Aquatic Animal Conservation Issues (3 credits)
Dr. Iske Larkin course coordinator
University of Florida, College of Veterinary Medicine

I. Course Information for Year 2021
Number: VME 6010, VME 4012, VEM 5371
Semester: Fall
- Graduate VME 6010: Class 21337 (UF students), Class 18712 (non-UF students), Class 24799 (CCAA Certificate)
- Undergraduate VME 4012: Class 21342 (UF students) and Class 18920 (non-UF students)
- Vet Student VEM 5371- 2 credits: Class 19069 in state; Class 19070 out of state

To Access the course, please go to: http://elearning.ufl.edu/ starting Monday, August 23rd, 2021 at 8:00 am, 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: 2021-Aq An Conservation – VME 4012, 6010 VEM 5371.

II. General Information
Course director: Dr. Iske Larkin, PhD
- Office location & office hours: E-learning web mail; 8-5 M-F during the course
- Office phone number: 352-294-4095
- Email: IVLarkin@ufl.edu

Course Lecturers:
- Chelsey Crandall, Don Behringer, Jeff Hill, Mia McGuire, Elizabeth Pienaar, Roy Yanong - UF Institute of Food and Agricultural Sciences;
- Iske Larkin, Patrick Larkin, Ruth Francis-Floyd – University of Florida, College of Veterinary Medicine;
- Megan Stolen - Hubbs-SeaWorld Research Institute;
- Andrew Stamper - Disney Animal Programs and Environmental Initiatives;
- Michael Jepson – National Oceanic and Atmospheric Administration (NOAA);
- Amanda Duffus - Gordon State College;
- James Nifong - Kansas State University;
- Michelle Davis – Georgia Aquarium - SeaWorld, Orlando;
- Stephen Cassle – U.S. Army
- Robin Bast – Clinic for the Rehabilitation of Wildlife (CROW)
- Dan Evans – Sea Turtle Conservancy
- Alicia Reid

Teaching Assistant: Kaylie Costa kcosta@ufl.edu and Sarah Wahltinez swahltinez@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), zoology (example-ZOO2203C), or instructor permission.

If you have technical problems with accessing the course web site, you should contact UF computer support:
• e-mail learning-support@ufl.edu
• call (352) 392-4357 (now available 24/7)
• ‘E-Learning Tutorial’ link to the left within Canvas

Their regular office hours are as follows: Monday-Thursday: 7:30am-10:00pm
     Friday: 7:30am-5:00pm
     Weekends: 12:00pm-6:00pm

III. Course Description
Course goals/ Educational goals of the course: Become acquainted with controversial issues surrounding the conservation of aquatic animals ranging from invertebrates to marine mammals, with some emphasis on marine mammals, but also including sea turtles, fisheries, and marine ecosystems. Develop critical thinking skills with regards to identifying problems, providing possible solutions and compromises that may help to conserve aquatic animal species and their environment. Cultivate scientific writing skills.

Course organization: The class will focus to a large extent on lectures and a significant amount of reading from book chapters and primary scientific literature on the topic chosen for a given class, and discussion. Students in this class will develop a working knowledge of some of the critical conservation issues facing a variety of aquatic species and will be introduced to both sides of a given problem.
• The MediaSite lectures are taped seminars given by individuals from various institutions, as listed above, who are experts specializing in the topics covered.
• Rather than have exams, students will be expected to review the reading material and the MediaSite lectures, then complete the module quiz and related homework assignments. The quizzes within each module may be taken 3 times before the due date, are open book, and the highest score will count towards your grade.
• Zoom sessions will be provided approximately every other week as an opportunity to ask questions in real time. Extra credit is provided for those attending the live sessions, but it will not be required for students to attend the real time session. Students will be asked to provide questions through the discussion board in the event that they cannot attend the live Q&A sessions. Questions will be covered during the sessions, which will be taped, allowing access through a link to be viewed at the student’s convenience.
• Homework 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 be asked to write an editorial (undergrads) or a pro/con review paper (graduate students) on a controversial topic of their choosing, providing an equally weighted overview of both sides of the controversy. Students will have an opportunity to submit drafts, review and received classmate feedback before the final papers are due.

Grades will be proportioned as indicated in the tables below (V. Evaluation/ Grading/ Testing) and will be based on TA and Professor assessments outlined in provided grading rubrics.
Directions for assignments, lectures and due dates will be provided within each learning module and specific assignment links.
Students should contact the course coordinator or TA by e-mail or within the course discussion board for any questions. You can expect a response within 24-48 hours (usually sooner, except for weekends).

