COURSE SYLLABUS

EVPP 419

Marine Mammal Biology and Conservation

Spring 2025

Class period: January 21 to May 05, 2025

Location: 100% ONLINE

Instructor: Dr. Paul Philippe Razafinjatovo

Email address: prazafin@gmu.edu (preferred way of contact)

Office Hours: online by appointment (Blackboard collaborate)

1) Course Description:

Marine mammals play key important roles in maintaining the health of marine ecosystems. Their presence may indicate healthy functioning and community structure of the marine environment. One of the reasons that lead to the decline of marine mammal populations is lack of knowledge and understanding of their biology. As important knowledge of marine mammals became available conservation efforts have received more support in pursuing their objective. To this end, this course focuses on the Introduction to marine mammal biology and explores the efforts for the conservation and management of marine mammals.

Understanding some key characteristics shared by marine mammals is crucial to studying their differences and diversity. Marine mammals possess some common features that allow them to adapt to the marine environment. There are, however, some distinguishing aspects that are studied in this course. Finally, it is important to highlight the different anthropogenic pressures on marine mammal populations before studying some management and conservation efforts for their protection.

2) Learning objectives:

The main objective of this course is to provide students with essential knowledge of the marine mammal biology and their management and conservation. Upon completion of this course, the students will be able to explain crucial aspects of the biology of marine mammals, including their characteristics, their classification, and their adaptations to the marine environment. By the end of the semester, students will also be able to describe and analyze the different threats posed on marine mammals from human activities and the different conservation and management initiatives to ensure their protection.

3) Course instructional method

In this course, students mainly learn in three different ways. Firstly, completing the reading assignment provides students with essential knowledge of the subjects taught in this class as highlighted in the reading materials, which are essentially the required textbook. Moreover, the lecture slides identify some key points that are crucial for understanding these subjects by synthesizing some important information in the materials and providing additional explanation.

This course is 100% online. All lectures, student presentations, quizzes and exams will be delivered and administered online through Blackboard and Blackboard tools. All closed book quizzes and the exam are administered through Blackboard using Respondus Lockdown Browser and your webcam. The open-book quiz gives students the opportunity to demonstrate their knowledge and understanding of the subject studied during the week, but the closed book quizzes cover three different subjects.

Students are given the opportunity to demonstrate their speaking and academic writing skills through the oral and written assignments. Their research skills on various aspects relevant to a particular issue affecting marine mammals are also showcased in their presentation and research proposal paper.

4) Required textbook:

An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (e-book version)

5) Course prerequisite:

Students who have completed BIOL 309 or BIOL 449 or equivalent are permitted to take this course. Please inform your instructor if you do not meet this requirement.

6) Course requirements:

This is a three-credit course. Therefore, students are expected to spend an average of ten hours per week on the work required for this course. The successful completion of this course requires that students complete their assignments on time and pass the quizzes and final exam. Students are expected:

i. to take the **open book quizzes** on the syllabus and assigned reading materials.
ii. to take **the closed book quizzes** on specified lectures and reading materials.
iii. to give a ten-minute **(10 minutes)** power point **presentation with a recorded video** (your face should be shown in the video) **of the research proposal**. The design and contents of the presentation as well as the associated guidelines are also provided in this syllabus.
iv. To complete the main **written assignment**, which is the **research proposal paper (2,500 words).**
v. to take the **final written exam** at the end of the semester

7) Grading breakdown:

Assignments	**Percentage of final grade**
Presentation of research proposal	15%
Research proposal paper (1st draft)	15%
Research proposal paper (final draft)	20%
Assessments	
Open book Quizzes	15%
Closed book Quizzes	15%
Final written exam	20%

8) Letter grade percentages

Letter grade	**Percentage of grade**
A+	97 - 100%
A	93 - 96%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D	60 - 69%
F	<60%

9) Email communication

In all your email communication with me, please **include your first name and EVPP 419 on the subject** and **only use GMU email address.** I am required to reply to your email within 48 hours, but I will try my best to get back to you as soon as possible. Students must use their Mason email account to receive important University information, including communications related to this class. I will not respond to messages sent from a non-Mason email address.

10) Assignment submission

All assignments must be uploaded on blackboard by the deadline**.** Late submission is not accepted. All assignments are **individual work** of the student. Plagiarism, cheating, lying and copying from other students' work are not tolerated (please see honor code below). It is extremely important to meet the deadlines in this class. **No late submission of assignments is accepted**. The assignments are no longer available on blackboard if you miss the deadline.

