

**VERTEBRATE NATURAL HISTORY
IB 104LF**

Instructors: TBD
GSI:

Office hours for faculty and GSIs will be posted on bCourses during week 1.

Lecture: Tues, Thurs, 09:30-11:00 in 101 LSA. Lab: Wed 1-4 pm, Thurs 2-5 pm, 3095 VLSB.

Required Books:

Sibley, D. A. 2016. *The Sibley Field Guide to Birds of Western North America: Second Edition*. Alfred A. Knopf.

Stebbins, Robert C. 2003. Peterson Field Guides - *Western Reptiles and Amphibians*. Third Edition. Houghton Mifflin Company (required).

Reid, F. A. 2006. *A Field Guide to Mammals of North America*. Peterson Field Guide Series, 4th edition. Houghton Mifflin Company.

Bowie, R. C. K., J. McGuire, A. Rush, and A. Shabel. 2018. Vertebrate Natural History Laboratory and Field Syllabus for Integrative Biology 104L (sold at Copy Central, 1971 Shattuck Avenue, (510) 848-7034, square@copycentral.com).

Point allocation for the course:

1 mid-term exam	150 pts.
1 final exam (comprehensive)	250 pts.
2 laboratory practical exams (100 pts. each)	200 pts.
2 field notebook (5 pts. for Feb 8 review)	105 pts.
1 independent field project	150 pts.
2 peer review exercises (5 pts. for presentations March 21/22)	25 pts.
13 field trips + 10 bonus points for final Hastings trip	120 pts.
 Total points possible	 1000 pts.

Laboratory: Please read pages 3-16 in the lab syllabus before the first lab meeting. You may not attend a lab section other than the one to which you have been assigned. If you should miss your lab meeting for a valid reason, see your GSI for a note permitting you to attend the other section.

Field trips: Before the first field trip, read pages 114-124 in the lab syllabus. Bring a field notebook to the first field trip (see page 116, #1). Also bring a pencil or pen with waterproof black ink. See notebook examples in the laboratory. The field notebook will be handed in on **February 8** (5 pts.) for a progress inspection. It is required that you bring binoculars and a field guide on all trips. 7X-10X power binoculars with coated lenses and center focusing are best for observing birds, but other kinds may be suitable.

ATTENDANCE IS REQUIRED ON ALL FIELD TRIPS

Field trips will be held rain or shine so come dressed appropriately. No umbrellas, pets, friends, or relatives are allowed on IB 104 field trips.

Independent field project: One of the most important requirements for this course is a written report on your individual field project. Read pages 120-124 in the lab syllabus before selecting a topic. You must discuss your proposed topic with an instructor and/or GSI. We recommend that you begin these discussions early in the semester. Before beginning the project, turn in a research proposal (pp. 124 in lab syllabus). The written proposal is due in your lab on **February 21, 22** and a 3-5 minute oral presentation will occur during the labs on **March 21, 22**. If you intend to study either amphibians or wintering birds, you should obtain early approval; these animals are not usually available for study after mid-March.

The typed report for your independent field project must be understandable without reference to anything else, even your field notes. Do not use library references; the basis for the report must be the original data that you have obtained in the field through your own efforts. You may not do the same project in IB 104LF that you have done, or are doing, for another course. No joint projects are allowed, but we recommend that you conduct your fieldwork with one or more students from the course when possible. **Do not work alone in remote sections of parks or in areas where you feel unsafe.**

YOUR APPROVED RESEARCH PROPOSAL AND ALL FIELD NOTES AND DATA SHEETS PERTAINING TO YOUR PROJECT MUST BE HANDED IN WITH THE TYPED REPORT AT THE END OF THE SEMESTER. GRADES FOR LATE PROJECTS WILL BE STEEPLY REDUCED.

