



SCIENCE Concentration Worksheet

School of Education

Science Concentration Mentor: Dr. Rupam Saran

Course Number	Course Title	Credits	Semester Taken	Grade	Course Substitute(s)	Pre-Requisite	Co-Requisite
Candidates must have taken the following courses for their AA Degree:							
BIO 101	Introduction to Biology	3				CUNY Entrance Exams	
PHS 101	Introduction to Physical Science	3				CUNY Entrance Exams	
Candidates must take all of the following courses:							
BIO 201	General Biology I	4				BIO 101 or BIO 111	BIOL 201; CHM 112
BIO 202	General Biology II	4				BIO 201, CHM 112, MTH 138	BIOL 202
CHM 112	Basic Chemistry	3				MTH 138	
CHM 201	General Chemistry I	4				CHM 112, MTH 151	
CHM 202	General Chemistry II	4				CHM 201 (MTH 202 or approval from Department Chairperson)	
Candidates must choose one (1) of the following options and take two courses in either Option 1 or 2:							
Option 1							
BIO 302	Genetics	4				BIO 202, CHM 201 & MTH 138	BIOL 302
BIO 340	Plant Science/Botany	4				BIO 202, CHM 202	
BIO 373	Invertebrate Zoology	4				BIO 202	
BIO 375	Chordate Morphology	4				BIO 202 and CHM 202	BIOL 375
BIO 376	Chordate Development	4				BIO 202 and CHM 202	
BIO 403	Microbiology	4				BIO 202, CHM 202 and a 300 level Biology course with a lab	BIOL 403
BIO 461	Molecular Biology	4				BIO 201, BIO 202, BIO 302, CHM 303 and MTH 201 substitute approved by Dept. Chairperson	BIOL 461
BIO 462	Microbial Physiology	4				BIO 403, CHM 304 and a 300 level Biology course with a lab	
BIO 481	Human Physiology					BIO 202, 300level Biology course with lab and CHM 303	
BIO 491	Cell Biology	3				A 300 level Biology course with lab	CHM 303
Option 2							
BIO 370	Principles of Environmental Science	3				BIO 202 or BIO 252 and CHM 201 or CHM 202	
ENVS 203	Environmental Law	3				Completion of Math and Language Basic Skills	
ENVS 200	Environmental Health Issues	3				Completion of Math and Language Basic Skills	
ENVS 301	Air, Water Pollution	3				ENVS 200 and CHM 201	
ENVS 313	Waste Management	3				ENVS 200 and CHM 201	
ENVS 400	Natural Resource and Conversation	3				ENVS 200 and ENVS 203	
ENVS 405	Pollution Control and Prevention	3				ENVS 200 or ENVS 313	