BIOO 470 - LAB SCHEDULE

Spring 2017

<table>
<thead>
<tr>
<th>Lab Date</th>
<th>Lab Topic</th>
<th>Pages in Lab Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jan 19</td>
<td>External morphology</td>
<td>1-1 to 1-19</td>
</tr>
<tr>
<td>2. Jan 26</td>
<td>Avian skeleton &amp; feathers</td>
<td>2-1 to 2-7</td>
</tr>
<tr>
<td>3. Feb 02</td>
<td>Internal anatomy</td>
<td>3-1 to 3-12</td>
</tr>
<tr>
<td>4. Feb 09</td>
<td>Snow Goose to Harlequin Duck</td>
<td>4-1</td>
</tr>
</tbody>
</table>
| 5. Feb 16 | **LAB EXAM #1**
               Bufflehead to Common Loon      | 5-1                 |
| 6. Feb 23 | P.-b. Grebe to Ferruginous Hawk   | 6-1                 |
| 7. Mar 02 | R.-l. Hawk to Wilson’s Phalarope  | 7-1                 |
| 8. Mar 9 | F. Gull to R. Hummingbird         | 8-1                 |
| 9. Mar 23 | **LAB EXAM #2 - Visuals**
               B. Kingfisher to W. Vireo     | 9-1                 |
| 10. Mar 30| **LAB EXAM #2 - Audio**
              Clark’s Nutcracker to Marsh Wren| 10-1                |
| 11. Apr 06| Am. Dipper to Chipping Sparrow    | 11-1                |
| 12. Apr 13| Lark Bunting to House Sparrow     | 12-1                |
| 13. Apr 20| **LAB EXAM #3 – Visuals**
               Song review               |                     |
| 14. Apr 27| **LAB EXAM #3 – Audio**           |                     |


Lab Exam #1 covers Labs 1-4 and contains no bird songs.
Lab Exam #2 covers Labs 5-8 and contains bird calls/songs from labs 4-8.
Lab Exam #3 covers Labs 9-12 and contains bird calls/songs from labs 9-12.
Lab 4.  Snow Goose to Harlequin Duck
You are responsible for knowing order, family, and common names of all species listed. You should be able to identify the species from museum mounts, taxidermic mounts, or photographs based on the plumages indicated. For species in bold, you also need to learn the vocalizations (tested on Exams 2 & 3). Page numbers refer to pages in National Geographic guide – 6th edition.

ANSERIFORMES - Geese, swans, & ducks
Anatidae

1. **snow goose** – (adult) page 16
2. Ross’ goose – (adult) page 16
3. **Canada goose** – (adult) page 20
4. **tundra swan** – (adult) page 22
5. **trumpeter swan** – (adult) page 22
6. wood duck – (adult male) page 24
7. **mallard** – (adult male) page 26
8. **gadwall** – (adult male) page 28
9. green-winged teal – (adult male) page 28
10. American wigeon – (adult male) page 30
11. **northern pintail** – (adult male) page 30
12. northern shoveler – (adult male) page 32
13. blue-winged teal – (adult male) page 32
14. cinnamon teal – (adult male) page 32
15. canvasback – (adult male) page 34
16. **redhead** – (adult male) page 34
17. ring-necked duck – (adult male) page 34
18. lesser scaup – (adult male) page 36
19. harlequin duck – (adult male) page 40
### Lab 5. Common Goldeneye to Common Loon

**ANSERIFORMES - Swans, geese, & ducks (continued)**

Anatidae

1. bufflehead – (adult male) page 44
2. common goldeneye – (adult male) page 44
3. Barrow's goldeneye – (adult male) page 44
4. hooded merganser – (adult male) page 46
5. common merganser – (adult male) page 46
6. ruddy duck – (adult male) page 48

**GALLIFORMES - Chicken-like birds**

Phasianidae

7. chukar – (adult) page 58
8. gray partridge – (adult) page 58
9. ring-necked pheasant – (adult) page 60
10. wild turkey – (adult) page 60
11. ruffed grouse – (adult male) page 62
12. spruce grouse – (adult male) page 62
13. dusky grouse – (adult male) page 62
14. sharp-tailed grouse – (adult male) page 66
15. greater sage-grouse – (adult male) page 66

**GAVIIFORMES - Loons**

Gaviidae

16. common loon - (breeding adult, winter adult) page 70
Lab 6. Pied-billed Grebe to Ferruginous Hawk

