## Degree Guide for the College of Arts and Sciences: 2017-2018

## **B.A. COMPUTER SCIENCE & COMPUTATIONAL THINKING**

### **Environmental Studies Concentration**

## COLLEGE of ARTS & SCIENCES Language Requirement

All students who major in the College of Arts & Sciences are required to demonstrate competence in a second language. For complete details see: <a href="http://www.gonzaga.edu/Academics/Colleges-and-Schools/College-of-Arts-and-Sciences/Majors-Programs/language-requirement-">http://www.gonzaga.edu/Academics/Colleges-and-Schools/College-of-Arts-and-Sciences/Majors-Programs/language-requirement-</a>

Credits	Sem/Yr
-	L

#### **UNIVERSITY CORE REQUIREMENTS:**

FUNDAMENTAL CORE COURSES		
Year 1: Understanding & Creating		
Writing	Credits	Sem/Yr
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3	
Reasoning		
PHIL 101 Reasoning	3	
First Year Seminar		
193	3	
Communication & Speech		
COMM 100 Communication & Speech	3	
Math		
MATH (must be above Math 100)	3	
Scientific Inquiry (2cr + 1cr lab)		
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3	
Year 2: Being & Becoming		
Christianity & Catholic Traditions	Credits	Sem/Yr
RELI (see approved list)**	3	
Philosophy of Human Nature	\	
PHIL 201 Philosophy of Human Nature	3	
Year 3: Caring & Doing		-
World/Comparative Religion	Credits	Sem/Yr
RELI (see approved list)** (fulfills 3cr Global Studies)*	3	
Ethics		outrassassassassassassas
PHIL 301 Ethics or RELI 330 Principals-Christian Moralit	y 3	
Year 4: Imagining the Possible		manusconscion
Core Integration Seminar	Credits	s Sem/Yr
492	3	

## ► BROADENING COURSES - see approved list\*\*

Credits Sem/Y
3
3
3

NOTE: some courses have pre-requisites, check the catalogue carefully!

#### ▶ REQUIRED COURSE DESIGNATIONS - see approved list\*\*

REQUIRED COOKSE DESIGNATIONS - see approved list		
*Writing Enriched	Credits Sem/Yr	
	9 total	
Social Justice		
	3 total	
*Global Studies		
	6 total	

<sup>\*\*</sup>for list of approved RELI, Broadening & Designated courses, see: http://www.gonzaga.edu/Academics/Undergraduate/General-Degree-Requirements-and-Procedures/University-Core/Default.asp

# B.A. Computer Science & 55-59 Credits Computational Thinking

LOWER DIVISION 15-16 C		edits
Course Course Title	Credits	Grade
CPSC 121 Computer Science I	3	
CPSC 122 Computer Science II	3	
CPSC 223 Algorithm/Abstract Data Structures	3	
MATH 231 Discrete Structures	3	

#### One of the following two courses:

CPSC 499 Computers & Society

Course	Course Title	Credits Grade
MATH 1	48 Survey of Calculus	3
OR		
MATH 1	.57 Calculus & Analytic Geometry I	4
UPPER	DIVISION	28 Credits
Course	Course Title	Credits Grade

In consultation with their advisor, students also choose an additional 21 credits in Computer Science courses, including Computer Science courses specific to each concentration.

CPSC 491/491L/492L Softwr Engr/Senior Design I & II

**NOTE:** A maximum of four 200 level Computer Science courses may be used in the entire major.

Elective Computer Science courses: 2		21 Credits
Course	Course Title	Credits Grade

DISCIPLINE for COMPUTATIONAL THINKING (DCT)

#### **ENVIRONMENTAL STUDIES CONCENTRATION**

	15 Credits	
Course Course Title	Credits	Grade
ENVS 101 Intro to Environmental Studies	3	
ENVS 103/103L Environmental Biology	4	
ENVS 104/104L Environmental Chemistry	4	
ENVS 200 Case Studies in Environmental Science	4	