

# DEGREE GUIDE FOR THE COLLEGE OF ARTS AND SCIENCES

## B.S.: BIOLOGY with Research Option -- 2009-2011

Page 1 of 2 (see reverse)

Note: of the 128 credits required for graduation, students must earn at least 104 within Arts and Sciences departments.

Thought and Expression		GRD	7.0
ENGL 101 English Composition	3	[ ]	
PHIL 101 Critical Thinking	2	[ ]	
SPCO 101 Intro to Speech Comm	2	[ ]	

Religious Studies		GRD	9.0
RELI 100 Level Course	3	[ ]	
RELI 200 Level Course	3	[ ]	
RELI 300 Level Course	3	[ ]	

Philosophy		GRD	9.0
PHIL 201 Human Nature	3	[ ]	
PHIL 301 Ethics	3	[ ]	
PHIL 400 Level Course	3	[ ]	

English		GRD	6.0
ENGL 102, 103H, 105 or 106	3	[ ]	
ENGL 201 – 285	3	[ ]	

Fine Arts (P)		GRD	3.0
	3	[ ]	

*Fine Arts Course must have "P" designation*

Foreign Language/Culture (FC)		GRD	3.0
	3	[ ]	

*Foreign Language/Culture Course must have "FC" designation*

History (choice of 2)*		GRD	6.0
HIST	3	[ ]	
HIST	3	[ ]	

\*HIST 101 and either 102 or 112 in the first year. If unable to complete all six 100-level HIST credits in the first year, HIST 201 or 202 may be substituted for ONE 100-level course after the first year. (NO upper division can substitute.)\*

Social Science		GRD	6.0
CRIM 101, ECON, SOCI, POLS or PSYC	3	[ ]	
	3	[ ]	

Math/Lab Science/Elective		GRD	10.0
Math**	3	[ ]	
Lab Science	4	[ ]	
Elective**	3	[ ]	

\*\*MATH 100 level or above (or ITEC for elective)

Social Justice (J)		GRD	3.0
	3	[ ]	

*Social Justice Course must have "J" designation*

**TOTAL CORE CREDIT** **62**

**Electives:**

	[ ]	
	[ ]	
	[ ]	

### B.S. – BIOLOGY with Research Option -- 68-69 Credits

#### MAJOR LOWER DIVISION

CRSE	CRSE Title	CRD	GRD
<b>BIOL 101 &amp; 101L</b>	Diversity of Life & Lab	4	[ ]
<b>BIOL 102 &amp; 102L</b>	Intro to Ecology & Lab	4	[ ]
<b>BIOL 201 &amp; 201L</b>	Cellular Biology & Lab	4	[ ]
<b>BIOL 202 &amp; 202L</b>	Genetics & Evolution & Lab	4	[ ]
<b>CHEM 101 &amp; 101L</b>	General Chemistry & Lab	4	[ ]
<b>CHEM 230 &amp; 203L</b>	Organic Chemistry & Lab	5	[ ]

*Choose one of the following sets of two classes and labs:*

<b>PHYS 101 &amp; 101L</b>	General Physics I & Lab	4	[ ]
<i>OR</i>			
<b>PHYS 103 &amp; 103L</b>	Scientific Physics I & Lab	4	[ ]

*Choose one of the following sets of two classes and labs:*

<b>PHYS 102 &amp; 102L</b>	General Physics II & Lab	4	[ ]
<i>OR</i>			
<b>PHYS 204 &amp; 204L</b>	Scientific Physics II & Lab	4	[ ]

*Choose one of the following sets of three classes and labs:*

<b>CHEM 240 &amp; 240L</b>	Intro to Bioanalyt Chem & Lab	4	[ ]
<i>OR</i>			
<b>CHEM 206 &amp; 206L</b>	Inorganic Chemistry & Lab	4	[ ]
<i>OR</i>			
<b>CHEM 310 &amp; 310IL</b>	Quantitative Analysis & Lab	4	[ ]

*Choose one of the following two classes:*

<b>MATH 148</b>	Survey of Calculus	3	[ ]
<i>OR</i>			
<b>MATH 157</b>	Calculus and Analytic Geometry I	4	[ ]

*Complete a Statistics or Biological Mathematics Course:*

		3	[ ]
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#### MAJOR UPPER DIVISION\*

CRSE	CRSE Title	GRD
<b>CHEM 331 &amp; 331L</b>	Organic Chemistry II & Lab	4
<b>BIOL 399</b>	Advanced Topics	2
<b>BIOL 484</b>	Research Seminar	1
<b>BIOL 499</b>	Senior Colloquium	1

**BIOL Upper Division Electives: 17 credits**  
(must be approved by an advisor in Biology)

<b>BIOL</b>	[ ]
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\*The prerequisite for all upper division biology classes is a cumulative GPA  $\geq 2.00$  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 10 (ten) credits for the BS, 6 (six) credits for the BA, or 4 (four) credits for the minor must be biology classes taken from Gonzaga faculty; students participating in School for Field Studies programs or other study abroad programs should make note. All classes should be chosen in consultation with a faculty advisor.

