

**California University of PA**  
**Eberly College of Science and Technology**  
**Department of Biological and Environmental Sciences**  
**Fisheries and Wildlife Concentration**  
**Bachelor of Science in Environmental Studies (120 credits)**

Name \_\_\_\_\_

Student ID Number \_\_\_\_\_

**General Education (51 credits)**

**Building a Sense of Community – 1 credit**

UNI 100 First Year Seminar 1 \_\_\_\_\_

**Critical Thinking Skills - 3 credits**

\_\_\_\_\_ 3 \_\_\_\_\_

**Communication Skills 6 credits**

ENG 101 Composition I 3 \_\_\_\_\_

ENG 102 Composition II 3 \_\_\_\_\_

**Public Speaking – 3 credits**

COM 101 Oral Communication\* 3 \_\_\_\_\_

**Mathematics – 3 credits**

MAT 181 College Algebra OR MAT 215

Statistics OR MAT 281 Calculus I<sup>G</sup>

OR MAT 273 Basic Calculus<sup>G</sup> 3 \_\_\_\_\_

**Natural Sciences – 8 credits**

CHE 101 General Chemistry I\* 4 \_\_\_\_\_

CHE 102 General Chemistry II\* 4 \_\_\_\_\_

**Social Sciences – 6 credits**

\_\_\_\_\_ 3 \_\_\_\_\_

\_\_\_\_\_ 3 \_\_\_\_\_

**Humanities and Fine Arts – 6 credits\*\***

\_\_\_\_\_ 3 \_\_\_\_\_

\_\_\_\_\_ 3 \_\_\_\_\_

**Multicultural Awareness – 3 credits**

\_\_\_\_\_ 3 \_\_\_\_\_

**Values – 3 credits**

\_\_\_\_\_ 3 \_\_\_\_\_

**Technological Literacy – 6 credits**

CSC 101 Personal Productivity Software\*

OR CSC 201 Windows and Internet\* 3 \_\_\_\_\_

\_\_\_\_\_ 3 \_\_\_\_\_

**Health and Wellness – 3 credits**

\_\_\_\_\_ 3 \_\_\_\_\_

**Writing Component Courses (two courses required)**

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<sup>W</sup> To be certified as a Wildlife Biologist requires some additional coursework – see advisor

**Major (60/61 credits)**

**Required Courses:**

**Biology Core (31 credits)**

BIO 115 Principles of Biology 4 \_\_\_\_\_

BIO 120 General Zoology 4 \_\_\_\_\_

BIO 125 General Botany 4 \_\_\_\_\_

BIO 310 General Ecology 4 \_\_\_\_\_

BIO 318 Genetics 4 \_\_\_\_\_

BIO 336 Plant Taxonomy **OR** 4 \_\_\_\_\_

BIO 442 Dendrology<sup>W</sup>

BIO 466 Biometry 4 \_\_\_\_\_

ENS 495 Design and Analysis 3 \_\_\_\_\_

**Physical Science Core (3/4 credits)**

Electives (CHE 331<sup>G</sup>, CHE 381, PHY 121<sup>G</sup>,

EAS 202, or EAS 150 (choose one) 3/4 \_\_\_\_\_

**Fisheries and Wildlife Management (12 credits)**

ENS 420 Principles of Wildlife Mgmt **OR**

ENS 424 Principles of Fisheries Mgmt 4 \_\_\_\_\_

ENS 423 Wildlife Mgmt Techniques 4 \_\_\_\_\_

ENS 492 Animal Population Dynamics 4 \_\_\_\_\_

**Fisheries and Wildlife Biology (8 credits)**

BIO 337 Ornithology 4 \_\_\_\_\_

BIO 400 Mammalogy 4 \_\_\_\_\_

BIO 433 Herpetology 4 \_\_\_\_\_

BIO 435 Ichthyology 4 \_\_\_\_\_

BIO 575 Water Pollution Biology 4 \_\_\_\_\_

**Law Policy and Planning (6 credits)**

ENS 435 Natural Resource Law and Policy 3 \_\_\_\_\_

GEO 311 Geographic Information Systems 3 \_\_\_\_\_

GEO 362 Site Planning and Design 3 \_\_\_\_\_

GEO 365 Recreation Resource Mgmt 3 \_\_\_\_\_

**Unrestricted electives – (8/9 credits)**

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**Note:**

**\*Required Courses:** If these courses are not taken as part of the student's general education, they should be completed as electives.

**\*\*** 3 credits must come from the Humanities menu and 3 credits must come from the Fine Arts menu.

<sup>G</sup> Courses recommended if student wishes to pursue graduate school

UCC approval date: February 19, 2007, effective Fall 2007

**Bachelor of Science in Biology  
Fisheries and Wildlife Biology Concentration**

Course #	Title	Credits	Course #	Title	Credits
<b>Freshman 1<sup>st</sup> Semester</b>			<b>Freshman 2<sup>nd</sup> Semester</b>		
BIO 115	Principles of Biology	04	BIO 120	General Zoology	04
CHE 101	General Chemistry I	04	BIO 125	General Botany	04
ENG 101	English Comp. I	03	ENG 102	English Comp. II	03
UNI 100	First Year Seminar	01	CHE 102	General Chemistry II	<u>04</u>
	General Education Requirement	<u>03</u>			
	TOTAL CREDITS	15		TOTAL CREDITS	15
<b>Sophomore 1<sup>st</sup> Semester</b>			<b>Sophomore 2<sup>nd</sup> Semester</b>		
BIO 310	General Ecology	04	BIO 318	Genetics	04
MAT 181 or 215 or 273 or 281		03		Physical Science Requirement	03/04
COM 101	Oral Communications	03	CSC 101	Micros/Appl Soft. OR	03
	General Education Requirements	<u>06</u>		201 Windows/Internet	
	TOTAL CREDITS	16		General Education Requirements	<u>06</u>
				TOTAL CREDITS	16/17
<b>Junior 1<sup>st</sup> Semester</b>			<b>Junior 2<sup>nd</sup> Semester</b>		
ENS 420	Wildlife Manage. OR	04	ENS 492	Animal Pop Dynamics	04
	424 Fisheries Management		BIO 466	Biometry	04
CSC 101	Micros/Appl Soft. OR	03		General Education Requirements	03
	201 Windows/Internet			Unrestricted Electives	03
ENS 495	Design & Analysis	03			
	General Education Requirement	<u>03</u>		TOTAL CREDITS	<u>14</u>
	TOTAL CREDITS	13			
<b>Senior 1<sup>st</sup> Semester</b>			<b>Senior 2<sup>nd</sup> Semester</b>		
	Fisheries or Wildlife Bio courses	04		Fisheries or Wildlife Bio courses	04
BIO 336	Plant Taxonomy OR	04		General Education Requirement	03
	BIO 442 Dendrology			Unrestricted Electives	06
ENS 423	Wildlife Techniques	04		Law Policy & Planning	03
	Law Policy & Planning	03			
	TOTAL CREDITS	<u>15</u>		TOTAL CREDITS	<u>16</u>

TOTAL CREDITS FOR DEGREE - 120