11) Honor Code:

Adherence to the *GMU Honor Code* is expected of all students. Students are expected to comply with the GMU honor code in completing their assignments and in their interaction with others during the class. Plagiarism, cheating and lying are the main forms of the honor code violation. Students are expected to visit the following link to avoid accidental or intentional violations and

understand the consequences: http://oai.gmu.edu/the-mason-honor-code-2/.
I will use a software that can detect plagiarism in your papers. Make sure to paraphrase the information you want to use from a different source. It is an online class, and most quizzes are closed book. To avoid potential problems, make sure to follow the requirements relative to the use of the Respondus Lockdown Browser as you take your quizzes when they are closed book.

12) Written assignment: Research proposal paper (2500 words)

The written assignment is a hypothetical research proposal. It is an essay that allows students to demonstrate their ability to describe an issue affecting marine mammal species due to threats from anthropogenic activities in a particular geographic area. It **proposes research to study the specific causes or the impacts of this issue** before suggesting some recommendations to address it. As multiple cases of issues involving marine mammal populations have occurred in different locations, students may choose to write a hypothetical research proposal for one of these issues, assuming that no research has been conducted for the purpose of investigating it. However, students are required to use multiple sources of relevant materials as they make comparisons while writing their paper. Students are asked to describe the nature of the issue and explain the methods to collect and analyze **primary data** to determine its specific causes or impacts.

13) Oral assignment: Presentation of the research proposal (individual work)

The presentation of the research proposal is intended to test your presentations skills. It presents only the most important information in the research proposal paper. Your research proposal is a research project, and your goal is to convey some information that highlights a local issue affecting marine mammal species and **propose research to study its specific causes or impacts**. The presentation should be given during weeks 5 to 7 and last **ten minutes**.

Duration of the presentation: 10 minutes.

The video presentation must be uploaded in two different ways on blackboard. Each student is required to upload the video both as assignment and on the discussion board.

14) Quizzes:

There are two different types of quiz: open-book and closed-book quizzes, They are intended to test the students' knowledge and understanding of some key information in the course materials. They generally include multiple choice questions with single or multiple answers. They may also consist of short or long-answer questions. Occasionally, I will ask you to write a short essay. The closed book quizzes are only available for 24 hours. The lecture slides and materials from which the quiz is taken are mentioned. How to prepare for the closed book quizzes? Make sure to know and understand the key concepts highlighted in the lecture slides and reading materials and review the relevant open book quizzes.

Download the blackboard Respondus Lockdown browser as you will use it to take your closed book quizzes and exam.

15) Exam:

The exam will take place at the end of the semester. It is a comprehensive exam, i.e., it covers everything that was taught during the semester. Study carefully the lecture slides and review some important points highlighted in the reading materials to prepare for your exam. You should also review the past quizzes to get prepared for it. The exam is just like a longer quiz. It is a timed and closed book, and you have to use Respondus Lockdown browser to take it. Make sure to follow carefully the instructions relative to the use of this browser. As an example, you should stay **within the frame throughout your quizzes or test**. Failure to do so will result in grade F in this course.

16) Technology Requirements

The technology requirements for this online course are listed below:
Hardware:

- A Windows or Macintosh computer with at least 2 GB of RAM and a fast, reliable broadband Internet connection (e.g., cable, DSL).
- Recommended computer monitor and laptop screen size be 13-inches or larger for optimum visibility of course material.
- A webcam for taking quizzes and exams using Respondus Lockdown Browser and for student presentations.

Software:

- Web browser (See Blackboard Support for supported web browsers)
- Blackboard Courses (Log into http://mymason.gmu.edu, select the Courses Tab)
- Blackboard Collaborate (select from the course menu)
- Microsoft Office (purchase)
- Respondus Lockdown Browser (from blackboard)
- Kaltura (from blackboard)

17) Student support resources

Here are some important GMU website links and resources that may help students succeed in their studies:
- University Catalog at http://catalog.gmu.edu/
- University Policies at http://universitypolicy.gmu.edu/
- Counseling and Psychological Services at http://caps.gmu.edu/
- Learning Services at http://caps.gmu.edu/learningservices/
- University Career Services at http://caps.gmu.edu/learningservices/
- University Writing Center at http://writingcenter.gmu.edu/
- Student privacy is governed by the Family Educational Rights and Privacy Act (FERPA) and is an essential aspect of any course. Instructor responsibilities with respect to student privacy are an important consideration when it comes to faculty and student digital communication.
- Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at

George Mason University. If you are seeking accommodations, please visit http://ds.gmu.edu/ for detailed information about the Disability Services registration process. Email: ods@gmu.edu - George Mason University is committed to providing a learning, living and working environment that is free from discrimination and a campus that is free of sexual misconduct and other acts of interpersonal violence in order to promote community well-being and student success. We encourage students who believe that they have been sexually harassed, assaulted or subjected to sexual misconduct to seek assistance and support. University Policy 1202: Sexual Harassment and Misconduct (check here: https://universitypolicy.gmu.edu/policies/sexual-harassment-policy/

