## CLARION UNIVERSITY OF PENNSYLVANIA School of Education

SECONDARY EDUCATION CHEMISTRY

Name	Transfer *	
ID#	**	
CUP Entrance Date	Date Cr Cr Date Cr Cr Date	Cr Cr
Program Entry Date		
Advisor		- — —
***************	**************	******
GENERAL EDUCATION REQUIREMENTS (48 Credits)		
Please refer to the approved list of Gen Ed courses on the back.	SECONDARY EDUCATION CORE – 33 CREDITS	
	ED 110 Ed Foundations for Middle & Sr Hi	3
I. LIBERAL EDUCATION SKILLS – 12 CREDITS	ED 327 Instruct. Strategies and Mgmt	3 3 3 3
A.E. F.1.G	SPED 418 Except. in Reg. Classroom	3
A. English Composition (3-6 credits)	SPED 441 Teaching Students w Disabilities	3
	SPED 442 Differentiating Instruction	3
	SECONDARY BLOCK* - Must be taken concurrently	
B. Mathematics Competency <sup>1</sup> (3 credits)	ED329 Educational Assessment*	3
	ED332 Methods of Teaching Secondary Science *	3
C. Credits to total 12 in Category I, selected from at least two of the	ED 424 Student Teaching	6
following: Academic Support, Communication, Computer Information	ED 425 Student Teaching	6
Science, Elementary Foreign Language, English Composition, Logic, and Speech Communication.	CHEMISTRY SPECIALIZATION – 38-39 CREDITS	
<u> </u>		3
	CHEM 161 Chemistry Principles 1 (Lab)	<u>1</u>
	CHEM 152 Chemistry Principles II	3 1 3
II. LIBERAL KNOWLEDGE – 27 CREDITS	CHEM 162 Chemistry Principles II (Lab)	1
	CHEM 251 Organic Chemistry I	13 1
A. Physical and Biological Sciences (9 credits) Selected from at least	CHEM 261 Organic Chemistry I (Lab)	1
two of the following: Biology, Chemistry, Earth Science,	CHEM 252 Organic Chemistry II	<u>3</u>
Mathematics <sup>1</sup> , Physical Science and Physics.	CHEM 262 Organic Chemistry II (Lab)	1
	CHEM 265 Inorganic Chemistry I	<u>3</u>
	CHEM 266 Inorganic Chemistry I Lab	1
	CHEM 353 Analytical Chemistry I	3
	CHEM 363 Analytical Chemistry I (Lab)	$\frac{1}{2}$
B. Social and Behavioral Sciences (9 Credits) Selected from the	CHEM 354 Physical Chemistry I	<u>3</u>
following: Anthropology, Economics, Geog., History, Political Science, Psychology, Sociology, Social Work, and Women's Studies.	CHEM 364 Physical Chemistry I (Lab)	1
	CHEM 470 Chemistry Seminar	3
	BCHM 453 Biochemistry I BCHM 463 Biochemistry I Lab	3
	CHEMISTRY ELECTIVE (3-4 credits)	1 2
		<del>3</del>
C. Arts and Humanities (9 Credits) Selected from the following: Art,	(1) CHEM 366 and 367 (Inorganic Chemistry II w/ Lab	
English Language and Literature, Humanities, Intermediate Foreign	(2) CHEM 358 and 368 (Analytical Chemistry II w/ Lab	n). or .,
Language and Cultures, Music, Philosophy, Speech and Theatre.	(3) CHEM 355 (Physical Chemistry II)	), 01
	PA Dept of Education Required Proficiencies (Grade	of C or Highe
W. MEALTH AND DEDGOVAL DEDGOVAL OF CO.		3
III. HEALTH AND PERSONAL PERFORMANCE (3 Cr)	ENG 111 Writing I (IA) 3	
A H 14 1W H (2.C. 17)	ENG Literature choice (IIC) 3	
A. Health and Wellness (2 Credits)	ED 122 Educational Psychology (IIB) 3 ED 225 Multipultural Education (IIB) 3	
Personal Performance (1 course and 1 credit)	ED 225 Multicultural Education (IIB) 3 ED 350 ELL (IIC) 3	
reisonal Performance (1 course and 1 credit)	ED 350 ELL (IIC) 3 *ED 417 (IC) 3	
	MATH 270 Calculus I (IB)	
IV. General Education Electives	MATH 270 Calculus I (IB)  MATH 271 Calculus II (IC)  4	
Credits to total 48 from Gen. Ed. Up to 1 credit from III-B allowed.	BIOL 111-499 (IIA) 3	
	ES 111-499 (IIA) 3	
	PH 251 or 252 IIA) 4	
	SCED 476 STS Topics (IV) 3	
<sup>1</sup> Math 110 may only be used under I-C.	*Take ED 417 concurrent with ED 329 and ED337.	
FLAGS - Record below		
* First Year Values (V)		
Writing Intensive (W)		
Quantitative Reasoning (Q)		
Writing Intensive (W	TOTAL CI	REDITS 121