

YEAR TERM	BIOLOGY MAJOR COURSES					GENERAL EDUCATION		TOTAL CREDITS
YEAR 1	FALL	BIOL 110 4 GENERAL BIOLOGY I			CHEM 110 4 GENERAL CHEMISTRY I Co-Req: MATH 135 or higher	MATH 170 4 CALCULUS I Pre-Req: Placement Exam, MATH 141, MATH 136	FCWR 101/111 3 FOUND. OF COLLEGE COMPOSITION Pre-Req: Requires Placement	15
	SPRING	BIOL 150 4 GENERAL BIOLOGY II Pre-Req: BIOL 110			CHEM 150 4 GENERAL CHEMISTRY II Pre-Req: CHEM 110	MATH 180 4 CALCULUS II Pre-Req: MATH 170	DATA 101 3 MAKING SENSE OF A DATA-ORIENTED SOCIETY	15
YEAR 2	FALL	BIOL 233 4 GENETICS Pre-Req: BIOL 150 & CHEM 150			CHEM 210 4 ORGANIC CHEMISTRY I Pre-Req: CHEM 150	PHYS 170/175 4/5 GENERAL PHYSICS I or PRE-MED PHYSICS I Co-Req: MATH 170	GENERAL ELECTIVE 3	15/16
	SPRING	BIOL 250 3 BIOSTATISTICS Pre-Req: BIOL 110 & MATH 136 or higher			CHEM 250 4 ORGANIC CHEMISTRY II Pre-Req: CHEM 210	PHYS 180/185 4/5 GENERAL PHYSICS II or PRE-MED PHYSICS II Pre-Req: PHYS 170 or PHYS 175 Co-Req: MATH 180	FCWR 151/161 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101/111	17/18
YEAR 3	FALL	BIOL 340 4 BIOCHEMISTRY Pre-Req: BIOL 110 & CHEM 210	CHEM 340 3 BIOANALYTICAL CHEMISTRY Pre-Req: BIOL 110, CHEM 150, BIOL 250				FCWR 304 or FCWR 302 3 COMM. FOR TECH. PROFESSIONS OR HEALTHCARE CAREERS Pre-Req: FCWR 151/161	13
	SPRING	BIOL 370 3 ADVANCED BIOCHEMISTRY Pre-Req: BIOL 340	BIOL/CHEM 395 3 INTRO TO RESEARCH LITERATURE Pre-Req: Any 300 level BIOL or CHEM course	BIOL 336 3 MOLECULAR BIOLOGY Pre-Req: BIOL 233		RESTRICTIVE SCIENCE ELECTIVE*** 3	ICXX 3XX* 3 SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 101/111 and FCWR 151/161	15
YEAR 4	FALL	BIOL/CHEM 48X/49x 3 RESEARCH PROJECT LAB or INDEPENDENT RESEARCH		CHEM 410 4 PHYSICAL CHEMISTRY I Pre-Req: CHEM 340		RESTRICTED SCIENCE ELECTIVE*** 3 See second page for course options	ICXX 3XX* 3 SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 101/111 and FCWR 151/161	16
	SPRING	BIOL 432 3 CELL BIOLOGY Pre-Req: BIOL 340		CHEM 450 4 PHYSICAL CHEMISTRY II Pre-Req: CHEM 410	RESTRICTED SCIENCE ELECTIVE*** 3 See second page for course options	RESTRICTED SCIENCE ELECTIVE*** 3 See second page for course options	ICXX 3XX* 3 SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 101/111 and FCWR 151/161	16

CREDITS 122-124

*Of the four required ICXX seminar courses (ICBS, ICLT, ICPH, ICSS), at least three must be in different subject areas.

***Restricted Science Electives are on the second page. One must be from the Chemistry pool and one must be from the Biology Pool.

Course names, numbers and/or pre-requisites subject to change

(Rev. 3/25)

Restricted Science Elective Options					
Biology Pool (choose at least 1)		Chemistry Pool (choose at least 1)		Miscellaneous Pool	
Course (credits)	Pre-req	Course (credits)	Pre-req	Course (credits)	Pre-req
BIOL 315 Neuroscience (3)	BIOL 310	CHEM 350 INSTRUMENTAL ANALYSIS (3)	CHEM 310	BIOL 235 Microbiology (4)	BIOL 150
BIOL 331 Virology (3)	BIOL 150	CHEM 330 Nanoscience and Nanotechnology (3)	CHEM 150, PHYS 225 or PHYS 185	BIOL 238 Introduction to Biotechnology (3)	BIOL 150
BIOL 332 Developmental Biology (3)	BIOL 150, BIOL 233	CHEM 455 Computational Chemistry (3)	CHEM 450	BIOL 335 Recombinant DNA Lab (3)	BIOL 233
BIOL 346 Immunology (3)	BIOL 310, BIOL 330	CHEM 470 Inorganic Chemistry (3)	CHEM 410	PHYS 366: Biophysics (3)	PHYS 180
BIOL 350 Bioinformatics (3)	BIOL 233, BIOL 250	CHEM 430 Biophysical Chemistry (3)	BIOL 340, CHEM 410	BIOL 441 Contemporary Biotechnology (3)	BIOL 341
BIOL 341 Genetic Engineering (3)	BIOL 233			BIOL 442 Bioprocessing (3)	BIOL 310
BIOL 456 Pharmacology (3)	BIOL 310, BIOL 340 or CHEM 215			BIOL/CHEM 48X/49X Research Project Lab/Independent Research (3/4)	
BIOL 461: Cancer Biology (3)	BIOL 233				