

## **Marine Mammal Biology and Conservation**

BIOL 454 / 508 or EVPP 419 (3.0 Credits)

Spring 2020 M/W 4:30 – 5:45 pm in Planetary 206

Dr. Lorelei D. Crerar    Email: [lcrerar@gmu.edu](mailto:lcrerar@gmu.edu)

Office Hours:            Exploratory Hall Room 1218

W 12:30pm – 4:00 pm

Mailbox:                 Exploratory Hall 1200

### **Required Text:**

An Introduction to Marine Mammal Biology and Conservation by ECM Parsons  
Jones and Bartlett Learning (ISBN:978-0-7637-8344-0)

### **Prerequisites:**

BIOL 309 or BIOL 449 or equivalent; or permission of instructor.

### **Important Dates:**

Last day to add – January 28, 2020

Last day to drop with full tuition refund – February 5, 2020

Last day to drop with 50% tuition penalty – February 11, 2020

Last day to drop with 100% tuition penalty – February 24, 2020

Selective withdrawal period – February 25 to March 30, 2020

### **Course Description, Goals and Objectives:**

Covers the evolution, biology, ecology, and behavior of marine mammals from polar bears and sea otters to whales and dolphins. Marine mammal conservation and policy is also a major component of the course; several, lecture sessions are devoted to the issue of whaling, threats to marine mammal populations, and recent conservation issues such as marine mammals and noise pollution.

By the end of this course, you should be a subject matter expert in your paper topic. Be sure you choose something very narrow. I will be approving all chosen topics.

### **Honor Code:**

The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow are that:

- (1) all work submitted be your own;
- (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and
- (3) if you are uncertain about the ground rules on an assignment, ask for clarification.

No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using the journal *Nature* format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously, and violations are treated gravely. In this class, when you are responsible for a task, you perform that task alone. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

Some lecture slides, notes, or exercises used in this course may be the property of the textbook publisher or other third parties. All other course material, including but not limited to slides developed by the instructor(s), the syllabus, assignments, course notes, course recordings (whether audio or video) and examinations or quizzes are the property of the University or of the individual instructor who developed them. Students are free to use this material for study and learning, and for discussion with others, including those who may not be in this class, unless the instructor imposes more stringent requirements. Republishing or redistributing this material, including uploading it to web sites or linking to it through services like iTunes, violates the rights of the copyright holder and is prohibited. There are civil and criminal penalties for copyright violation. **Publishing or redistributing this material in a way that might give others an unfair advantage in this or future courses may subject you to penalties for academic misconduct.**

**People to Call in Case You Miss Class:**

1. \_\_\_\_\_ 2. \_\_\_\_\_  
\_\_\_\_\_

**Course Policies:**

All work is due either at the beginning of class in hard copy or emailed to me by the start of class on the day it is due (instructions will be provided for each assignment). **No late work** will be accepted. Some assignments are based on attendance. If you are **not present**, you may **not complete** that assignment. The only valid excuse is a medical excuse from a doctor. If you **miss an exam**, you will need to provide medical documentation, expect me to call the doctor's office, to excuse your absence. You also need to notify me in advance of the exam time. No other absences will be excused.

You are expected to take notes on **real paper!** Cell phones, pagers, and other communicative devices are **not allowed** in this class. Please keep them stowed away and out of sight. Laptops or tablets (e.g., iPads) may be permitted for the purpose of taking notes only, but you must have an ODS accommodation in writing to do so. Engaging in activities not related to the course (e.g., gaming, email, chat, etc.) will result in a significant reduction in your participation grade. Powerpoints will be provided on Blackboard. The suggestion is that you download those and take notes on a printed copy of the slides. Try printing 3 per page.

**Disability Accommodations:**

If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Services (SUB I, Rm. 4205; 993-2474; <http://ds.gmu.edu>) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

If you are a student with a disability and you need academic accommodations, please see me and contact Disability Services at 993-2474, <http://ds.gmu.edu>. All academic accommodations must be arranged through Disability Services.

**Diversity and Inclusion:**

As a Mason faculty member, I will keep diversity in mind throughout the semester. If English is your second language, you may wish to work closely with me on writing a paper. In this manner you can achieve the highest possible score on that assignment.

**Sexual Harassment, Sexual Misconduct, and Interpersonal Violence:**

As a faculty member and designated “Responsible Employee,” I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1412. If you wish to speak with someone confidentially, please contact the Student Support and Advocacy Center (703-380-1434), Counseling and Psychological Services (703-993-2380), Student Health Services, or Mason’s Title IX Coordinator (703-993-8730; cde@gmu.edu).

