
ORNITHOLOGY (BIOL 3950/5950):
Spring 2023 Syllabus
Dr. Brad Bergstrom
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Lect. MWF 12:00-12:50 (BSC 1024)
Lab/Field F 7:30-10:20 (1088)
1107 BSC 333-5770
(Offc. Hrs. MW 2-3, T 11-12; or by appt)

Required Texts: (1) Gill, F.B., and R.O. Prum. 2019. Ornithology. 4th ed. W.H. Freeman, N.Y.
(2) Dunn, J.L., and J. Aldorfer. 2017. Field Guide to the Birds of North America. 7th ed. National Geographic Society, Washington, DC.

Recommended Book: Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The Birder's Handbook: A Field Guide to the Natural History of North American Birds. Simon and Schuster, New York.

Helpful Website: All About Birds (Cornell Lab of Ornithology) <http://www.allaboutbirds.org/>
Online birding system (what's being seen where): <https://ebird.org/explore>
Downloadable Apps for SmartPhones: Merlin, iBird, Audubon Society, Peterson, Sibley guides

LECTURE SYLLABUS

Week TopicChapters in Gill and Prum

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| 1 | Diversity of birds; Geographic patterns; General avian characteristics; Phylogenetic systematics. |xvii-xxii, Chapt. 1, (Skim 20, 2), 3 |
| 2,3 | Origin and early evolution of birds; (reptilian ancestry, fossil birds, DNA evidence). Extinction. Variation and evolutionary diversification (polymorphism, ecotypes, hybrids). Speciation models; Kin selection; Coevolution; Biogeography of birds. |Chapt. 2,19 |
| 4,5 | Integument, feathers, molt; Flight; Anatomy & Physiology |Chapt. 4,5,6 |
| 6,7 | Sensory/nervous systems; Vocalizations; Behavior; Reproduction; Annual cycles; |Chapt. (Skim 7,8), 12, 9 |
| 8,9 | Migration; Social behavior |Chapt. 10,11 |

Spring Break: South Texas birding fieldtrip: 12-18 March

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| 10,11 | Life History; Mates and mating systems |Chapt. 17,13,14 |
| 12,13 | Nests; Development of young, and parental care |Chapt. 15,16 |
| 14,15 | Avian communities; Conservation |Chapt. 20,21 |

Exam Dates: #1: February 17; #2: March 24; #3: Fri, May 5, 10:15 am -12:15 pm.

NOTICE: Attendance at ALL LECTURES and LABS is MANDATORY! Points will be deducted for each absence. Tardiness = Absence! Note: no lecture Jan. 16 (M).

LABORATORY & FIELD

On most Fridays we will go into the field, either walking or by special bus. Please assemble in the lab at 7:25 a.m. to check out binoculars. Stay tuned in lecture to know what we're doing for that week's lab. *We will leave the building (or bus stop) promptly at 7:30. That means you need to do whatever it takes (multiple alarm clocks, wake-up service, buddy system...) to make sure that your*

mind and body are present in the lab a little bit before 7:30 am on each scheduled day. The bus will not wait for you; so if you're late, you're absent. Wear appropriate field attire (long pants, boots or high-tops; rain gear if advisable; bug spray); bring field journal, field guide.

TENTATIVE LABORATORY TOPICS

Weeks 1,3 -- Bird Anatomy: external gross, skeletal, feathers, feet, bills, QUIZ WEEK 3
Weeks 2,4 -- Local birds in winter (field) QUIZ WEEK 5

Week 5,7 -- Bird Sounds I and II. IN-LAB BIRDSONG QUIZ WEEK 7
FIELD BIRDSONG QUIZ WEEK 9

Spring Break Week 10 (S. Texas trip)

Week 11 -- Museum Preparation, or nests, or other
Week 12-13 -- Local Field Excursions

FINAL FIELD QUIZ April 28

Week 15 -- Special Projects Due (April 30; Topics TBA)

(Note: most weeks we will be in the field; weeks 1, 3, and 5 we will be in lab, and others TBA).

*Bonus Points will be awarded: (1) for species identified in field and properly annotated in journal, beyond 90 species baseline [10 pts per 60 species]; (3) special Saturday/weekend fieldtrip attendance 3 pts. each (4 pts for Feb. overnight; 9 pts for March multi-day trip; See Below).

GRADING :

Lecture Tests @100 pts	= 300
4 Lab/Field quizzes	= 100 (approx.)
Lab/Field Project	= 45
Semester Bird List	
(base points, up to 90 spp.)	= 15
*Bonus Points	= 35 max. (10 pts/60 spp.)

TOTAL= 460 (=100%, but 495 pts. possible with bonus)

A/B/C/D cutoffs will be 90/80/70/60%, *or lower*, at my discretion (**NOTE: not lower for 5950**).

