

BIOL 3970 - Wildlife Diseases

**Biology Department, College of Arts and Sciences, Valdosta State University
BIOL 3970A (CRN 26256) 3 credit hours**

Spring Semester, 2023

Instructor - Dr. J. Mitchell Lockhart

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Office Hours: 10:00-11:00 Monday and Friday or by appointment

Course hours: Lecture – MWF, **9:00-9:50AM** Biology-Chemistry Building Room 2022

Textbook – *Field Manual of Wildlife Diseases in the Southeastern United States, Fourth Edition*, William R. Davidson (**suggested**), *Field Manual of Wildlife Disease – General Field Procedures and Diseases of Birds*, National Wildlife Health Center (**suggested** – free online at http://www.nwhc.usgs.gov/publications/field_manual/). Various other readings may be provided.

Other resources:

Journal of Wildlife Diseases – www.jwildlifedislog.org/archive/

Students With Documented Disabilities: Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the semester. Students with disabilities who are experiencing barriers in this course may contact the Access Office (<https://www.valdosta.edu/student/disability/>) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Christina Kidd, Student Conduct Coordinator at chkidd@valdosta.edu. Please note, you will be required to provide

Tentative Lecture Outline:

Introduction

Disease transmission in natural populations

Field techniques for investigation of wildlife diseases

Diagnostic and Laboratory techniques for investigation of wildlife diseases

Working with zoonotic disease/biosafety considerations

Permits and paperwork for wildlife disease investigations

Working with stakeholders

Foreign Animal Diseases

Specific Disease Lists

Avian

Cholera, Tuberculosis, Salmonellosis, Chlamydiosis, Mycoplasmosis,

Miscellaneous Bacterial Diseases, Aspergillosis, Candidiasis, Miscellaneous Fungal

Diseases, Duck Plague, Inclusion Body Disease of Cranes, Miscellaneous Herpesviruses of

Birds, Avian Pox, EEE, Newcastle Disease, Avian Influenza, Woodcock Reovirus,

Hemosporidiosis, Trichomoniasis, Intestinal and Renal Coccidiosis, Sarcocystis,

Eustrongylidosis, Tracheal Worms, Heartworm, Grsqdl(E)-126 (r)2.6 (on)-2.1 (g)4.1 (y)-1am9 (r)-1.5 (co)-4.1 (c)

Bobcat
Feline Panleukopenia, Rabies, Toxoplasmosis, Cytauxzoonosis, *Spirometra*

Opossum
Rabies, Leptospirosis, Sarcocystis, Besnoitia, Stomach Worm

Mink
Mink Virus Enteritis, Dioctophyme

River Otter
CDV, Salmonellosis, Subcutaneous worm

Muskrat
Tularemia, Tyzzer's Disease

Beaver
Tularemia, *Giardia*

Cottontail Rabbit
Shope's Fibroma, Tularemia, Staphylococcosis, Tapeworm, Ascarid, Warbles

Gray Squirrel
Squirrel Fibroma, Warbles, Miscellaneous Skin Conditions - Congenital Alopecia, Dermatophytoses, Notedric Mange, Louse

Woodchuck
Woodchuck Hepatitis, Rabies, Ascarids

Armadillo
Leprosy

Others
Chronic Wasting Disease, Cervid Adenovirus Infection, Malignant Catarrhal Fever, Brucellosis, Bovine Tuberculosis, Johne's Disease, Anaplasmosis, Elaphostrongylosis

Course Outcomes/Assessments

1. To understand the diversity of wildlife diseases.
2. To understand epidemiological, ecological, and social factors that underlie the emergence and spread of selected wildlife diseases.
3. To learn potential strategies for surveillance and management of wildlife health.

Assessments for this course will include reading of scientific literature, written exams, various assignments, and classroom literature presentations.

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