

Manatee Health and Conservation

On-line class

Course Coordinator: Dr. Iske Larkin

University of Florida, College of Veterinary Medicine



Dr. Iske Larkin



Dr Tatiana Weisbrod

I. Course information for Year 2020

Number: **VME 4016 (undergrad), VME 6017(graduate), VEM 5373 (vet students)**

Semester: Summer C

Course credit: 3 (2 credits for UF DVM students)

Graduate (VME 6017): Section 14584 UF students; Section 14583 non-UF students

Undergraduate (VME 4016) Section 14580 UF students; Section 14579 non-UF students

UF DVM (VEM 5373) in-state 14296, off-book 14297

To Access the course, please go to: <http://elearning.ufl.edu/> starting **Monday May 11th, 2020**, hit the e-Learning in Canvas button and log in with your Gator link username and password. You should see the following link at the top of the page: VME4016/VME6017/VEM5373: Manatee Health & Conservation Summer A/C 2020.

II. General information

Course Coordinator: Dr. Iske Larkin

Office location & office hours: E-learning web mail; 8am-5pm EST M-F during the course

Office phone number: (352) 294-4095

Email: IVLarkin@ufl.edu

Course Faculty: Gordon Bauer, Cathy Beck, Bob Bonde, Chip Deutsch, Martine deWit, Lucy Keith Diagne, Daryl Domning, Holly Edwards, Andy Garrett, Joe Gaspard, Maggie Hunter, Iske Larkin, Chris Marshall, Doug Nowacek, Tom O'Shea, Allison Peterson, James Powell, Roger Reep, Jim Reid, Pat Rose, Monica Ross, Dave Rotstein, Dan Slone, Katie Tripp, Terri Calleson, Mike Walsh, and Jim Wellehan.

Teaching Assistant: Tatiana Weisbrod - tweisbrod@ufl.edu

Prerequisites

At least 2 courses beyond basic Biology I & II (BSC2010 & 2011) in the following scientific fields: physiology (example-PCB4723C), anatomy (example-ZOO3713C), ecology (example-PCB4043C), behavior (example-ZOO3513C), vertebrate zoology (example-ZOO4307C), or instructor permission (please contact Dr. Larkin if you are unclear).

If you have technical problems with accessing the course web site, you should contact UF computer support:

- e-mail helpdesk@ufl.edu
- call (352) 392-4357

Phone and E-mail now available 24 hours a day, 7 days a week.

*Their office hours are as follows: **Monday-Thursday: 7:30am-10:00pm EST***

Friday: 7:30am-5:00pm EST

Weekends: 12:00pm-6:00pm EST

(If you find that your technical difficulties have interfered with your ability to submit an assignment or quiz on time, you must provide your ticket number to be considered for avoiding a late penalty or re-opening of a quiz)

III. Course description

Course goals/ Educational goals: To introduce students at the graduate, undergraduate and professional levels to the natural history, anatomy, physiology, behavior, conservation and health issues of manatees, so that they can identify and categorize major aspects critical to manatees. Graduate students will practice scientific writing skills with a term paper requirement. Upon completion of this course, students should be able to identify and characterize major impacts on manatee mortality and health, population size, and mitigation efforts in place to manage these endangered marine mammals.

Course Organization: The class will focus to a large extent on lectures, a significant amount of reading from book chapters and primary scientific literature, and discussion to establish a baseline of information on manatees. You are expected to leave this course having a working knowledge of the manatee topics listed in the above goals, but also having been exposed to the current experts in these fields. Students should be able to evaluate and discuss common health and mortality issues, and explain current management strategies.

- Students will be expected to review the reading material and the MediaSite lectures, then complete the module quiz and related homework assignments. The quizzes are designed to assess your assimilation of the lecture and reading material, may be taken 3 times before the due date, are open book, and the highest score will count towards your grade. Undergraduate students will have 3 exams throughout the course; the exams will not be cumulative.
- Zoom sessions will be provided at regular intervals throughout the semester as an opportunity to ask questions in real time and have discussions with some of the experts involved in the course. It is preferred that you attend the live/real time session however, it will NOT be required. Students WILL be asked to provide questions through the discussion board before the real time sessions begin. Questions will be answered during the sessions, which will be recorded, allowing access through a link to be viewed at the student's convenience. Students will receive extra credit for attending live Q&A sessions.