Tentative dates and destinations for optional Saturday full-day trips and longer trip:

Jan. 21: St. Marks National Wildlife Refuge, FL

Feb. 17/18: Fernandina Beach, FL

March 12-18: ****South Texas Spring Break Trip****

April 22: St. Marks National Wildlife Refuge, or Sweetwater Wetlands

STUDENTS WITH DISABILITIES: Students requiring classroom or testing accommodations because of documented disabilities should discuss their needs with the instructor at the beginning of the quarter. To register with the Access Office, go to 1115 Nevins or call 245-2498 (voice) or 219-1348 (tty), or visit <https://www.valdosta.edu/student/disability/>.

COURSE GOALS AND LEARNING OUTCOMES: This course is designed to give the Biology Major a basic understanding of the biology of birds, including anatomy, physiology, reproduction, behavior, ecology, and evolution. Class Aves includes nearly 10,000 species of uniquely adapted warm-blooded vertebrates, which occupy nearly every environment and niche available on Planet Earth. Birds are the most observable group of vertebrates, due to their mostly diurnal habits and tolerance of humans, and so direct non-invasive observation of a wide diversity of birds is possible in a course as it is with no other group of vertebrate animals. The course features a heavy emphasis on identification and observation of birds in their natural habitats. In addition to visual learning, acoustic memory skills are taught in this class, as they arguably are in no other.

With reference to the Educational Outcomes for the B.S. Degree in Biology (see p. 113 of 2014-2015 VSU Undergraduate Catalog) and as explained above, BIOL 3950 is particularly designed to give the student extensive background in Outcomes #2 and #5.

With reference to the VSU General Education Outcomes¹, BIOL 3950 will significantly address the following: #3) Students will use computer and information technology when appropriate; #4) Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening; #5) Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices; #7) Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written, and visual materials.

¹<http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml>

Statement on COVID-19 Safety Protocols

VSU, the CDC, and I strongly encourage students to be vaccinated against COVID-19 with the updated (bivalent) vaccines, and that process is both easy and free. If you should have symptoms that you feel might be the result of COVID-19, you should get tested. Both vaccination and testing can be done at the Student Health Center—call them at 333-5886 for an appointment.

If you have been **exposed** to COVID-19, you should:

- > Practice physical distancing and wear a well-fitting mask for 10 days.
- > Monitor yourself for symptoms of COVID-19.
- > [Test 5 days after exposure](#), or sooner if you have symptoms.

Alternatively, you may make an appointment with the Lowndes County Public Health Service COVID testing center by calling 844-955-1499, and do not come to class until you receive a negative test and your symptoms clear (or 10 days after symptoms start if you do not get a test). This is a face-to-face course and you are expected to be in class (lecture and lab); any special accommodations will require documentation (including from Student Affairs). VSU's Coronavirus FAQ page is <https://www.valdosta.edu/health-advisory/faq.php>. For whatever reason you might miss class, you must inform the instructor ASAP you will be (or have been) absent and receive instructions for making up work.

Although you may choose to wear a proper-fitting mask (N95 or KN-95) covering the mouth *and nose* when inside the building, it is especially important to do so while riding in very close quarters in the van to and from our field trips—whether vaccinated or not.

Latest from CDC and VSU on COVID-19

With the many variants (and subvariants of the Omicron variant), you are urged you to keep your vaccinations updated and especially to get vaccinated if you have not already been. Vaccination, followed by periodic boosters, is the best way to protect yourself and others.

If it has been more than 6 months since your second Pfizer or Moderna vaccine, you will be considered as unvaccinated in the event of an exposure.

If it has been more than 2 months since your J&J vaccine, you will be considered as unvaccinated in the event of an exposure.

Isolation Changes

Recently, the CDC updated its guidance regarding isolation, and the USG has endorsed that recommendation. For those who test positive, they should isolate for 5 days, and if the symptoms are improving and they've been fever-free for 24 hours and haven't used a fever-reducing medication, they can leave isolation after 5 days, but they should continue to wear a well-fitting mask around others for an additional 5 days to minimize potential transmission.

Quarantine Changes

The USG is also following the CDC's updated guidance regarding quarantine. Those exposed who are unvaccinated or are vaccinated but not fully boosted should quarantine for 5 days followed by strict mask use for an additional 5 days. Those who have received their booster shot or completed the primary series of the Pfizer or Moderna vaccine within the last 6 months or completed the primary series of the J&J vaccine within the last two months DO NOT need to quarantine following an exposure, but they should wear a mask for 10 days after the exposure. For anyone exposed, the CDC says best practice would also include getting tested at day 5 after exposure. If symptoms occur, individuals should immediately remain at home until a negative test confirms symptoms are not attributable to COVID-19. You can read more about the updated CDC guidance here: <https://www.cdc.gov/media/releases/2021/s1227-isolation-quarantine-guidance.html>

VSU continues to maintain a self-reporting portal for COVID+ diagnosis through MyVSU (just left of the Blazeview link), although its use is no longer required. VSU's COVID-19 Task Force will continue to meet as needed. If you have a concern you would like the Task Force to consider, you can email it to communications@valdosta.edu.