PODICIPEDIFORMES - Grebes
Podicipedidae
1. **pied-billed grebe** – (breeding adult) page 72
2. horned grebe – (breeding adult) page 72
3. eared grebe – (breeding adult) page 72
4. Clark’s grebe – (breeding adult) page 74
5. western grebe – (breeding adult) page 74

Suliformes – Frigatebirds, boobies, & cormorants
Phalacrocoracidae
6. double-crested cormorant - (all) page 106

PELECANIFORMES – Pelicans, bitterns, herons, & ibis
Pelecanidae
7. American white pelican - (all) page 110
Ardeidae
8. **American bittern** – (adult) page 112
9. great blue heron – (adult) page 112
10. black-crowned night-heron – (adult) page 118

Threskiornithidae
11. white-faced ibis – (breeding adult) page 120

Accipitriformes – vultures, osprey, eagles, & hawks
Cathartidae
12. turkey vulture – (adult) page 124

Pandionidae
13. **osprey** – (adult) page 126

Accipitridae
14. golden eagle – (adult) page 130
15. **bald eagle** – (adult) page 130
16. northern harrier– (adult) page 132
17. sharp-shinned hawk – (adult) page 134
18. Cooper's hawk – (adult) page 134
19. northern goshawk – (adult) page 134
20. Swainson’s hawk – (typical adult) page 142
21. ferruginous hawk – (typical adult) page 142
Lab 7.  Rough-legged Hawk to Wilson's Phalarope

Accipitridae con.
1. rough-legged hawk – (typical adult)  page 144
2. red-tailed hawk – (typical adult)  page 144

Falconiformes – Caracaras & falcons
Falconidae
3. American kestrel – (adult)  page 148
4. merlin – (adult male)  page 148
5. prairie falcon – (adult)  page 150
6. peregrine falcon – (adult)  page 150
7. gyrfalcon – (adult)  page 150

GRUIFORMES - Rails & cranes
Rallidae
8. sora – (adult)  page 156
9. Virginia rail – (adult)  page 158
10. American coot – (adult)  page 160
Gruidae
11. sandhill crane – (adult)  page 162

CHARADRIIFORMES - Shorebirds, etc
Charadriidae
12. killdeer – (adult)  page 166
13. mountain plover – (adult)  page 170
Recurvirostridae
14. American avocet – (adult)  page 172
Scolopacidae
15. willet – (breeding adult)  page 174
16. greater yellowlegs – (breeding adult)  page 174
17. lesser yellowlegs – (breeding adult)  page 174
18. spotted sandpiper – (breeding adult)  page 180
19. long-billed curlew – (adult)  page 184
20. Wilson's snipe – (adult)  page 204
21. Wilson's phalarope – (adult)  page 206
Lab 8. Franklin’s Gull to Rufous Hummingbird

CHARADRIIFORMES - Shorebirds, etc
Laridae
1. Franklin's gull – (breeding adult) page 216
2. ring-billed gull – (breeding adult) page 222
3. California gull – (breeding adult) page 222
4. black tern – (breeding adult) page 238
5. common tern – (breeding adult) page 240

COLUMBIFORMES - Pigeons & doves
Columbidae
6. rock pigeon – (adult) page 264
7. mourning dove – (adult) page 266

STRIGIFORMES - Owls
Tytonidae
8. barn owl – (adult) page 282
Strigidae
9. long-eared owl – (adult) page 282
10. short-eared owl – (adult) page 282
11. great horned owl – (adult) page 282
12. great gray owl – (adult) page 284
13. snowy owl – (adult) page 284
14. eastern screech owl – (adult) page 286
15. northern saw-whet owl – (adult) page 290
16. burrowing owl – (adult) page 290

CAPRIMULGIFORMES - Nighthawks
Caprimulgidae
17. common nighthawk – (adult) page 292

APODIFORMES - Swifts & Hummers
Apodidae
18. white-throated swift – (adult) page 296
Trochilidae
19. calliope hummingbird – (adult male) page 308
20. rufous hummingbird – (adult male) page 308
Lab 9. Belted Kingfisher to Warbling Vireo