Grades will be proportioned as indicated in the table below and will be based on TA and Professor assessment, outlined in provided grading rubrics, see section V. Evaluation/Grading/Testing.

Directions for assignments, lectures and due dates will be provided within each learning module.

Generally you will see the following schedule each week, but some exceptions may occur:

Quizzes and Homeworks are due on alternating Sundays at 11:59 pm EST within each module. Some homework assignments may have a Part 1 & Part 2, with Part 1 due earlier (Thursdays) than Sunday.

Zoom **Question & Answer sessions** will be held Wednesdays 3:00 – 4:00 pm EST (sessions will be recorded and can be viewed asynchronously)

Course Outline & schedule:

Please note that this speaker schedule is subject to minor changes, depending upon lecturer availability.

The class will open on the first day of classes, May 13th 8:00 am EST

Modules	Topic	Lectures	Quizzes/Assignments	Due dates
Wk – 1 (May 11-17)	History & Evolution	History and Current Issues (O'Shea)	Quiz- Syllabus	Sun May 17, 11:59 pm EST
		Evolution of Sirenia (Domning)		
Wk – 2 (May 18-24)	Population	Manatee Population Genetics (Hunter)	Term Paper – Part 1	Sun May 24, 11:59 pm EST
		Manatee Photo-identification - Catalog of Survivors (Beck)		
		Manatee Habitat (Slone)	Quiz 1	
Wk – 3 (May 25-31)	Population	Assessing Manatee Distribution and Abundance from Aerial Surveys (Edwards)	Q&A 1 session	Tues May 26, 11:59 pm EST – Post question
		Tracking Manatees for Conservation (Deutsch)	HW 1– Article Review & Discuss	Wed May 27, 3:00-4:00 pm EST live session
		Life History Insights through Radio Tracking (Reid)		Sun May 31, 11:59 pm EST
		International Program (Powell)		
Wk – 4 (Jun 1-7)	Population	African Manatees (Keith Diagne)	Quiz 2	Sun Jun 7, 11:59 pm EST
Wk – 5 (Jun 8-14)	Anatomy	Exam 1	75 min for 50 questions	Mon Jun 8, (starts 8:00 am; closes Tues Jun 9, 8:00 am EST)
		Manatee Functional Morphology (Peterson)	HW 2 – Topic Discussion	Part 1 due Thurs Jun 11, 11:59 pm; Part 2 due Sun Jun 14 11:59 pm EST
	Physiology	Manatee Carcass Salvage Program, Pathology and Necropsy (deWit)		
Wk – 6 (Jun 15-21)	Physiology		Q&A 2 session	Tues Jun 16, 11:59 pm EST – post question

