

LECTURE SYLLABUS
BIOL 4404/5407 Ornithology Spring 2021

Instructor: Dr Sean P. Graham
Lectures: live time TBA; 3 x weekly via zoom; lectures recorded and posted
Laboratory: live time TBA; independent activities assigned, as well as online podcasts and videos with assignments

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Course Description:

Ornithology is the study of birds, one of the most spectacular, successful, and best-studied animal groups. This course will survey the origin, evolution, diversity, physiology, and behavior of birds. The laboratory component of this course will make use of preserved museum specimens, dissections, and field trips to illustrate morphology, taxonomy, identification, natural history, reproduction, and other aspects of bird biology. A separate syllabus is available for laboratory. Many materials associated with this course (e.g. this syllabus, lecture and lab handouts, grades) will be distributed through the Blackboard web site.

Recommended Books/Checklists (NONE REQUIRED):

1. *Ornithology, 3rd ed.* (2009).
This text is a large and comprehensive view of Ornithology. We will not have the opportunity to cover every chapter, but purchasing this text will greatly enhance your understanding of the lecture material. I will be basing the lectures and tests in large part on this text.
2. Birds of the Trans Pecos (checklist)
3. Birds of Big Bend National Park (checklist)
4. Birds of Big Bend National Park (book)
5. *National Geographic Field Guide to Birds of North America, 6th Ed.* Dunn and Alderfer
(Highly recommended! Buy it used online)

Exams & Grading: The table below illustrated the grading for this course. I do not give comprehensive exams.

3 lecture exams @ 100 pts ea	300
Lab practicals/summaries (3 @ 100 pts ea)	300
<u>Quizzes</u>	<u>100</u>
Total Credit	750 points

A 90 — 100% B 80 — 89% C 70 — 79% D 60 — 69% F 0 — 59%

Attendance is mandatory. I do not post lectures on blackboard, so all material needed to do well in the exams will be provided during lectures and laboratory. **DO NOT MISS EXAMS or LABS** unless you have a documented, university-approved excuse (hospitalization, etc.), and I need to hear about this **BEFORE THE DAY OF THE EXAM**. Otherwise you're out of luck.

Student Learning Outcomes (SLOs) for Biology:

- 1) The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.
- 2) The student will be able to demonstrate utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.
- 3) The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.

4) The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

Student Learning Outcomes (SLOs) for Biology, MS:

1. Understanding and implementation of scientific methodology
2. *Utilization of field techniques toward addressing scientific questions**
3. Be able to utilize statistics toward the analysis of data within the discipline
4. Be able to effectively disseminate scientific findings using both written and oral communication.

Marketable Skills:

- 1) Ability to organize, analyze, and interpret data.
- 2) Proficiency in using presentation software.
- 3) Experience in managing time and meeting deadlines.
- 4) Ability to speak effectively and write concisely about scientific topics.
- 5) Experience in the development of professional email correspondence.

Tentative schedule (subject to change)

Day

Week	Topic
1	Introduction: Diversity of birds
1	Origin of birds
2	
2	Form and function I: Feathers
3	
3	II: Flight
4	III: Physiology
4	IV. Brains and senses
5	
5	
6	V. Feeding
6	
7	Behavior and communication I: Visual Communication
7	First test Friday Feb 24
8	II: Vocal Communication
8	
9	Behavior and the Environment I: Annual Cycles
10	Spring Break
	No classes Mar 8-12
10	II. Migration
11	Second test Friday 24 March
11	III. Navigation
12	Reproduction and Development: I

	Reproduction
12	II. Nests and Development
13	
13	III. Mating systems
14	
14	IV Parental care
15	Ecology and Conservation I:
	Communities
15	
16	Conservation

**Final exam (not cumulative): Finals week
April 30; May 1-3**

Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the Student's responsibility to initiate a request. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.

SPECIAL COVID-19 STUFF:

- 1) **Masks:** Face coverings are required indoors and outdoors on SHSU campuses unless you are in a private space or are engaged in an activity for which wearing a covering is impractical. In this class, if a student refuses to wear a mask/wear a mask properly, class will be cancelled, and according to SHSU policy, I will be forced to report the student to the Dean of Students office. Please note that a face mask that has an exhalation valve or vent is not acceptable. <https://www.shsu.edu/katsafe/face-coverings#2d0290a3-7bfe-4a69-9bab-14fb494c332b>
- 2) **Assigned Seating:** There will be an assigned seating chart for each group to encourage social distancing.
- 3) **Disinfection of Classroom Surfaces:** Each person should disinfect their space at the beginning and end of each class meeting. The university has provided disinfectant wipes in our classroom. When you enter the classroom, please take a wipe and use it to clean your space before settling in. If possible, please keep that wipe to use again to clean your space before you leave. Although, SHSU will provide access to hand sanitizer at the entrances to classroom buildings, I encourage you to also carry your own sanitizer with you in public.
- 4) **Orderly Dismissal:** When class is over, I will dismiss students row by row, starting with the row closest to the exit. Each day, I will end class a little early so that you have enough time to wipe down your desk and wait to be dismissed by row.
- 5) **Food & Drinks:** There will be no eating or drinking in the classroom. If you need to take a sip of your drink during class time, you may leave the room to do so.
- 6) **Paperwork:** In order to maintain social distancing and reduce the transmission of germs via paper, all paperwork requiring faculty signatures should be sent as digital documents via email, e.g., athletic schedules, doctor's notes, SSD forms, etc. I will not pass out any papers to students and I will not accept any papers from students.
- 7) **Limited in-class interaction:** We will do our absolute best to maintain social distancing in the classroom. Please stay 6 feet away from my desk. I will be happy to answer general questions during class time, but I recommend that you address personal questions virtually.
- 8) **No in-person office hours.** My office is not large enough to accommodate the CDC's recommendations for social distancing; therefore, all office hours will be held virtually.
- 9) **Travel:** *If you have travelled internationally*, you are required to self-quarantine for 14 days upon your return. *If you have travelled locally or out of state*, you are required to self-quarantine for 14 days only if the local destination or state you traveled to is under a CDC COVID-19 travel advisory. <https://www.shsu.edu/katsafe/restart2020/faq#b73e7b75-e764-44b3-a404-66f4d498f0f6>

10) **Illness:** Students who are experiencing COVID-19 symptoms, have been diagnosed with COVID-19, or have been in close contact with a person who has been diagnosed with COVID-19, PLEASE DO NOT COME TO IN-PERSON SESSIONS.

<https://www.shsu.edu/katsafe/covid-19-protocols>

If you have tested positive for COVID-19, please self-report via the "Restart 2020" SHSU web page. Go to <https://www.shsu.edu/katsafe/restart2020/> and click on the link on the right titled "Report Your Positive Case" (alternatively, you may contact Erica Bumpurs directly at stdemb17@shsu.edu).

Students who are symptomatic or who have had known exposure to COVID-19 may be tested at the Student Health Center.