Course Outline & schedule:

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. In some cases there are 2 parts when students respond to classmate posts, then a Thursday due date is included.

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

(**Please note that the schedule below may be amended due to lecture availability, with appropriate notification to students ahead of time**)

<table>
<thead>
<tr>
<th>Module</th>
<th>Lectures</th>
<th>Quizzes/Assignments</th>
<th>Due dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week - 1</strong></td>
<td>Introduction and Overview</td>
<td>Quiz: Syllabus</td>
<td>Sun Sep 5 (11:59 pm EST)</td>
</tr>
<tr>
<td>(Aug 23 - 29)</td>
<td>Introduction &amp; Natural History and Ecosystems</td>
<td>HW 1: Develop Public Sign</td>
<td>Sun Sep 5 (11:59 pm EST)</td>
</tr>
<tr>
<td></td>
<td>Overview (I. Larkin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week - 2</strong></td>
<td>Sea Turtles</td>
<td>Quiz 1: Wk 1&amp;2</td>
<td>Sun Sep 5 (11:59 pm EST)</td>
</tr>
<tr>
<td>(Aug 30 - Sep 5)</td>
<td>Natural History and Conservation (Evans)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week - 3</strong></td>
<td>Fish</td>
<td>HW 2: Mitigation article search</td>
<td>Part 1 due Thurs Sep 9 (11:59 pm)</td>
</tr>
<tr>
<td>(Sep 6-12)</td>
<td>Aquatic Ecosystems and Fish (Behringer)</td>
<td></td>
<td>Part 2 due Sun Sep 12 (11:59 pm EST)</td>
</tr>
<tr>
<td><strong>Week-4</strong></td>
<td>Invertebrates</td>
<td>Q&amp;A 1 session</td>
<td>Post questions Tues Sep 14 (11:59 pm EST)</td>
</tr>
<tr>
<td>(Sep 13-19)</td>
<td>Coral Conservation (Stamper); Sea Urchins</td>
<td></td>
<td>Live session Wed Sep 15 (3:00-4:00 pm EST)</td>
</tr>
<tr>
<td></td>
<td>(Francis-Floyd)</td>
<td>Quiz 2: Wk 3&amp;4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Term Paper Part 1</td>
<td></td>
</tr>
<tr>
<td><strong>Week-5</strong></td>
<td>Aquaculture</td>
<td>HW 3: power point</td>
<td>Sun Sep 26 (11:59 pm EST)</td>
</tr>
<tr>
<td>(Sep 20-26)</td>
<td>Disease and Impacts on Conservation (Yanong)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week-6</strong></td>
<td>Attitudes</td>
<td>Q&amp;A 2 session</td>
<td>Post questions Tues Sep 28 (11:59 pm EST)</td>
</tr>
<tr>
<td>(Sep 27 – Oct 3)</td>
<td>Human Dimensions in Aq An Conservation</td>
<td></td>
<td>Wed Sep 29 (3:00-4:00 pm EST)</td>
</tr>
<tr>
<td></td>
<td>(Crandall)</td>
<td>Quiz 3: Wk 5&amp;6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sun Oct 3 (11:59 pm EST)</td>
</tr>
<tr>
<td>Week-7 (Oct 4-10)</td>
<td>Fisheries Interactions</td>
<td>Human Interactions and Marine Mammals (Stolen); Social Science in Fishery Management (Jepson)</td>
<td>HW 4: Sci Article Rev/ critique</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Week-8 (Oct 11-17)</strong></td>
<td>Right Whales &amp; Conservation Economics</td>
<td>Conservation of North Atlantic Right Whales (Reid); Applying Economics to Marine Mammal Conservation (Pienaar)</td>
<td>Q&amp;A 3 session</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Term Paper Part 2 - Draft</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz 4: Wk 7&amp;8</td>
</tr>
<tr>
<td><strong>Week-9 (Oct 18-24)</strong></td>
<td>Manatees &amp; Florida Springs</td>
<td>Florida Manatee: Biology (Larkin); Drivers of Ecological Change in FL Spring Ecosystems (Nifong)</td>
<td>HW 5: Discussion Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week-10 (Oct 25-31)</strong></td>
<td>Toxicology</td>
<td>Aquatic Toxicology and Endocrine Disruption (P. Larkin)</td>
<td>Q&amp;A 4 session</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz 5: Wk 9&amp;10</td>
</tr>
<tr>
<td><strong>Week-11 (Nov 1-7)</strong></td>
<td>Military Interactions &amp; Managed Animals</td>
<td>Military Interactions with Marine Mammals (Cassle); Marine Mammal Captivity (Davis)</td>
<td>HW 6: Pro/Con power point</td>
</tr>
<tr>
<td><strong>Week-12 (Nov 8-14)</strong></td>
<td>Non-native Species</td>
<td>Introduced and Invasive Species (Hill)</td>
<td>Q&amp;A 5 session</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Term Paper Part 3 - Draft</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz 6: Wk 11&amp;12</td>
</tr>
<tr>
<td><strong>Week-13 (Nov 15-21)</strong></td>
<td>Ocean Health</td>
<td>Ocean Acidification (Stamper); Plastics in the Ocean (McGuire)</td>
<td>HW 7: Article search &amp; summary</td>
</tr>
</tbody>
</table>
IV. Course Materials

