

Topics in Aquatic Animal Health

VEM5931 (*veterinary students*) & **VME6938** (*graduate students*)

SEMESTER: SPRING 2024

CREDIT HOURS: 1 CREDIT HOUR

GRADING SYSTEM: PASS/FAIL (*VETERINARY STUDENTS*)

A-E GRADING (*GRADUATE STUDENTS*)

Course Coordinator

Name: Dr. Iske Larkin, PhD

Phone: 352-294-4095

Email: ivlarkin@ufl.edu

Office Hours: By appointment only

Course Instructor

Name: Dr. Jonathan Cowart, PhD

Phone: 252-342-4942

Email: jrc8462@ufl.edu

Office Hours: By appointment only

Course Description

This course covers multiple aspects surrounding aquatic animal health research with a central focus on the appraisal of research quality, validity, and applicability within aquatic veterinary medicine. Throughout the semester, students will be required to review a current, peer-reviewed article within the subject area, present an oral review of the selected article, and facilitate an active and productive critical evaluation of the selected article with their course peers. Students will also be introduced to additional topics including: (1) authorship and contribution, (2) peer review, (3) ethical use of animals in research, and (4) current issues in aquatic veterinary medicine, all of which are important aspects of conducting and disseminating aquatic research.

Course Learning Outcomes

After successful completion of this course, students will be able to:

1. Critically **evaluate** peer-reviewed studies within the field of aquatic animal health.
2. Effectively **facilitate** active and productive discussion of current literature.

3. **Examine** the components of scientific writing and research publication and **apply** this knowledge in aquatic veterinary medicine or research.
4. **Appreciate** the roles of veterinarians, biologists, and governmental personnel in the field of aquatic animal health.

Course Schedule

This weekly schedule contains topics and assignments. Please refer to Canvas for updates and announcements to any changes to this schedule.

Class meetings will be held **in-person** in the **Deriso Hall Conference Room**, first door on your left inside the main entrance. For students unable to attend in-person, each class meeting can also be accessed via Zoom, which can be accessed through Canvas by selecting the “Zoom Conferences” tab.

<i>Date and Time</i>	<i>Topic/Module/Unit</i>	<i>Faculty</i>	<i>SLO # Above</i>	<i>Instructional Hours</i>
11 Jan 2024 4-5PM	Class 1: Course overview, introduction to evaluating peer-reviewed literature, presentation sign-up	Larkin	1	1.0
18 Jan 2024 4-5PM	Class 2: Papers TBD; Critical Thinking Questions	Larkin	1,2,4	1.0
25 Jan 2024 4-5PM	Class 3: Papers TBD; Critical Thinking Questions	Larkin	1,2,4	1.0
01 Feb 2024 4-5PM	Class 4: Selecting a scientific journal for publishing; Predatory publishing; Authorship and contribution	Cowart	3	1.0
08 Feb 2024 4-5PM	Class 5: Papers TBD; Critical Thinking Questions	Larkin	1,2,4	1.0
15 Feb 2024 4-5PM	Class 6: Papers TBD; Critical Thinking Questions	Larkin	1,2,4	1.0
22 Feb 2024 4-5PM	Class 7: Peer review & Statistical Analysis	Cowart	3	1.0
29 Feb 2024 4-5PM	Class 8: Papers TBD; Critical Thinking Questions	Larkin	1,2,4	1.0
07 Mar 2024 4-5PM	Class 9: Papers TBD; Perusall	Larkin	1,2,4	1.0
14 Mar 2024	No class – UF Spring Break	-	-	-
21 Mar 2024 4-5PM	Class 10: Papers TBD; Perusall	Larkin	1,2,4	1.0
28 Mar 2024 4-5PM	Class 11: Ethical use of animals in research	Wahlteinez	4	1.0
04 Apr 2024 4-5PM	Class 12: Papers TBD; Manuscript Dissection	Larkin	1,2,4	1.0
11 Apr 2024 4-5PM	Class 13: Papers TBD; Manuscript Dissection	Larkin	1,2,4	1.0

<i>Date and Time</i>	<i>Topic/Module/Unit</i>	<i>Faculty</i>	<i>SLO # Above</i>	<i>Instructional Hours</i>
18 Apr 2024 4-5PM	Class 14: Aquatic Veterinary Career Pathway Roundtable Discussion (Guest speakers TBD)	Weisbrod	4	1.0
		Total		14

**Please note Lecturer adjustments may be made during the semester based on unforeseen changes in schedule.

Required Textbooks and/or Course Materials

All course materials are available on Canvas and can be accessed through: <https://elearning.ufl.edu/> and signing in using your gatorlink username and password. Students will post their selected journal article and submit critical thinking questions and journal article reviews/critiques in the respective sections on Canvas. Information for selecting journal articles, completing critical thinking questions, and presenting your journal articles can be found in Appendix B.

