

VEM5222 Cytodiagnosis in Veterinary Practice

SEMESTER: SPRING 2021

CREDIT HOURS: 1

GRADING SYSTEM: A-E GRADING

PHASE: III

Course Coordinator

Name: Sarah Beatty, DVM, Diplomate ACVP (Clinical)

Email: preferred contact is through Canvas Course Site Inbox Messaging, skbeatty@ufl.edu

Office Hours: Via Zoom and by Appointment, weekly hours posted on Canvas

Course Description

This course will focus on how to obtain, stain, and evaluate high quality cytologic specimens. Students will learn to interpret microscopic findings in body fluids, organs and tissue masses, and understand the practical application of cytology as it applies to veterinary medicine.

Student Learning Outcomes

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

1. Collect and prepare samples for cytologic evaluation.
2. Categorize lesions and evaluate samples for criteria for malignancy. Recognize routes of metastasis and know the neoplastic processes where these criteria are not reliable indicators of the biological behavior of the lesion.
3. Collect and interpret cytology samples from neoplastic processes that involve the skin, subcutaneous tissues, selected organs, and bone.
4. Apply the didactic material via an instructor guided session evaluating cytology samples from skin, subcutaneous, select organs, and bone lesions.
5. Properly use a microscope for evaluation of dry preparations including the use of Kohler illumination.
6. Collect and interpret cytology samples from lymph nodes and lymphoid tissue.
7. Collect and interpret cytology samples from the liver.
8. Apply the didactic material via an instructor guided session evaluating cytology samples from lymph nodes, liver and neoplastic processes.
9. Prepare and interpret thoracic, abdominal, and pericardial fluids and explain the disease conditions that can cause them.
10. Prepare and interpret synovial fluid.

11. Prepare and interpret cytology samples from the eye and surrounding structures and the respiratory tract.
12. Prepare and interpret spinal fluid samples
13. Prepare and evaluate urine dry mount sediment preparations
14. Apply the didactic material via an instructor guided session evaluating cytology samples from body fluids, synovial fluids, ocular lesions and the respiratory tract, cerebrospinal fluid, and urine dry mount preparations.

Course Schedule

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

Class meetings will be held in Lecture Hall B (Lectures and Discussions) or V1-126 (Clinical Skills Laboratory) unless otherwise specified.

<i>Date and Time</i>	<i>Topic/Module/Unit</i>	<i>Faculty</i>	<i>SLO # Above</i>	<i>Contact Hours</i>
02/16/2021 10:30am-11:20am	Lecture 1: Sample collection, preparation, processing	Beatty	1, 5	1.0
02/16/2021 11:30am-12:20pm	Lecture 2: Lesion classification and malignant criteria	Beatty	1-2	1.0
02/17/2021 10:30am-12:20pm	Lecture 3 & 4: Epithelial and neuroendocrine neoplasms	Beatty	1-3	2.0
02/18/2021 10:30am-11:20am	Lecture 5: Mesenchymal neoplasms	Beatty	1-3	1.0
02/18/2021 11:30am-12:20pm	Lecture 6: Round cell neoplasms	Beatty	1-3	1.0
02/19/2021 10:30am-12:20pm	Case Discussion 1 (Attendance required)	Beatty	1-4	2.0
02/22/2021 8:00am-9:50am Group A 10:30am-12:20pm Group B 3:00pm-4:50pm Group C	Laboratory 1 (Attendance required)	Beatty	1-5	3.0
02/23/2021 10:30am-11:20am	Lecture 7: Lymph node and splenic cytology	Beatty	1-2, 6	1.0
02/23/2021 11:30am-12:20pm	Lecture 8: Hepatic cytology	Beatty	1-2, 7	1.0
02/24/2021 10:30am-12:20pm	Case Discussion 2 (Attendance required)	Beatty	1-8	2.0
02/25/2021 10:30am-11:20am	Lecture 9: Body cavity effusion analysis	Beatty	1-2, 9	1.0
02/25/2021	Lecture 10: Synovial fluid analysis	Beatty	1-2,	1.0

<i>Date and Time</i>	<i>Topic/Module/Unit</i>	<i>Faculty</i>	<i>SLO # Above</i>	<i>Contact Hours</i>
11:30am-12:20pm			10	
02/26/2021 10:30am-11:20am	Lecture 11: Respiratory and Ocular sample analysis	Beatty	1-2, 11	1.0
02/26/2021 11:30am-12:20pm	Lecture 12: Cerebrospinal Fluid and Urine Dry Mount Examination	Beatty	1-2, 12-13	1.0
03/02/2021 10:30am-12:20pm	Case Discussion 3 (Attendance required)	Beatty	1-13	2.0
03/03/2021 8:00am-9:50am Group A 10:30am-12:20pm Group B 1:00pm-2:50pm Group C	Laboratory 2 (Attendance required)	Beatty	1-13	3.0
03/08/2021 8:00am-10:20am	Final Examination (Exam Soft proctored)	Beatty	1-13	1.0
		Total		25.0