**Privacy:**

Students must use their MasonLive email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

**Undergraduate Course Repetition:**

Beginning Fall 2018, there is a limit of three graded attempts for this course. A **W** does not count as a graded attempt. Please see AP. 1.3.4 in the University Catalog and consult with your academic advisor if you have any questions.

**Grading:**

Grades below 0.5 will be rounded down. The Undergraduate Regular grading scale is:

A+	98%-100%
A	93% - 97%
A-	90% - 92%
B+	88% - 89%
B	80% - 87%
B-	80% - 82%
C+	78% - 79%
C	70% - 77%
D	60% - 69%
F	59% or below

**Points Available\*\*:**

Three Exams	350 points
Video / Guest Lecture (Based on attendance.)	40 points
Paper	100 points
Paper Presentation (Based on attendance.)	50 points

\*\*Other assignments may be added and final points for the class are sometimes higher than shown here.

**Exams:**

Three exams will be given worth 350 points of your grade. All exams will include a mixture of interpretation of diagrams, matching of terms/concepts, multiple choice and short essays. Many questions will be interpretative and analytical in nature. Each exam will stress the section

covered immediately before the exam. **Missed exams will be counted as a zero unless there has been prearrangement with me.** The exams will be closed notes, brain only exams.

Your third exam will be an essay style exam. Although it will cover information from Lectures 12 to 14, you will need to have an in-depth knowledge of one of the groups of marine mammals we covered. This should be one species, like right whales or grey seals. You will need to use the knowledge of one group of animals to create a recovery plan for that animal.

**Paper and Presentation:**

You will be required to write a paper on a topic of your choice, which I will approve. The paper will be cited in the style of the journal *Nature* using Zotero. If you have not done this before, please seek help from me sooner rather than later. I will be delighted to review your paper before you turn it in.

Your final presentation will cover the information in your paper. You will create a single Powerpoint slide in the same style used by the Society of Marine Mammalogy for the biennial conference. There was a conference in December of 2019, so you can access all of the information there. If you have questions, please ask me.

**Class Schedule:**

<b>Date</b>	<b>Topic</b>	<b>Chapter Readings</b>
<b>January 20</b>	<b>MLK, Jr. Holiday</b>	<b>No Class</b>
January 22	1-What is a Marine Mammal? Marine Mammal Classification and Diversity Adaptations to the Marine Environment Underwater Sound	Chapter 1, 3, 4 and 5
January 27	1-CONTINUED	Chapter 1, 3, 4 and 5
January 29	2-Order Carnivora – Polar bears, sea otters and seals Ancient Organisms	
February 3	3-Order Carnivora – Polar Bears	Chapter 6
February 5	4-Order Carnivora – Sea Otters	Chapter 7
February 10	5-Order Carnivora – Pinnipeds Otariidae Phocidae Odobenidae	Chapter 9
February 12	5-CONTINUED	Chapter 9
<b>February 17</b>	<b>Exam 1 (Lectures 1-5)</b>	<b>100 points</b>
February 19	6-Order Cetacea – Whales Ancient Organisms	
February 24	7-Mysticeti	Chapter 10
February 26	7-CONTINUED	Chapter 10
March 2	8-Odontoceti	Chapter 11
March 4	8-CONTINUED	Chapter 11
<b>March 9-11</b>	<b>Spring Break Holiday</b>	<b>No Class</b>
March 16	9-Porpoises and Dolphins	Chapter 12
March 18	9-CONTINUED	Chapter 12
March 23	Video: Spy in the Pod	<b>20 points (Attendance based.)</b>
March 25	9-Order Sirenia – Sirenians Ancient Organisms	Chapter 8
March 30	10-Dugongidae and Hydrodamalidae	Chapter 8
April 1	11-Trichechidae	Chapter 8
<b>April 6</b>	<b>Exam 2 (Lectures 6-11)</b>	<b>100 points</b>
April 8	12-Marine Mammal Protection	Chapter 17
April 13	13-Marine Mammal Tourism	Chapter 18
April 15	Lecture: Dr. Kathleen Hunt Reproductive Physiology	<b>20 points (Attendance based.)</b>
April 20	14-Species Recovery Plans Humans and Marine Mammals	Chapter 13 <b>Paper Due (100 points)</b>
April 22	Paper Presentations	
April 27	Paper Presentations	
April 29	Paper Presentations	
May 4	Paper Presentations	
<b>May 6</b>	<b>Exam 3 (Lectures 12-14)</b>	<b>4:30 – 7:15 pm (150 points)</b>