		Sirenian Metabolism and Cold: Why Is Florida Not Warm Enough? (Peterson)		Wed Jun 17, 3:00-4:00 pm EST – live session	
		The Unusual Sirenian Nervous System (Reep)	Term Paper – Part 2 Draft	Thurs Jun 18 11:59 pm	
		Sensory Perception (Bauer)	Quiz 3	Sun Jun 21, 11:59 pm EST	
			Term Paper – Part 2 Review		
Wks – 7 & 8 (Jun 22–Jul 5)			UF summer break		
Wk – 9 (Jul 6-Jul 12)	Health	Reproduction (Larkin)	Term Paper – Part 3 Draft	Thurs Jul 9, 11:59 pm	
		Behavioral Training (Gaspard)			
		Manatee Feeding Behavior (Marshall)	HW 3 – Power point	Sun Jul 12, 11:59 pm EST	
Term Paper – Part 3 Review					
Wk – 10 (Jul 13-19)			Exam - 2	75 min for 50 questions	Mon Jul 13, (starts 8:00 am; closes Tues Jul 7, 8:00 am EST)
		Digestion (Larkin)	Quiz 4	Sun Jul 19, 11:59 pm EST	
		Manatee Health Assessments (Bonde)			
Wk – 11 (Jul 20-26)		Capture, Handling, and Transport Techniques Used on Florida Manatees (<i>Trichechus manatus latirostris</i>) (Garrett)	Graduate Term Papers due	Mon Jul 20, 11:59 pm EST	
		Captive Rehab and Release, MRP (Ross)	Q&A 3 session	Tues Jul 21, 11:59 pm EST – post question	
				Wed Jul 22, 3:00-4:00 pm EST – live session	
		Medicine & Red Tide Issues (Walsh)	HW 4 – Wikipedia Update	Sun Jul 26, 11:59 pm EST	
Wk – 12 (Jul 27-Aug 2)		Pathologic Findings in Manatees (Rotstein)	Quiz 5	Sun Aug 2, 11:59 pm EST	
		Manatee Virology (Wellehan)			
		Hearing and Boat Avoidance (Nowacek)			

Wk – 13 (Aug 3-9)	Conservation	Florida manatees at the crossroads of science, policy, advocacy & politics (Tripp)	HW 5 – Topic Summary	Sun Aug 9, 11:59 pm EST
		Management and Recovery (Calleson)		
		Conservation – a Case Study (Rose)		
Wk – 14 (Aug 10-14)	Conclusions	Exam 3	75 min for 50 questions	Mon Aug 10, (starts 8:00 am; closes Tues Aug 11, 8:00 am EST)
			Q&A 4 session	Tues Aug 11, 11:59 pm EST – post question
				Wed Aug 12, 3:00-4:00 pm EST – live session
			Course Survey; Student Evaluations	Fri Aug 14, 11:59 pm EST

IV. Course Materials

- Lectures will be provided through MediaSite, where lectures are taped seminars given by expert individuals with significant experience specializing in manatees. MediaSite lectures will be provided through links on the Canvas E-learning site.
- Reading material will be provided in PDF format through links on the Canvas E-learning site and needs to be reviewed before viewing the MediaSite lectures.
- From the background reading material and MediaSite lectures provided, students will be asked to answer questions from a quiz, under the 'Quizzes' link.
- Within each module students may have related discussion questions for the electronic message board on the given topic or assignments, found under the 'Discussions' link.
- Homework within each module, found under the 'Assignments' link, will include items like a 2 page review and critique of a scientific journal article, 10 slide power point presentation and literature searches of scientific publications.
- Students will ideally need a headset and webcam to participate in the Zoom sessions and Proctor U exams (see testing requirements below).
- Graduate students will be required to write an 8 page term paper. The term paper should be organized as a critical review dealing with a particular topic in sirenian biology, health, or conservation. The Review section should summarize the main findings of the articles cited. The Critique section should evaluate these findings in the context of methods used for data collection or analysis, related findings in other taxa, and other criteria deemed to be of value by the student.
- Undergraduate students will not be asked to write and review a term paper. Instead, they will have 3 non-cumulative exams.

Directions for assignments, lectures and due dates will be provided within each learning module.

Library Support

Hannah Norton has agreed to provide assistance with accessing the UF library system and conducting literature searches. She can be reached at nortonh@ufl.edu and she has access to the Canvas/E-Learning class web page.

MediaSite Lectures

If you are having trouble accessing the lectures through the MediaSite Link, when prompted you need your Gator Link User Name and Password and you may need to download Silverlight if it does not automatically prompt you to do so. You may install Silverlight through the following link: <http://www.microsoft.com/getsilverlight/Get-Started/Install/Default.aspx>

Note on assignments

When applicable (meaning not for the website discussion board postings), assignments must be in a MS Office document format (use .doc or .docx for documents, .ppt or .pptx for powerpoint, etc.) Sorry Apple people. You can use iWork, but just save the file as .doc, etc. and prepare for cross compatibility issues. If you do not have MS Office for Windows/Mac or iWork for Mac, there is a freeware version of such software that is compatible. You can find it at www.OpenOffice.org. The files created with this software can also be saved as .doc, .ppt, etc. If this is something you would like to do, but need some help you can contact the campus computer support group (e-mail helpdesk@ufl.edu, or call (352) 392-4357).