18) Use of Artificial Intelligence

We have a writing assignment in this class. Because the act of composing a response in your own words actually increases your learning, it is important that you complete the task yourself, rather than rely on an artificial intelligence (AI) tool. Completing these writing assignments yourself will help strengthen your performance in this class on later assignments and activities, as well as help you develop professionally and succeed in your career goals. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not yet prepared to produce text that meets the standards of this course. If you do choose to experiment with AI text generation, you are expected to indicate your usage of it and give credit for text that has been generated by AI. Use of AI-generated text without proper attribution is a violation of academic integrity.

19) Course Schedule (tentative).

First day of the week	Week#/Topics/Reading materials/Assignment/Assessment
January 21st	**Week 1** **Topics:** - Syllabus - Marine mammals - The importance of marine mammals **Reading materials:** -Syllabus - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages1-7 and 9-10) - Lecture slides week 1 -YouTube video material: Marine Mammals (5 minutes) **Assignments:** - **Complete the reading assignment and watch the assigned video** - **Download the following apps from the course page in blackboard** • Respondus Lockdown Browser • Kaltura **Assessment: Due on Sunday, January 26th at 11:59 pm** - Complete the **open-book quiz 1 on syllabus and reading materials week 1 and assigned video (complete assignments before taking this quiz): Syllabus quiz PART 1**
January 27th	**Week 2** **Topic:** - Marine mammal classification - Geographical distribution **Reading materials**: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 27-40) - Marine mammals of the world. Rome, FAO. 1993.320. (Pages 1-11) - Lecture slides week 2 **-YouTube video material:** Introduction to Respondus Lockdown Browser for Students (2 minutes) **Assignment due on Saturday, February 1st at 11:59 PM**: - Complete your **reading assignment.** - Post **the title of your research proposal** on BB (go to assignment) - Post your statement on BB to confirm that you read the syllabus **Assessment**: **Due on Sunday, February 2nd at 11:59 PM** - Complete the **open-book quiz** 2 on reading materials and lecture slides of week 2 - Complete the **closed book quiz on Respondus Lockdown Browser use: Syllabus quiz PART 2**

February 3rd	**Week 3** **Topic:** Marine mammal adaptation to aquatic life **Reading materials**: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 43-58). - Lecture slides week 3 - Lecture Video (52 minutes): Just Marine Mammals **Assignment**: Complete your **reading assignment and watch assigned video.** **Assessment: Due on Sunday, February 9th at 11:59 PM** - Complete **Open-book quiz 3** on lecture slides and reading materials of week 3
February 10th	**Week 4:** **Topic: Polar bears** **Reading materials:** - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 82-89). - Lecture video: Wild Polar Bear - Predator of Arctic Ocean | Ice Bears (2018 Documentary) (48 minutes) - Lecture slides week 4 **Assignment:** Complete reading assignment and watch the video. **Assessment 1 due on Saturday, February 15th** at 11:59 pm: **CLOSED-BOOK QUIZ 1** on lecture and reading materials assigned in **weeks 1, 2 and 3** N.B: It is a timed and closed book quiz. Use Respondus Lockdown Browser and your webcam! Only one attempt is permitted. The quiz is available for 24 hours from 00:01 am to 11:59 pm on Saturday, **February 15th** and can be taken for **fifteen minutes**. Make sure to be fully ready before taking the quiz. **Assessment 2 due on Sunday, February 16th** at 11:59 pm: **Open book quiz 4** on reading materials of **week 4**
February 17th	**Week 5:** **Topic: Sirenians** **Reading materials**: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 101-111). - Lecture video: Sirenia Bio Project - Lecture slides week 5 **Assignment**: Complete your **reading assignment.** **Assessment: Due on Sunday, February 23rd at 11:59 PM** Complete **Open-book quiz 5** on lecture slides and reading materials of week 5.

February 24th	**Week 6:** **Assignment for students in group 1 only: Due Wednesday, February 26th at 11:59 PM:** • Submit your research proposal presentation slides on blackboard (BB) as assignment. • Post your Kaltura video presentation on discussion board on BB. **Assignment for ALL students (including students in group 1):** Post your questions on your colleagues' presentation (deadline for posting: Friday **February 28th** at 11:59PM) **Additional assignment for students in group 1**: Respond to questions you received on your presentation by Sunday, **March 2nd** at 11:59PM.
March 3rd	**Week 7** **Assignment for students in group 2 only: Due Wednesday, March 5th at 11:59 PM:** • Submit your research proposal presentation slides on blackboard (BB) as assignment. • Post your Kaltura video presentation on discussion board on BB. **Assignment for ALL students (including students in group 2):** Post your questions on your colleagues' presentation (deadline for posting: Friday **March 7th** at 11:59PM) **Additional assignment for students in group 2**: Respond to questions you received on your presentation by Sunday, **March 9th** at 11:59PM
March 10th	**Week 8** **RECESS NO CLASS**

