Valdosta State University Department of Biology BIOL 1080: Conservation Biology Course Syllabus, Summer 2024

Instructor: Dr. Erin Grabarczyk Office: Bailey Science Center (BSC) 2216 Office Phone: 229.333.7380 E-mail: egrabarczyk@valdosta.edu Virtual office hours: Monday 8AM-10AM on TEAMS, or by appointment.

Course overview: Basic biology underlying current issues in the conservation of rare species, native ecosystems, and biological diversity in general. Exploration of the nature and geographic distribution of biodiversity and threats to it, discussed in the context of ecological and population-genetic principles as well as socio-economic and political realities. Theory and case studies of different modes of preserving biodiversity (zoos and gardens vs. natural preserves) will be presented. The US Endangered Species Act and Wilderness Preservation Act and C.I.T.I.E.S., among others, will be critically evaluated as models for government involvement in conservation. Prescriptions of sustainable development that does not further erode biodiversity will be discussed in light of current knowledge of genetics, population dynamics, and community and landscape ecology.

This is a Core IMPACTS course that is part of the Technology, Mathematics & Sciences area. Core

IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas.

This course will help master course content, and support students' broad academic and career goals. This course should direct students toward a broad Orienting Question:

· How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome: • Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- \cdot Inquiry and Analysis
- · Problem-Solving
- · Teamwork

Lecture: Online

Textbook: An Introduction to Conservation Biology by Anna A. Sher, 3rd edition.

Class Policies

• Ask questions: If you have a question or don't understand something please let me know. I am more than willing to take as much time as necessary to help you understand a concept, but you have to ask!

- Late work: Once during the semester you may turn in late work for full credit. I will give you 48 hours to submit your work, no questions asked. Your assignment needs to be emailed to me, turned into my mailbox in the biology office, or submitted on BlazeVIEW. After your one late work turn-in, late assignments will not be accepted.
- Email: Use your VSU account for e-mail communication.
- Cheating: You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at http://valdosta.edu under Student Code of Conduct.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test. All forms of academic dishonesty including, but not limited to collusion, fabrication, cheating and plagiarism are worthy of punishment according to the policy set forth by Valdosta State University. This includes doing your own work on lab assignments. While you are allowed to brainstorm with each other, it is expected that your answers are your own. I will not tolerate any form of cheating. This includes using Al to write your assignments!

Students with disabilities: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit <u>VSU's Access Office</u> or email: <u>access@valdosta.edu</u>

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Grading Scale:

Letter	% Points	
А	90-100	135-150
В	80-89	120-134
С	70-79	105-119
D	60-69	90-104
F	<60	<90

Assessments:

- 1. 7 Quizzes each worth 10 points (70 total points)
- 2. 8 Discussion posts each worth 5 points (40 total points)

3. 4 Species Fact Sheets each worth 10 points (40 total points)

Discussion rubric

Score	Criteria			
5	1. Content: Clearly addresses discussion question and links ideas to relevant course content as			
	well as additional information from the textbook as needed.			
	2. Structure: Logical, strong and obvious links between sentences. Well organized.			
	3. Mechanics: Complete sentences, correct spelling and grammar.			
	4. <u>Timeliness</u> : Submitted by the due date.			
	5. <u>Contribution:</u> Contribution to the learning community, respectful of other students, ideas,			
	beliefs and backgrounds.			
4	Missing 1 of the 5 criteria			
3	Missing 2 of the 5 criteria			
2	Missing 3 of the 5 criteria			
1	Missing 4 of the 5 criteria			
0	No Discussion submitted. Or comment adds no value to the discussion.			

	Week	Topic & Book Chapters	Lecture recordings	Assignments
1	June 11-	What is Conservation	1. Welcome to Conservation	Discussion 1, Quiz 1 –
16	16	Biology?	Biology	due by June 16 th @
			2. What is Conservation	11:59PM.
		<u>Reading:</u> Chapter 1	3. History of Conservation	
			4. Case study	
			5. IUCN & Fact sheets	
			6. Guiding principles	
2	June 17-	Biodiversity	7. What is Biodiversity	Discussion 2, Quiz 2,
23	23		8. Species diversity	Species Fact Sheet 1 –
		<u>Reading:</u> Chapter 2	9. Genetic diversity	due by June 23 rd @
			10. Ecosystem diversity	11:59PM.
			11. Biodiversity worldwide	
3 June	June 4-30	Value of Biodiversity	12. Value of Biodiversity	Discussion 3, Quiz 3,
			13. Use Values	Species Fact Sheet 2 –
		<u>Reading:</u> Chapter 3	14. Option Value	due by June 30 th @
			15. Existence Value	11:59PM.
			16. Environmental Ethics	
4	July 1-7	Threats to Biodiversity	17. Threats to Biodiversity	Discussion 4, Quiz 4,
			18. Habitat Destruction	Species Fact Sheet 3 –
		Reading: Chapters 4-5	19. Pollution	due by July 7 th @
			20. Climate Change	11:59PM.
			21. Other Threats	
5	July 8-14	Extinction Risk	22. Extinction Risk	Discussion 5, Quiz 5,
			23. Meaning of Extinct	Species Fact Sheet 4 –
		<u>Reading:</u> Chapter 6	24. Vulnerability to Extinction	due by July 14 th @
			25. Problems of Small	11:59PM.
			Populations	
6.	July 15-21	Conserving Populations	26. Conserving Populations &	Discussion 6, Quiz 6 –
		& Species	Species	due by July 21 st @
			27. Data Collection	11:59PM.
		<u>Reading:</u> Chapter 7	28. What Should Be Protected	
			29. Legal Protection of Species	
7	July 22-28	Protected Areas &	30. Protected Areas	Discussion 7, Quiz 7 –
		Restoration	31. Designing Protected Areas	due by July 28 th @
			32. PA Management	11:59PM.
		<u>Reading:</u> Chapter 9 &	Challenges	
		11	33. Restoration Ecology	
8	July 29-31	Agenda for the Future	34. Agenda for the Future	Discussion 8 – due by
				July 31 st @ 11:59PM.
	1	<u>Reading:</u> Chapter 13		1