Recommended Textbooks and/or Course Materials

None

Methods of Evaluation

Grades will be calculated based on the following:

Item	Weight
Journal Article Presentation	25 %
Critical Thinking Questions	25 %
Perusall	20 %
Manuscript Dissection	20 %
Seminars/Presentations	10 %
Total	100 %

Note: Late assignments will have 10% removed from the final score each day it is late. You have until the Sunday after class at 11:59PM to submit any late assignments. After that, the assignment locks and you will receive a zero for it.

Grading Scheme

Grades will be based on attendance, submission of critical thinking questions or Perusall participation for each article, active participation in discussions, preparation of oral review/critique, and ability to facilitate productive discussions regarding selected articles. Graduate students (VME 6938) will receive a letter grade (*see grading scale below*). Veterinary students (VEM 5931) will receive Pass/Fail (*C or better = Pass*) with credit counting towards the Aquatic Animal Medicine Certificate. Course grades will be assigned based on the following grading scheme. This grading scale is **final**.

Letter	Scale
A	100.00 – 94.00

Letter	Scale
A-	93.99 – 90.00
B+	89.99 – 87.00
B	86.99 – 84.00
B-	83.99 – 80.00
C+	79.99 – 77.00
C	76.99 – 74.00
C-	73.99 – 70.00
D+	69.99 – 67.00
D	66.99 – 64.00
D-	63.99 – 61.00
E	60.99 – 0

Course Policies

Attendance to all class meetings is **required**. If you should miss a class day due to research, illness, or attending a course at a conflicting time, you may make up the missed work by writing a 1pg review of another article of your choosing in addition to the assignment due for that class period. Be sure to send me your review as well as a PDF copy of the article. If you expect to miss more than 4 classes, it will impact your grade and you may want to consider registering another semester.

Curriculum Policies

DVM curriculum policies are consistently held and reinforced across all DVM courses. Please visit the DVM webpage and review the curriculum policies listed within the [Online Student Handbook](#).

Community Respect

The University of Florida College of Veterinary Medicine strives to cultivate an atmosphere of respect, empathy, and open-mindedness within an exceptional community of students, faculty, and staff. It is our intent that students from varied backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of this course, and that the viewpoint of students brought to this course be considered a resource, strength, and benefit.

We intend to present materials and activities that are respectful to all. Your suggestions are encouraged and appreciated. Please let us know ways to improve the course's effectiveness for you personally or for other students or student groups.

If any of our course meetings conflict with any of your religious events or practices, an excused absence will be provided when requested using the standard UF CVM Absence Request Form process as detailed in the <https://education.vetmed.ufl.edu/dvm-curriculum/absence-request/>

If you feel that you have experienced or witnessed any bias/treatment that falls short of these expectations, you may submit a report through the [UF CVM Student Mistreatment Report](#).

Students with Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting www.disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. **Students in UF Health Sciences programs should be mindful that unique course accommodations may not be applicable in a clinical, fieldwork or practicum setting. Thus, planning a semester in advance with the DRC Health Sciences Learning Specialist is highly encouraged.** Our learning specialist can be contacted at the following email address: DRC@ufsa.ufl.edu.

The DRC is located on the main UF campus. ASA (Office for Academic and Student Affairs) works closely with the DRC to ensure student accommodations are met in the classroom and during exams. Sabrina Barot in ASA assists in coordinating exams and meeting recommended disability-related requirements for students with accommodations (sbarot@ufl.edu).

Course and Instructor Evaluation

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 through the [GatorEvals web site](#). 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 their [web link](#). Summaries of course evaluation results are available to students on their [public web page](#).

Student Use of Artificial Intelligence (AI)

When authorized by the course director, students may use AI technologies in the completion of coursework as long as they cite all such use by naming the technology and how it was employed. Students assume full responsibility for all content, including errors and omissions. Assistive technology authorized as part of an accommodation for a disability is always permitted.

Course instructors may adjust limitations on AI technology use and must communicate any limitations to students sufficiently in advance of the assignment due date. Failure to cite the use of AI technology or disregarding specific course limitations is considered academic misconduct. **The use of AI on assignments, essays/reflection papers, exams, and quizzes when prohibited by course or college instructions is considered cheating** and students are violating the UF Regulations 4.040 [Student Honor Code](#) and [Student Conduct Code](#).