Required Textbooks and/or Course Materials

- Google Chrome Browser for image and video viewing during course and for examination
- Functioning tablet, laptop, or computer with reliable internet connection
- Access to WebScope online course slides (only used if full remote learning is instituted)

Recommended Textbooks and/or Course Materials

- Raskin, R. & D. Meyer. Canine and Feline Cytology: A Color Atlas and Interpretation Guide- 3rd Edition
- Valenciano, A. & R. Cowell. Cowell & Tyler's Diagnostic Cytology and Hematology of the Dog and Cat- 4th edition
- Walton, R.M. Equine Clinical Pathology- 1st edition
- Campbell, T. Exotic Animal Hematology and Cytology- 4th edition
- Cornell website: www.eclinpath.com
- Journals: JAVMA: Pathology in Practice, Veterinary Clinics of North America, Veterinary Clinical Pathology

Methods of Evaluation

Grading will be determined by satisfactory participation and completion of material in discussions and laboratory sessions and a final examination, which will be administered via Canvas with proctoring through ExamSoft. Attendance is mandatory at discussion and laboratory sessions. The final examination will cover the entire course and will be multiple choice, true/false, image identification and short answer/essay. Material covered in the examination will be taken from provided Canvas materials including lectures, discussions, and laboratory sessions. Students may expect some examination questions which directly refer to material covered in lectures that may not appear written in the notes (e.g. image description/identification). Individual students can reschedule examinations and/or make up laboratory sessions in the case of documented medical or family need, or other unusual extenuating circumstances. This should be done prior to the scheduled laboratory session or examination when possible. The course instructor should be notified as soon as possible if special arrangements need to be made. Exam review can be scheduled with the course coordinator and must be requested and completed within 1 week of the in-class examination.

Grades will be calculated based on the following:

Item	Weight
Discussion Sessions 1, 2, 3 & Laboratory Sessions 1 & 2	15 %
Final Exam	85 %
Total	100 %

Grading Scheme

Course grades will be assigned based on the following minimum grading scheme. The instructor reserves the right to adjust the scale if a curve is instituted.

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

Course Policies

Attendance: Attendance in all scheduled lectures, discussions, and laboratories is expected. Lectures may be available in recorded format but are not guaranteed pending technology availability.

Discussions and laboratories will not be recorded and attendance with participation is required as part of the grade. Students are responsible for all material and assignments from all scheduled activities.

This course will be delivered in-person in Lecture Hall B to a group of students on a rotating basis. Faculty who are lecturing in the classroom will be required to wear a mask. The members of the class who are not physically present in the classroom will be attending the live synchronous lecture via Zoom. The group of students who attend physically each day will follow physical distancing and masking requirements. Eating or drinking while in the classroom during lecture is prohibited. The same requirements will apply to the in-person laboratory sessions.

Additional guidelines for online learning and face-to-face learning are detailed below:

Online Learning Policies:

The College of Veterinary Medicine asks that students, when possible, have cameras turned on for courses in the professional curriculum, which facilitates participation and professional communication. Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Face-to-Face Learning Policies:

In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>), please use the UF Health screening system (<https://coronavirus.ufhealth.org/screen-test-protect/covid-19-exposure-and-symptoms-who-do-i-call-if/>) and follow the instructions on whether you are able to attend class.
 - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work (<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>).

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](#).

Academic Honesty: The College of Veterinary Medicine expects students to be honest in all their class work. Therefore, students are required to commit themselves to academic honesty by signing the following statement as part of the admissions process: "I understand that the University of Florida expects its students to be honest in all of 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 of Florida."

Professional Behavior Satisfactory demonstration of professional attitudes considered important for successful performance in veterinary medicine including, but not limited to, academic honesty, interpersonal relations and communication skills, behavior and conduct with animals, clients, faculty, students, staff, and adherence to the provisions of the Veterinary Medical Practice Act of the State of Florida as set forth by the Department of Business and Professional Regulations. Satisfactory demonstration of professional attitudes considered important for successful performance in veterinary medicine including, but not limited to, academic honesty, interpersonal relations and communication skills, behavior and conduct with animals, clients, faculty, students, staff, and adherence to the provisions of the Veterinary Medical Practice Act of the State of Florida as set forth by the Department of Business and Professional Regulations.

Plagiarism includes any attempt to take credit for another person's work. This includes quoting directly from a paper, book, or website, without crediting the source. Sources should be noted, a link to the website added, or quotation marks placed around the material and attributed, even during online discussions. However, the instructor expects more than simply cutting and pasting in this graduate-level course. Students are expected to review, evaluate and comment on material they research, rather than simply copying relevant material. Work will be graded accordingly.

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, Lisa Diekow ldiekow@ufsa.ufl.edu, is highly encouraged.** 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. Melissa Cox in ASA assists in coordinating exams and meeting recommended disability-related requirements for students with accommodations (melissacox@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 on the [GatorEvals Webpage](#). 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 the [Online Platform](#). Summaries of course evaluation results are available to students at the [GatorEvals Public Results Webpage](#).