0	1.0	2.0	3.0	BIO12, CHEM23c
CHEM65	Computational Chemistry	3.0	2.0	1.0	2.0	3.0	
		21.0	15.0	7.0	15.0	22.0	
<b>4TH YEAR - SUMMER</b>							
CHEM94	On- the -Job -Training	24.0	0.0	0.0	4.0	4.0	
		24.0	0.0	0.0	4.0	4.0	
<b>5TH YEAR - 1ST SEMESTER</b>							
CHEM96	Undergraduate Thesis 1	6.0	1.0	2.0	1.0	3.0	CHEM93
ENVI23	Environmental Technology & Management 1	3.0	3.0	1.0	3.0	4.0	ENVI10, CHEM42
PSYC20	Applied Psychology	0.0	3.0	0.0	3.0	3.0	
CHEM99	Chemistry Seminar & Professional Integration 1(Elec)	0.0	3.0	0.0	3.0	3.0	
PHYS60	Modern Physics	0.0	3.0	0.0	3.0	3.0	
		9.0	13.0	3.0	13.0	16.0	
<b>5TH YEAR - 2ND SEMESTER</b>							
CHEM100	Chemistry Seminar & Professional Integration 2(Elec)	0.0	3.0	0.0	3.0	3.0	
CHEM97	Undergraduate Thesis 2	6.0	1.0	2.0	1.0	3.0	CHEM96
CHEM98	Chemical Jurisprudence & Ethics	0.0	2.0	0.0	2.0	2.0	
ENVI24	Environmental Technology & Management 2	3.0	3.0	1.0	3.0	4.0	ENVI23
		9.0	9.0	3.0	9.0	12.0	