It is important to note that many generative AI models (e.g., ChatGPT, ChatSonic, Google Bard, etc.) place any information that they are provided with into the public domain. When using such tools, students must therefore ensure that the tools are **never provided with confidential information**. For the avoidance of doubt, the use of such tools is prohibited for generating any confidential communications, including, but not limited to, communications relating to patient records, clients, students, and intellectual property. Students are also reminded that they should always review the terms and conditions of any third-party software being used (e.g., proof reading tools) to ensure that any data the tools are provided with are appropriately protected. Students should always verify information and sources generated by AI tools. AI has inherent bias and has been known to generate

false information and to cite non-existent sources. Also, because AI-generated text mines people's intellectual property without appropriate credit, this raises ethical concerns.

It is not acceptable for students to use generative AI for reflective writing, as by its very nature, the process of reflective writing demands that the individual actively engages in the writing process. Delegating this to a natural language processing algorithm may produce convincing outputs, but does not demonstrate development in an individual's professional practice.

Students are responsible for understanding their dynamic data stewardship responsibilities to minimize personal, college, and university risk.

[UF Integrated Risk Management – CHATGPT Privacy, Factual Accuracy and Usage Guidelines](#)

Appendix A: Faculty Lecturers

Dr. Iske Larkin, PhD

Email: ivlarkin@ufl.edu

Name: Dr. Tatiana Weisbrod, DVM, MS, Dipl. ACZM

Email: tweisbrod@ufl.edu

Appendix B: Other Information

What kind of journal article are you looking for and where should you look?

Students should seek current, peer-reviewed research published in reputable scientific journals. The selected article should have an Introduction, Methods, Results and Discussion/Conclusion section. You can conduct searches through the electronic databases (BIOSYS, Web of Science, Pub Med...) on the UF library system (contact Hannah Norton: nortonh@ufl.edu for any questions related to best literature search practices). Articles to avoid include review papers or those on non-peer reviewed web sites (e.x – governmental reports).

Journal Article Presentation

Students will be asked to review a current, peer-reviewed article of their choosing within the subject area. For the journal article presentation, students will give a **5-10 min oral summary** of their selected article. In addition to the oral presentation, the student will act as the **primary facilitator of discussion and critical evaluation of the article**. Any assigned critical thinking questions can be used to help facilitate peer discussion of the article (*this may be conducted as a group depending upon class size*). Each student should prepare additional critical thinking questions to help facilitate discussion and critical evaluation of the paper. The journal article presentation *AND* critical thinking questions should be handed in through the Canvas/e-learning site **prior** to class when the paper is covered. The rubric used to assess your presentation is included within the assignment. Please look this over to be sure you cover all the major points.

***Please look through your schedules and think of a date that you would like to present. (if it is a large class, think of who you would like in a group of 3-5). I will provide a sign-up sheet for everyone to sign up for their presentation date on the first day of class (first come, first served).**

For the article you select to present, please add a PDF of the article and article presentation date to the course Canvas/e-learning site, under the Discussion link – ‘Articles’ folder. Please make sure to add this before class on **January 18th**, so they can be available to all within the course web site. You may choose any article related to an aquatic animal species ranging from invertebrates to megavertebrates. Please include your name and the date you will be presenting the article on the title of your discussion post when you attach it to the Discussion board link in the class.

You are encouraged to invite someone (faculty, post doc, resident...) here at UF with expertise in the area covered within your paper to come the day of your presentation. **You will receive extra credit should you be successful in bringing someone to class (2 additional points towards that presentation grade)**. This is not a requirement, but it should facilitate addressing questions beyond the scope of the paper that may provide perspective rather than leave the group with unanswered questions.

Critical Thinking Questions

For the first half of the semester, there will be 5-10 critical thinking questions for each selected article that are designed to help guide students through critical evaluation of the article. The set of assigned critical thinking questions will likely change week-to-week depending on the research article. *You are all*

asked to review the article and address and submit all of the questions before each journal article review class. This will be set up as an assignment on Canvas and are due no later than 3PM on the day of each journal article review class. **Late submissions will have 10% removed for each day they are late.**

Perusall

The second half of the semester we will be using a collaborative software called Perusall in order to generate collaborative/interactive discussion amongst all students within the course when critically evaluating a journal article. Each student will be required to make one thoughtful annotation (comment) within the paper and to respond to at least one other classmate's annotations. See the example within the Perusall assignment for examples of thoughtful annotations. Lastly, on the papers we use Perusall, there will be no critical thinking questions assigned for the paper.

Manuscript Dissection

Students will be asked to lead a discussion of a manuscript selected ahead of time, but only reviewed by the discussion leaders ahead of time. Parts of the manuscript are revealed with a facilitated discussion and analysis of aspects of the manuscript. Analysis will include study design, methods choice, data analysis and interpretation of results.

Seminars

Seminars will be scheduled periodically throughout the semester and students will be notified of these at the earliest possible time. As seminar dates/times are not finalized, recordings of each seminar will be made available on Canvas. Students will be required to watch each seminar recording and complete the seminar assignment on Canvas by the specified date.