TO ACCESS THE MODULES ON E-LEARNING IN CANVAS, GO TO THE HOME LINK.

Reading material will be provided in PDF format through links on the Canvas E-learning site and will include selected chapters from Conservation and Management of Marine Mammals, 1999, Eds. John R. Twiss Jr. and Randall R. Reeves (CMMM); Biology of Marine Mammals, 1999, Eds. John E. Reynolds III and Sentiel A. Rommel (BMM); Marine Conservation Biology: The science of maintaining the sea’s biodiversity, 2005, Eds. Elliott A. Norse and Larry B. Crowder (MCB); and current literature from journals on relevant topics. Please expect to read a significant amount of material each week, which may be 1 book chapter (~30 pages) and/or 1-2 journal articles (10-15 pages each).

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 E-Learning class web page. Feel free to contact her if you need assistance with finding articles or scientific papers on specific subjects. So if you need help finding that ‘perfect’ paper for an assignment beyond reaching out to the course coordinator and TAs, Hannah is here to help.

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, assignments should 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 e-learning support, please visit this page before the course begins: https://elearning.ufl.edu/student-help-faqs/

V. Evaluation/ Grading/ Testing: Grades will be based on participation, completion of quizzes, homework assignments (i.e. - critical review of a scientific paper, a power point presentation, discussion board postings etc... ). Students will be asked to write and review a term paper. Due dates will be held to strictly.
Feedback
You will find feedback on your assignments in the same site where the homework directions are found, under the Assignments link or you can get to it through the Grades link. Discussion assignments will also be graded and feedback is also under the related links. Grades for the assignments, discussions and quizzes will show under the Grades link.

Feedback on the quiz answers will be provided ~ 1 week after quizzes are due. You can find this under the specific quiz link within the Grades page. E-Learning grades the quizzes automatically. Homework and term paper grades will be based on TA and Professor assessments outlined in provided grading rubrics. Grades should be assessed within 2-3 weeks of the due date.

Grade Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>94-100</td>
<td>93-90</td>
<td>89-87</td>
<td>86-83</td>
<td>82-80</td>
<td>79-77</td>
<td>76-73</td>
<td>72-70</td>
<td>69-67</td>
<td>66-63</td>
<td>62-60</td>
<td>59-0</td>
</tr>
</tbody>
</table>

For Graduate and Undergraduate students:

- **90%** Performance & Knowledge of Subject Area
  - Ability to satisfactorily integrate reading material, discussions, and writing assignments as demonstrated
  - 30% Quizzes
     - 30% Homework assignments (equally weighted across modules) – includes critical review of a scientific paper, a power point presentation, discussion board postings etc...
     - (Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)
  - 30% Pro/con Term paper & Reviews
  - 10% Participation
     - Regular Access, Participation in Zoom Q&A sessions
     - Enthusiasm & attitude

For CE students:

- **90%** Performance & Knowledge of Subject Area
  - Ability to satisfactorily integrate reading material, 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...
     - (Rubric point scales for each assignment are for grading and feedback. Differences in point scales do not reflect differing % to final grade between assignments.)
  - 10% Participation
     - Regular Access, Participation in Zoom Q&A sessions
     - Enthusiasm & attitude

For Veterinary Students:

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

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.

******************************************************************************

Note – 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 an additional -10% per day.

Late quiz submissions will not be accepted. You must submit at least one quiz ~10 min before the final due date/time for the system to be able to process and recognize your submission or it will give you a 0.

If there are problems and you find yourself falling behind, contact me as soon as possible. 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.

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.

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
Some resources through the Health Science Center Libraries: https://guides.uflib.ufl.edu/c.php?g=147797&p=967443

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.

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. For additional information on Academic Honesty, please refer to the University of Florida Student Rights & Responsibilities: https://sccr.dso.ufl.edu/process/students-rights-responsibilities/

**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: https://disability.ufl.edu/. 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.

**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/.