Spring 2018

VERTEBRATE NATURAL HISTORY

IB 104LF

LECTURE			LABORATORY	FIELD
T	Jan 16	Intro/Vertebrate Diversity Birds	Jan 17, 18 Birds	Jan 19, 20 Birds
TH	Jan 18			
T	Jan 23	Birds Birds	Jan 24, 25 Birds	Jan 26, 27 Birds
TH	Jan 25			
T	Jan 30	Birds Birds	Jan 31, Feb 1 Birds	Feb 2, 3 Birds
TH	Feb 1			
T	Feb 6	Birds Birds	Feb 7, 8 Birds	Feb 9, 10 Birds
TH	Feb 8			
T	Feb 13	Birds Amphibians	Feb 14, 15 Amphibians	Feb 16, 17 Amphibians
TH	Feb 15			
T	Feb 20	Amphibians Amphibians	Feb 21, 22 Amphibians	Feb 23, 24 Amphibians
TH	Feb 22			
T	Feb 27	Amphibians Mammals	Feb 28, Mar 1 Lab Exam (Birds & Amphibs, MVZ tour)	Mar 2, 3 Mammals
TH	Mar 1			
T	Mar 6	Lecture Exam 1 Mammals	Mar 7, 8 Mammals	Mar 9, 10 Indiv. Field Projects
TH	Mar 8			
T	Mar 13	Mammals Mammals	Mar 14, 15 Mammals	Mar 16, 17 Mammals
TH	Mar 15			
T	Mar 20	Mammals Mammals	Mar 21, 22 Mammals & project presentations	Mar 23, 24 General
TH	Mar 22			
T	Mar 27	Spring recess Spring recess	Mar 28, 29 No labs	Mar 30, 31 No field trips
TH	Mar 29			
T	Apr 3	Mammals Mammals	Apr 4, 5 Reptiles	Apr 6, 7 Mammals
TH	Apr 5			
T	Apr 10	Mammals Reptiles	Apr 11, 12 Reptiles	Apr 13, 14 Reptiles Birds
TH	Apr 12			
T	Apr 17	Reptiles Reptiles	Apr 18, 19 Reptiles & project peer review	Apr 20, 21 Birds (5:30-9:30 am)
TH	Apr 19			
T	Apr 24	Reptiles Reptiles	Apr 25, 26 Lab Exam (Mammals & Reptiles)	Apr 28-29 Culminating trip (8AM Sat. to 3-5 PM Sun.)
TH	Apr 26			

Field Trip Schedule 2018

Week	Date	Location
1	Jan 19, 20	Birds: Aquatic Park
2	Jan 26, 27	Birds: Tilden, Jewel Lake
3	Feb 2, 3	Birds: Arrowhead Marsh
4	Feb 9, 10	Birds: Coyote Hills
5	Feb 16, 17	Amphibians: Briones (Alhambra Valley Rd.)
6	Feb 23, 24	Amphibians: Briones (Bear Creek Rd.)
7	Mar 2, 3	Mammals: Tilden, Wildcat Canyon
8	Mar 9, 10	<i>Individual field projects (no field trip)</i>
9	Mar 16, 17	Mammals: Point Pinole
10	Mar 23, 24	General: Del Valle
11	Mar 30, 31	<i>Spring Break (no field trip)</i>
12	Apr 6, 7	Mammals: Point Reyes
13	Apr 13, 14	Reptiles: Sunol
14	Apr 20, 21	Birds: Tilden, Lone Oak (dawn chorus)
15	Apr 28–29	General: Hastings (overnight adventure)

Important dates:

Field notebook handed in for preliminary evaluation due **in lecture on February 8**

Field project proposal due **in lab on February 21, 22**

Field project oral presentation **in lab on March 21,22**

Field project submission for peer review due **in lab on April 18, 19**

Final version of Field Project due **in lecture Thursday April 26**

Field notebook final version due **in lecture Thursday April 26**

Final Exam: Wednesday, May 9, 11:30 AM–2:30 PM