For the most current information on the computer requirements, please visit this page before the course begins: <https://it.ufl.edu/> and <https://it.ufl.edu/policies/student-computing-requirements/>

V. Evaluation/ Grading/ Testing:

Exam information for Undergraduate Students:

The three exams will consist of multiple choice and true false questions. Tests can only be taken once. All exams need to be taken in a manner where the student can be proctored. This class will use Proctor U (<http://www.proctoru.com/>) for online proctoring services for the three exams. Proctor U is an online proctoring service that allows exam takers to complete their assessment at home while still ensuring the integrity of the exam for the institution. **You do not need to use this service for any of the quizzes, only the three exams.**

The guidelines for this proctoring system are:

- “Students will need to have a microphone and webcam in place during the test-taking period. An inexpensive webcam and microphone will work fine. Most webcams come complete with a microphone in the camera. Students will NOT be allowed to take an exam without a webcam.
- Students need to create an account and register with ProctorU (<https://go.proctoru.com/registrations>) **within the first two weeks of the start of class, and no later than 5 days prior to an exam.**
- For the exams, you will have a one day (24 hr) window within which to take the exam. You will have 75 minutes to take each exam. Exams will be administered 8:00 AM – 8:00 AM the following day (Eastern Standard Time) on certain exam dates, which are listed below.

First exam date: Monday June 8th

Second exam date: Monday July 13th

Third exam date: Monday August 10th

- Exams may be taken at a student’s home, but under certain guidelines specified below:
 - (1) you will be allowed to use notes and reference material (e.g. books to take the exam),
 - (2) besides Canvas/E-Learning, you are allowed to access additional programs on your computer for reference purposes only,
 - (3) while taking the exam you are **not** allowed to contact or communicate with other individuals, you have to take the exam independently,
 - (4) you are also not allowed to pause the test at any time.

If the Proctor U staff see you doing anything not as specified above, they will immediately shut down your computer and contact the Course Coordinator directly. You may be given a zero for that exam and the course coordinator will discuss further disciplinary action with you at that time.

- Students may need to have some administrative rights on the computer they are using for the exam to enable the service to function

****There will be no make-up exams given unless arrangements are made with the Course Coordinator prior to the exam being administered. If you are getting sick, or have a scheduling conflict and contact me before the exam, I will work with you to take the exam at another time.***

Feedback

You will find feedback on your assignments on the Grades page, under the specific Assignment link. Discussion assignments will also be graded and feedback is similarly found under the related Assignment link. Grades for the assignments, discussions and quizzes will show on the Grades link and should be provided approximately 2 weeks after the due date.

Feedback on the quiz answers will be provided ~1 week after quizzes are due. You can find this under the specific quiz link. Canvas/E-Learning grades the quizzes automatically. Homework and term paper grades will be based on TA and Professor assessments outlined in provided grading rubrics.

Undergrad Students

95%	Performance & Knowledge of Subject Area	
	Ability to satisfactorily integrate reading material, lectures, discussions, and writing assignments as demonstrated	
	25%	Quizzes
	25%	Homework assignments (equally weighted across modules) – includes critical review of a scientific paper, a power point presentation, discussion board postings etc... <i>(Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)</i>
	45%	Exams (15% each exam)
5%	Participation	
	Participation in Q&A sessions	

Graduate Students

95%	Performance & Knowledge of Subject Area	
	Ability to satisfactorily integrate reading material, lectures, discussions, and writing assignments as demonstrated	
	25%	Quizzes
	25%	Homework assignments (equally weighted across modules) – includes critical review of a scientific paper, a power point presentation, discussion board postings etc... <i>(Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)</i>
	45%	Term paper & Review
5%	Participation	
	Participation in Q&A sessions	

