Where? SEL 3101

When? Monday, Tuesday, Thursday and Friday 9 am – 12 noon, and 1 to 4 pm

Who?
- Dr. Som B. Ale (SES 3358; sale1@uic.edu; SES 3358, office hour, open)
- Mr. Alexander Pergams [section 20015 (9am-12)], pergams1@uic.edu; office SEL 4269, office hour 12 to 1 pm (Tuesday and Friday)
- Ms. Emily Dodd [section 17315 (1 to 4 pm)], edodd3@uic.edu, office SEL 4269, office hour 11am to 12 (Tuesday and Thursday)

What? The course will combine lectures, discussions, hands-on activities, and field trips. The goal is to learn and apply important concepts from ecology and evolution, and to experience nature first-hand. Course performance will be based upon 1) Field trips and associated field trip reports, 2) Field experiment paper, 3) quizzes, 4) assignments, and 5) participation.

Field Trips: There will be two all-day [mandatory] field trips (one on May 20, Saturday and another on May 31, Wednesday) to various natural areas. On days with field trips we will board buses at the loading dock of SES at 7:45AM and return by 4PM. You are responsible for bringing along a lunch and snacks, and pens, pencils and notebook for taking field notes. Failure to attend field trips means that you will be unable to complete lab reports. In the event that you miss one of these field trips, your participation points will be zero (see below).

For these mandatory all-day field trips you will be responsible for writing lab reports --two lab reports, one from each field trip. **The presence of plagiarized or identical prose among lab reports will be grounds for a score of ZERO.**

- **Saturday, 20 May** Warren Woods (Forest Community Ecology)
- **Wednesday, 31 May** Indiana Dunes (Succession)

Field Experiment: During the four weeks, you will also conduct an experiment on the feeding ecology of cottontail rabbits at the UIC Greenhouse or sparrow in spruce-groves around campus library. The results from these projects will be written up as a paper.

Quizzes: Each laboratory period will begin with a lecture and discussion on a general topic in ecology. These lectures will provide general concepts and provide a foundation for the material of the lab and field trips. There will be five quizzes spread throughout the four weeks that will cover the material of these lectures. You may miss one quiz or drop your lowest score of the five quizzes.

Assignments: There will be four homework assignments. One of these will require you to present a 10-12 minute presentation in lab.
**Participation:** You are expected to come to all labs and participate in activities and discussion. Expect to be in lab for the entire allotted time. On field trips we expect students to participate fully in the nature activities, hypothesis formulations and data collection. Failure to participate, in class and fieldtrips, will result in the loss of participation points.

**Grading:**

- 2 field trip reports \( \times \) 100 = 200
- 1 foraging experiment paper = 50
- 4 quizzes \( \times \) 25 = 100
- 4 Assignements \( \times \) 25 = 100
- Participation = 50
- **Total** 500

\( \geq 450 = A; \ 400-449 = B; \ 350-399 = C; \ 300-349 = D \)

**Syllabus**

May 15: Ecology: Interaction of organisms with their environment
- Discussion of urban ecology
- Introduction to Campus wildlife and habitat

May 16: Population Dynamics
- Using Excel to model population growth
- **Assignment # 1** on Population Growth

May 18: Foraging Ecology
- QUIZ 1
- **Assignment # 2** on Wildlife Literature Review [Each student for this exercise will be assigned a species.]
- Discussion on Setting-up foraging experiment (on mammal [e.g., cottontail] or bird [e.g., sparrow]). The class will be divided into two groups: One group will work on cottontail and the other group on sparrow. Students in groups of 2 to 3 (never a group of 4) will prepare a concept paper (one page per group) on how do they conduct their foraging experiment.

May 19: Forest Ecology (Species Interactions)
- Preview on Warren Woods (Temperate Deciduous Forests)

**May 20: Field Trip to Warren Woods**

May 22: Complex Life Histories and Life History Tradeoffs
- QUIZ 2
- **Assignment 1 DUE**
- Analyze data from Warren Woods

May 23: Community Ecology: Direct and Indirect Effects
- How to write a lab report
- Note: Students, in group of 2-3, turn in a collective concept paper on their foraging adventure for screening and approval. Once approved, they will immediately begin collecting data using feeding trays.

May 25: Species Interactions (models on competition and predation)
   - Assignment 2 DUE
   - More using Excel to model species interactions
   - Assignment # 3 on Multispecies Population Dynamics

May 26: Nutrient Cycle
   - Foraging data analysis

May 29: NO CLASS, Memorial Day

May 30: Succession
   - QUIZ 3
   - Assignment 3 due
   - Indiana Dunes

**May 31: Field Trip to Indiana Dunes**

June 1: Global Climate Change
   - Warren Woods Report DUE
   - Analyze data from Indiana Dunes

June 2: Ecology of Large predator (special topic)!

June 5: Biodiversity and Conservation
   - QUIZ 4
   - Foraging report DUE
   - Assignment # 4 (Power-point Presentation) begins

June 6: Evolutionary Ecology
   - Presentations (cont.)

June 8: Human Ecology
   - Quiz 5
   - Assignments # 4: Presentations (cont.)
   - Indiana Dunes report DUE

June 9: No formal lecture; Assignment catch-up
   - Assignment # 4: Presentations (cont.)