CORACIIFORMES - Kingfishers
Alcedinidae
1. belted kingfisher – (adult) page 310

PICIFORMES - Woodpeckers
Picidae
2. Lewis' woodpecker – (adult) page 312
3. red-naped sapsucker – (adult) page 316
4. hairy woodpecker – (adult) page 320
5. downy woodpecker – (adult) page 320
6. northern flicker – (adult) page 322
7. pileated woodpecker – (adult) page 324

PASSERIFORMES - Perching birds
Tyrannidae
8. olive-sided flycatcher – (adult) page 326
9. western wood-pewee – (adult) page 328
10. Empidonax flycatchers – (adult) page 328-334
11. Say's phoebe – (adult) page 336
12. western kingbird – (adult) page 342
13. eastern kingbird – (adult) page 344
Laniidae
14. loggerhead shrike – (adult) page 348
Vireonidae
15. warbling vireo – (adult) page 356
Lab 10. Clark’s Nutcracker to Marsh Wren

PASSERIFORMES - Perching birds continued

Corvidae
1. Clark’s nutcracker – (adult) page 356
2. gray jay – (adult) page 356
3. blue jay – (adult) page 358
4. Steller's jay – (adult) page 358
5. black-billed magpie – (adult) page 362
6. American crow – (adult) page 364
7. common raven – (adult) page 364

Alaudidae
8. horned lark – (adult) page 366

Hirundinidae
9. tree swallow – (adult) page 370
10. violet-green swallow – (adult) page 370
11. barn swallow – (adult) page 370
12. northern rough-winged swallow – (adult) page 372
13. bank swallow – (adult) page 372
14. cliff swallow – (adult) page 372

Paridae
15. black-capped chickadee – (adult) page 376
16. mountain chickadee – (adult) page 376

Certhiidae
17. brown creeper – (adult) page 382

Sittidae
18. red-breasted nuthatch – (adult) page 380

Troglodytidae
19. house wren – (adult) page 384
20. marsh wren – (adult) page 386
Lab 11. American Dipper to Chipping Sparrow

PASSERIFORMES - Perching birds continued

Cinclidae
1. American dipper – (adult) page 386

Regulidae
2. ruby-crowned kinglet – (adult) page 386

Turdidae
3. mountain bluebird – (adult) page 396
4. Townsend's solitaire – (adult) page 396
5. veery – (adult) page 398
6. Swainson's thrush – (adult) page 398
7. American robin – (adult) page 402

Mimidae
8. gray catbird – (adult) page 404
9. sage thrasher – (adult) page 406

Sturnidae
10. European starling – (adult) page 410

Bombycillidae
11. cedar waxwing – (adult) page 416

Calcariidae
12. chestnut-collared longspur – (breeding male) page 420
13. snow bunting – (winter male) page 422

Parulidae
14. yellow warbler – (breeding male) page 430
15. yellow-rumped warbler – (breeding male) page 434
16. American redstart – (breeding male) page 444
17. Wilson's warbler – (breeding male) page 450
18. common yellowthroat– (breeding male) page 452

Emberizidae
19. spotted towhee – (adult male) page 460
20. chipping sparrow – (breeding male) page 468
# Lab 12. Lark Bunting to House Sparrow

**PASSERIFORMES - Perching birds continued**

**Emberizidae**
1. lark bunting – (breeding male) page 472
2. **vesper sparrow** – (adult male) page 472
3. **song sparrow** – (adult male) page 478
4. **dark-eyed junco** – (adult) page 484

**Cardinalidae**
5. **western tanager** – (breeding male) page 490
6. **black-headed grosbeak** – (breeding male) page 494

**Icteridae**
7. **western meadowlark** – (adult) page 500
8. **bobolink** – (breeding male) page 502
9. **red-winged blackbird** – (adult male) page 502
10. **yellow-headed blackbird** – (breeding male) page 504
11. Brewer’s blackbird – (breeding male) page 504
12. common grackle – (adult male) page 506
13. brown-headed cowbird – (adult male) page 508
14. Bullock’s oriole – (breeding male) page 514

**Fringillidae**
15. Cassin’s finch – (adult male) page 518
16. **house finch** – (adult male) page 518
17. red crossbill – (adult male) page 520
18. American goldfinch – (breeding male) page 522
19. pine siskin – (adult) page 524

**Passeridae**
20. house sparrow – (adult) page 582
<table>
<thead>
<tr>
<th>Songs/calls on Exam #2</th>
<th>Songs/calls on Exam #3</th>
</tr>
</thead>
<tbody>
<tr>
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