### Instructor
Dr. Jim Lovvorn, office: 445 Life Sciences II, (618) 453-4127, lovvorn@siu.edu

### TA:
Justin Shew, office: 269D Life Sciences II, justin.shew@siu.edu

### Texts

### Meetings
- Lecture: 08:00-08:50 Wednesday and Friday, 430 Life Sciences II.
- Lab: 09:00-11:50 Friday, 310 Life Sciences II.

### Office Hours
Formal office hours often conflict with schedules of students, so just ask, e-mail, or call for appointment.

### Grading
- **Lecture (60% of grade):**
  - Exam 1 (13%)
  - Exam 2 (13%)
  - Exam 3 (13%)
  - 2-part Final: Exam 4 (8%) + Cumulative (13%)
- **Laboratory (40% of grade):** weekly quizzes, all cumulative; two practical exams.

### Final Exam
Monday, 6 May, 07:50–9:50.

### Make-ups
Make-up exams (including lab practicals) will be given only under extreme circumstances. See me **before** a lecture exam you **have** to miss, and don't assume you will be allowed to take an exam outside the normal time. We will automatically drop one lab quiz grade; if you miss a lab, the grade for that day’s quiz (zero) will be the one we drop. I suggest that you not miss a lab without very good reason, because you might later need to miss another one and you don’t want a zero.

### Disabilities
If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible so that we can make special arrangements.

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***************** Lab Practicals: 1 March and 24 April ***************

Lab Practical 1 is during regular lab period. Lab Practical 2 is at 5-8 PM

**Approximate Schedule: unexpected changes may occur**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Topic</th>
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<tbody>
<tr>
<td>16 Jan</td>
<td>Lec 1</td>
<td>Overview of course. General characteristics of birds. Origin and early evolution.</td>
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<tr>
<td>18 Jan</td>
<td>Lec 2</td>
<td>Approaches and problems in modern systematics.</td>
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<tr>
<td>23 Jan</td>
<td>BBC Film 1: <em>The Life of Birds</em> – “To Fly or Not to Fly”, “Mastery of Flight”</td>
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<tr>
<td>25 Jan</td>
<td>Lec 3</td>
<td>Plumage.</td>
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<td>30 Jan</td>
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<td>Justin Shew describes his graduate research.</td>
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<tr>
<td>1 Feb</td>
<td>Lec 4</td>
<td>Reproduction 1: organ systems, fertilization, egg production.</td>
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<tr>
<td>6 Feb</td>
<td>Lec 5</td>
<td>Reproduction 2: eggs and laying patterns.</td>
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8 Feb      Lec 6      Reproduction 3: incubation, development of eggs and young.
13 Feb     **EXAM 1** (covers Lectures 1–6, BBC Film 1)
15 Feb     Review Exam 1.
20 Feb     Lec 7      Respiration.
           “The Limits of Endurance”, “Finding Partners”
27 Feb     Lec 8-9    Digestion. Excretion.
1 Mar      Lec 10    Thermoregulation.
           **LAB PRACTICAL 1** (During regular lab period. Covers labs 1–6)
6 Mar      Lec 11    Wing aerodynamics.
8 Mar      Lec 12    Flight modes and wing morphology.
   **SPRING BREAK**
20 Mar     Lec 13    Flight energetics.
22 Mar     **EXAM 2** (covers Lectures 7–12, BBC Film 2).
29 Mar     Lec 14    Migration: patterns and timing.
5 Apr      Lec 16    Habitat issues for Neotropical migrants 1.
10 Apr     Lec 17    Habitat issues for Neotropical migrants 2.
12 Apr     Lec 18    Contaminants: lead poisoning, chlorinated hydrocarbons, and heavy metals.
17 Apr     **EXAM 3** (covers Lectures 13–17).
19 Apr     Review Exam 3.
24 Apr     Lec 19    Conflicts with fish-eating birds.
           **LAB PRACTICAL 2, 5-8 PM** (covers labs 7–12).
26 Apr     Lec 20    Flocking and territoriality.
1 May      BBC Film 3: *The Life of Birds* – “Signals and Songs”, “Meat Eaters”
3 May      Review for Final Exam.
6 May      **FINAL EXAM.  07:50-09:50.** Includes Exam 4 (Lectures 18–20) and Cumulative Portion.