Curriculum Content: Physical Science Dual Field Licensure BS INTERDISCIPLINARY PHYSICS MAJOR with an interdisciplinary focus on Chemistry (94-99 Semester Hours Required)

Course #	est – Chemistry: Content Knowledge (20245) & Phys Course Title	Hrs.	Gr.	Sem. Offered
PH 135/135L	Physics I and Workshop	5		Fall
PH 136/136L	Physics II and Workshop	5		Spring
PH 246	Modern Physics	3		Fall
PH 247	Modern Physics Laboratory	1		Spring
PH 315/315L	Classical Mechanics and Workshop	4		
PH 347	Advanced Laboratory	2		Fall
PH 365/365L	Electricity and Magnetism and Workshop	4		
PH 407	Senior Research or Design Project	2		Fall
PH 445/445L	Quantum Physics and Workshop	4		
EP 217	Mathematical Methods of Physics & Engineering	3		Spring
EP 260/260L	Electronics and Lab	4		Spring
EP 451/451L	Numerical Physics and Workshop	4		
CH 141/143 *	General Chemistry I and Lab	5		Fall
CH 142/144	General Chemistry II and Lab	5		Spring
CH 221/223	Organic Chemistry I and Lab	4		Fall
CH 222/224	Organic Chemistry II and Lab	4		Spring
CH 431	General Biochemistry	4		Spring
BL 155/156	Principles of Biology I and II	6		
BL 155/156 BL 157/158	Principles of Biology Lab I and II	6 2		
DL 137/138		2		
MT 135	Calculus and Analytic Geometry I	4		
MT 136	Calculus and Analytic Geometry II	4		
MT 233	Calculus and Analytic Geometry III	4		
Select One:				
CH 361	Introductory Physical Chemistry	3		Fall
CH 367	Physical Chemistry I Lab	2		Spring & Fall
CH 365	Physical Chemistry I	3		Fall
CH 367	Physical Chemistry I Lab	2		Spring & Fall
CH366	Physical Chemistry II	3		Every other Spring
CH 368	Physical Chemistry II Lab	2		
Select One:				
PH 115/L	Environmental Earth Science and Lab	4		Fall
PH 206	Earth System Science	3		Spring
Select One:				
PL 314 **	Science, Technology & Ethics	3		
PL 375 **	Philosophy of Science	3		
NT .				

Note:

*CH 151/153 (5 credits) may substitute for CH 141-144 with Chair's approval.

**Course meets Division V Core Requirement

The above program with 30 credit hours of lower division CH and BL plus 5-8 credit hours of upper division chemistry plus earth science substantially exceeds the requirements for a BS in Interdisciplinary Physics. The BS in Interdisciplinary Physics only requires 24 credit hours of lower division CH and BL courses. Revised Fall 2013