

# VME 6934

## Developmental and Acquired Small Animal Orthopedic Diseases

SEMESTER: SPRING 2024

CREDIT HOURS: 1 CREDIT HOUR

GRADING SYSTEM: A-E GRADING

### Course Coordinator

Name: Daniel D. Lewis, DVM, DACVS

Phone: 352-294-4426

Email: [LewisDa@ufl.edu](mailto:LewisDa@ufl.edu)

Office Hours: By appointment only.

### Course Description

This course will be an intensive review of various developmental and acquired orthopedic diseases affecting dogs and cats. Lectures will focus on the pathophysiology, diagnosis, specific treatments, and prognosis for each of the discussed conditions. Descriptions of required and recommended approaches, instrumentation as well as procedural steps for the appropriate surgical management of applicable abnormalities will be detailed. These procedures will be practiced in the laboratory setting on cadavers.

### Prerequisites, Co-requisites and Enforced Prerequisites

Baccalaureate degree or permission of an academic advisor of a student in a premedical Baccalaureate program such as animal science, biology, or physiology; or enrollment in a graduate clinical or laboratory medicine or surgery program

### Course Learning Outcomes

1. This course is designed for graduate students whose interest and career objectives are to perform clinical and/or experimental surgery for the treatment of disease in companion animals such as dogs and cats.
2. Students will examine the pathophysiology including histologic pathologic events associated with the development of the conditions which will be discussed in this course.
3. Students will examine translational aspects of analogous conditions in humans as well as other animal species.
4. Students will examine the clinical and radiographic (including advanced diagnostic imaging) abnormalities characteristic to each condition. The student should be able to propose further

diagnostic tests or procedures that would be useful, if needed, to substantiate a definitive diagnosis.

5. Students will be able to formulate a treatment protocol for animals affected with any of the conditions that will be covered in the course with an emphasis on specific treatment based on pertinent patient variables.
6. Students will be able to compose appropriate treatments for the conditions discussed in the course.
7. Students will be able to formulate appropriate surgical management when applicable, including traditional open surgical as well as arthroscopic and minimally invasive procedures.
8. Students will be able to accurately prognosticate the short- and long-term outcome for an animal affected with each of the conditions discussed in this course. The student will also be able to discuss the ramifications of various treatment options on the prognosis for an individual patient..

## Course Schedule

This weekly schedule contains topics, assignments, and exams. This schedule is subject to change. We will attempt to notify participants by email. Please refer to the course eLearning site for updates and announcements to any changes to this schedule.

Class meetings will be held in the Banfield B as well as through Zoom or otherwise specified.

Three laboratories will be held in which each student will perform a series of tasks as described in the course notes. Each student will be required to complete a pre-laboratory work sheet which will be graded and account for half of each laboratory grade. The students will also receive a grade based on their ability to successfully, as judged by assigned faculty, perform each of the laboratory exercise will determine the other half of the laboratory grade. The cumulative possible points for all four laboratories will account for 40% of the total course grade.

**\* Unless otherwise noted, the class will be held in the Banfield Room B from 8.00am – 9.00 am. Class schedule is subject to change. We will attempt to notify participants by email. You can also check this eLearning site for updated schedules.**

<i>Week</i>	<i>Topic</i>	<i>Instructor</i>
Monday, January 8, 2024	Legg-Perthes Disease	Lewis
Monday, January 15, 2024	Panosteitis & Hypertrophic Pulmonary Osteopathy	Lewis
Monday, January 22, 2024	Feline Developmental & Acquired Orthopedic Diseases	Peper
Monday, January 29, 2024	Craniomandibular Osteopathy & Hypertrophic Osteodystrophy	Lewis
Monday, February 5, 2024	Nutrition & Developmental Orthopedics	Shamlberg
Monday, February 12, 2024	Osteochondrosis – Pathogenesis & Diagnosis	Johnson
Monday,	Osteochondrosis – Arthroscopic Management	Johnson