March 17th	**Week 9** **Topic: Pinnipeds** **Reading materials:** - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 115-126). - Lecture slides week 9 - Video: Fur Seals Overcome Extinction On 'Resurrection Island' Access Here. **Assignment:** Complete your reading assignment **Assessment 2 due on Sunday, March 23rd** at 11:59 pm: **Open book quiz 9** on reading materials and lecture slides of **week 9** .
March 24th	**Week 10** **Topic: Mysticeti: The Baleen Whales** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 129-138). - Lecture slides week 11 **Assignment:** Complete your reading assignment **Assessment 1 due on Saturday, March 29th** at 11:59 pm: **CLOSED-BOOK QUIZ 2** on lecture and reading materials assigned in **weeks 4, 5 and 9** N.B: It is a timed and closed book quiz. Use Respondus Lockdown Browser and your webcam! Only one attempt is permitted. The quiz is available for 24 hours from 00:01 am to 11:59 pm on Saturday, March 29th and can be taken for **fifteen minutes**. Make sure to be fully ready before taking it. **Assessment 2 due on Sunday, March 30th at 11:59 PM** Complete the **open-book quiz 10** on reading materials and lecture slides of week 10.

March 31st	**Week 11** **Topic: Odontoceti** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 141-155). - Lecture slides week 11 - Video: Facts - Toothed whales **Assignment:** Complete your reading assignment **Assessment due on Sunday, April 6th at 11:59 PM** Complete the **open-book quiz 11** on reading materials and lecture slides of **week 11.**
April 7th	**Week 12** **Topic: Threats to Pinnipeds** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 253-267). - Lecture slides week 12 - Video: Six seals rescued from entanglements **Assignment:** Complete your reading assignment. **Assessment due on Sunday, April 13th** at 11:59 pm: Complete the **Open book quiz 12** on reading materials and lecture slides of **week 12.**

April 14th	**Week 13** **Topic: Threats to Cetaceans** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 215-217 and 231-246). - Lecture slides week 13 - Video: Endangered whales **Assignment 1:** Complete your reading assignment. **Assignment 2: FIRST DRAFT OF RESEARCH PROPOSAL PAPER due on Saturday, April 19th at 11:59 PM.** Post your assignment on BB by the deadline **Assessment 1 due on Saturday, April 19th at** 11:59 pm: **CLOSED-BOOK QUIZ 3** on lecture and reading materials assigned in **weeks 10, 11 and 12.** N.B: It is a timed and closed-book test. Use Respondus Lockdown and your webcam! Only one attempt is permitted. The quiz is available for 24 hours from 00:01 am to 11:59 pm on **April 19th** and can be taken for **fifteen to thirty minutes**. Make sure to be fully ready before taking it. **Assessment 2 due on Sunday, April 20th at 11:59 PM** Complete the **open-book quiz 13** on reading materials and lecture slides of week 13
April 21st	**Week 14** **Topic: Marine Mammal Conservation Laws and Initiatives – Part I (International)** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 271-276). - Lecture slides week 14 **Assignment:** Complete your reading assignment **Assessment due on Sunday, April 27th at 11:59 PM** Complete the **open-book quiz 14** on reading materials and lecture slides of week 14.

April 28th	**Week 15** **Topic: Marine Mammal Conservation Laws and Initiatives – Part II (United States)** Reading materials: - An Introduction to Marine Mammal Biology and Conservation 1st Edition by E.C.M. Parsons (Pages 276-278). - Lecture slides week 15 **Assignment:** Complete your reading assignment **Assessment due on Sunday, May 4th** at 11:59 pm: Complete **Open book quiz 15** on reading materials and lecture slides of **week 15**
May 5th	**Week 16** **EXAM PREPARATION SESSION: NO CLASS**
May 12th	**Week 17** **Due: FINAL DRAFT OF RESEARCH PROPOSAL PAPER to be posted on blackboard by Monday, May 12th at 11:59 PM** **Online FINAL EXAM on Monday, May 12th only.** The exam is comprehensive, timed, and closed book. Please use Respondus Lockdown and your webcam. Only one attempt is permitted. The exam is available for 24 hours from 00:01 am to 11:59 pm on **May 12th** and can be taken for thirty to 45 minutes. Make sure to be fully ready before taking it.

N.B.: This syllabus is subject to change.