A	94 -100
A-	93-90
B+	89-87
B	86-83
B-	82-80
C+	79-77
C	76-73
C-	72-70

D+	69-67
D	66-63
D-	62-60
E	59-0

For CE students:

90%	Performance & Knowledge of Subject Area	
	Ability to satisfactorily integrate reading material, lectures, discussions, and writing assignments as demonstrated	
	45%	Quizzes
	45%	Homework assignments (equally weighted across modules) – includes critical review of a scientific paper, a power point presentation, discussion board postings etc... <i>(Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)</i>
10%	Participation	
		Participation in Q&A sessions

For Veterinary Students:

100%	Performance & Knowledge of Subject Area	
	Ability to satisfactorily integrate reading material, discussions, and writing assignments as demonstrated	
	50%	Quizzes
	50%	Homework assignments (equally weighted across modules) – includes critical review of a scientific paper, a power point presentation, discussion board postings etc... <i>(Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)</i>

CE students will receive a certificate of completion for grades of a C or better, all other students will receive their calculated letter grade as indicated above.

VI. Administrative Policies:

Deadlines – Homework assignments completed past the due date will automatically be graded **-10% as late**. Points will continue to be removed over time past the due date an additional **-10% per day**.

Late quiz submissions will **not** be accepted. You also need to be sure to allow ~10 min for your submission to process, so please do not wait until the very last minute.

If you find that you are having technical difficulties with your computer or accessing the course site and this has interfered with your ability to submit an assignment or quiz on time, you must provide your ticket number to be considered for avoiding a late penalty or re-opening of a quiz.

If there are problems and you find yourself falling behind, contact me ASAP. Notifying me after the fact will not add points back that have already been removed. **Please be prepared to provide documentation, such as a doctor's note or other official paperwork with your name and date of event should something come up to prevent you from**

participating in the class (ex – illness, car accident, death in the family etc....) Conflicts with vacation plans are not sufficient for adjusting due dates and exam times.

All work conducted should be done independently unless specifically indicated in the assignment directions. Any writing should be your own thoughts or a summary of other reading material. **Plagiarism will result in a 0 for the assignment and depending upon the severity of the issue may result in a 0 for the class.** TurnItIn is a plagiarism Checker and will be used within the course. Any assignment with a match of more than 15% will not be accepted. Where TurnItIn is used, you will have access to the report.

This is a link to a video on citing sources and avoiding plagiarism (Dr. Martin Simpson, UF)

<http://mediasite.video.ufl.edu/mediasite/Viewer/?peid=adaa44500eaf460a84f238e6b9a558f91d>

This is a link to a website on avoiding plagiarism

https://owl.purdue.edu/owl/research_and_citation/using_research/avoiding_plagiarism/is_it_plagiarism.html

This is a link to AMA formatting which is the default citation formatting for this class unless you specify you are using a different format.

https://owl.purdue.edu/owl/research_and_citation/ama_style/index.html

For more information on grades and grading policies, please visit:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

UF Counseling Services

Resources are available on-campus for students having personal problems or lacking clear career and academic goals.

The resources include:

[UF Counseling & Wellness Center](#), 3190 Radio Rd, 392-1575, psychological and psychiatric services.

[Career Resource Center](#), Reitz Union, 392-1601, career and job search services.

Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their web site: <http://www.counseling.ufl.edu/cwc/>

Honesty Policy

All students registered at the University of Florida have agreed to comply with the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." In addition, on all work submitted for credit the following pledge is either required or implied: "On my honor I have neither given nor received unauthorized aid in doing this assignment." If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at:

<https://www.dso.ufl.edu/%20sccr/process/student-conduct-honor-code>

Accommodation for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drc/>. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

If comfortable, please also contact the instructor directly after registering for this course so we can ensure accommodations are met in a timely manner.

Software Use

All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

EVALUATIONS - Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/> . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/> .

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