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February 19, 2024		
Wednesday, February 28, 2024	<b>Laboratory:</b> Arthroscopy & Open Surgical Management of Osteochondrosis	Kim/Johnson/Lewis
Thursday, February 29, 2024	Open Surgical Management of Osteochondrosis	Lewis
Thursday, March 7, 2024	Hip Dysplasia - Pathogenesis & Diagnosis	Kim
Thursday, March 21, 2024	Surgical Management of Hip Dysplasia	Lewis
Wednesday, March 27, 2024	<b>Laboratory:</b> Surgical Management of Hip Dysplasia	Lewis/Johnson/Kim
Thursday, April 4, 2024	Total Hip Replacement	Kim
Wednesday, April 10, 2024	<b>Laboratory:</b> Total Hip Replacement	Kim/Carvajal
Thursday, April 18, 2024	<b>Final Exam</b>	Lewis

### Required Textbooks and/or Course Materials

1. Small Animal Surgery, 5<sup>th</sup> ed. TW Fossum. Elsevier, 2018.
2. VEM 5432 & 5433 Course Notes, Canvas (available online in pdf form for students enrolled in the course)

### Recommended Textbooks and/or Course Materials

1. Veterinary Surgery: Small Animal, 2nd ed. by Johnson and Tobias Small Animal Surgery: 4th ed. by Fossum, 2013
2. AO Principles of Fracture Management in Dogs and Cats: Johnson, Houlton & Vannini, 2011  
Applicable scientific manuscripts pertaining to topics discussed in lecture
3. A final examination will be given at the conclusion of the course

### Grading Scheme

Course grades will be assigned based on the following grading scheme.

NOTE: This is the UF grading scheme and may be adjusted.

Letter	Scale
A	100.00 – 94.00
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

Letter	Scale
D+	69.99 – 67.00
D	66.99 – 64.00
D-	63.99 – 61.00
E	60.99 – 0

## Course Policies

1. Attendance in all scheduled lectures is expected.
2. Students are responsible for all material and assignments from all scheduled activities.
3. Students should expect some examination questions which refer to material covered in lectures that may not appear in the notes.
4. Students will be expected to complete all supplemental reading assignments.
5. Please turn cell phones off during class.
6. Students late to class should enter through the back of the lecture hall.
7. Lectures and extra files may be placed on the UF E-Learning site at <https://elearning.ufl.edu>. Students can access the course E-Learning site using their Gator Link login information. Only students who are registered for the course will have access to the site. Please contact Debby Sundstrom ([dsund@ufl.edu](mailto:dsund@ufl.edu)) or Dan Lewis ([lewisda@ufl.edu](mailto:lewisda@ufl.edu)) if you would like to audit the course
8. Whenever possible, copies of the lecture slides and required reading or viewing can be found at this site. Course communications will be through the Online eLearning site or by e-mail. The online material may be updated throughout the course, so it should be checked frequently.

## 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.

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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](http://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 is **Beth Roland** and can be contacted at the following email address: [DRC@ufsa.ufl.edu](mailto: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](mailto: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 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/>.

## 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](#).

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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. Jose L Carvajal, DVM  
Email: [josecarvajal@ufl.edu](mailto:josecarvajal@ufl.edu)

Dr. Matthew D. Johnson, DVM, MVSc, CCRP, DACVS  
Email: [mdjohnson@ufl.edu](mailto:mdjohnson@ufl.edu)

Dr. Stanley Kim, BVSc, MS, DACVS  
Email: [stankim@ufl.edu](mailto:stankim@ufl.edu)

Dr. Dan Lewis, DVM, DACVS  
Email: [lewisda@ufl.edu](mailto:lewisda@ufl.edu)

Dr. Katharine E Peper, DVM  
Email: [peper.kate@ufl.edu](mailto:peper.kate@ufl.edu)

Dr. Justin Shmalberg, DVM, DACVN, DACVSMR  
Email: [shmalberg@ufl.edu](mailto:shmalberg@ufl.edu)

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