

Marian University 2009 - 2010

School of Mathematics and Natural Science Student's Name: _____
Chemistry and Physics Department

Date: _____

Minor: Chemistry Education

CHEMISTRY EDUCATION MINOR									
24 -25 credits as follows:									
20 credits:									
COURSE ID	COURSE TITLE	CR	PREREQUISITES	COURSE CYCLE			ADVISOR COMMENTS	CR	GR
				SEM I	SEM II	SUM			
CHE 101	Principles of Chemistry I	4		X	X	X			
CHE 102	Principles of Chemistry II	4	CHE 101 or CHE 105		X				
CHE 201	Organic Chemistry I – Lecture	3	CHE 101	X					
CHE 202	Organic Chemistry II - Lecture	3	CHE 201		X				
CHE 300	Analytical Chemistry	4	CHE 102	X					
CHE 251	Organic Chemistry I - Lab	1	CHE 201 or concurrent enrollment	X					
CHE 252	Organic Chemistry II - Lab	1	CHE 251 and CHE 202 or concurrent enrollment		X				
4-5 credits from the following:									
COURSE ID	COURSE TITLE	CR	PREREQUISITES	COURSE CYCLE			ADVISOR COMMENTS	CR	GR
				SEM I	SEM II	SUM			
CHE 301	Instrumental Analysis	4	CHE 300		E				
CHE 302	Biochemistry	5	CHE 202, CHE 300		X				
20-22 credits as follows:									
12 credits:									
COURSE ID	COURSE TITLE	CR	PREREQUISITES	COURSE CYCLE			ADVISOR COMMENTS	CR	GR
				SEM I	SEM II	SUM			
BIO 101	Biological Principles I	4		X					
BIO 102	Biological Principles II	4	BIO 101		X				
BIO104	Environmental Science and Lab (Also ENS 104)	4		X					

X Offered every year
 E Offered in even years (2008-09, 2010-11, etc.)
 O Offered in odd years (2009-10, 2011-12, etc.)
 * Offered at discretion of faculty as needed

4-5 credits:									
COURSE ID	COURSE TITLE	CR	PREREQUISITES	COURSE CYCLE			ADVISOR COMMENTS	CR	GR
				SEM I	SEM II	SUM			
PHS 201	General Physics I	4	MAT 112 with C or better	X					
PHS 203	University Physics I	5	MAT 201 or concurrent	X					

4-5 credits:									
COURSE ID	COURSE TITLE	CR	PREREQUISITES	COURSE CYCLE			ADVISOR COMMENTS	CR	GR
				SEM I	SEM II	SUM			
PHS 202	General Physics II	4	PHS 201		X				
PHS 205	University Physics II	5	PHS 203 or PHS 201 and permission		X				

Additional requirements
All other courses normally applicable to the middle-Secondary major in sciences.

X Offered every year
 E Offered in even years (2008-09, 2010-11, etc.)
 O Offered in odd years (2009-10, 2011-12, etc.)
 * Offered at discretion of faculty as needed