

DEGREE GUIDE FOR THE COLLEGE OF ARTS & SCIENCES
SCIENCES MINORS
2009-2011

Minor - Biology: 33 credits

Minor Lower Division			GRD	Minor Upper Division*			GRD
BIOL 101	Diversity of Life	3	[]	Electives		8 credits	
BIOL 101L	Diversity of Life Laboratory	1	[]	_____		[]	
BIOL 102	Introduction to Ecology	3	[]	_____		[]	
BIOL 102L	Introduction to Ecology Lab	1	[]	_____		[]	
BIOL 201	Cellular Biology	3	[]	_____		[]	
BIOL 201L	Cellular Biology Laboratory	1	[]				
BIOL 202	Genetics and Evolution	3	[]				
BIOL 202L	Genetics and Evolution Lab	1	[]				
CHEM 101	General Chemistry	3	[]				
CHEM 101L	General Chemistry Lab	1	[]				
CHEM 230	Organic Chemistry	4	[]				
CHEM 230L	Organic Chemistry Lab	1	[]				

*The prerequisite for all upper division Biology classes is a cumulative GPA ≥ 2.0 in BIOL 101, 102, 201, 202, and CHEM 101 and 230, and the associated labs. In regards to upper division biology electives, a minimum of 4 (four) credits for the minor must be biology classes taken from Gonzaga faculty. All classes should be chosen in consultation with a faculty advisor.

Minor - Chemistry: 33 credits

Minor Lower Division			GRD	Minor Upper Division			GRD
CHEM 101	General Chemistry	3	[]	CHEM 310 & 310L	Quantitative Analysis & Lab	5	[]
CHEM 101L	General Chemistry Lab	1	[]	CHEM 331 & 331L	Organic Chemistry II & Lab	4	[]
CHEM 206	Inorganic Chemistry	3	[]				
CHEM 206L	Inorganic Chemistry Lab	1	[]	<i>One of the following courses:</i>			
CHEM 230	Organic Chemistry	4	[]	CHEM 320	Physical Chemistry I	3	[]
CHEM 230L	Organic Chemistry Lab	1	[]		(requires MATH 258)		
MATH 157	Calculus & Anly. Geom. I	4	[]	CHEM 321	Physical Chemistry II	3	[]
PHYS 101, 101L or PHY 103, 103L		4	[]		(requires MATH 258)		
				CHEM 440	Biochemistry I	3	[]

Minor - Physics: 28 credits

Minor Lower Division			GRD	Minor Upper Division			GRD
PHYS 103, 103L & 103R	Scientific Physics I	4	[]	*PHYS Electives (Any 300 or 400 level except PHYS 300)		9 credits	
PHYS 204, 204L & 204R	Scientific Physics II	4	[]	_____		[]	
PHYS 205	Modern Physics	3	[]	_____		[]	
MATH 157	Calculus & Analytical Geom. I	4	[]	_____		[]	
MATH 258	Calculus & Analytical Geom. II	4	[]	_____		[]	

*Note: Courses that can be counted as a minor elective are any 300 or 400 level course other than PHYS 300. For chemistry and engineering students, consideration of their course work for their major has led to credit for part of the minor. These students, after finishing PHYS 205, need only get the following PHYS credits:

Chemistry (assuming that physical chemistry is taken for the major):	6 credits
Civil OR Mechanical Engineering	8 credits
Computer Engineering	9 credits
Electrical Engineering	5 credits

(Electrical Engineering students must take courses other than PHYS 306 to satisfy the minor elective.)