Schedule, Spring 2024

NRES 470/670

Please check for updates frequently!

| Week | Dates | Topic | Readings | Due | X |
| --- | --- | --- | --- | --- | --- |
| Week 1 | 1/22/2024 | LECTURE: [Course overview](INTRO.html); [Intro to Systems Thinking](LECTURE1.html) |  |  |  |
|  | 1/24/2024 | LECTURE: [Intro to Population Ecology; Exponential growth](LECTURE2.html) | Gotelli Chapter 1 |  |  |
|  | 1/26/2024 | LAB 1: [Introduction to population modeling in Excel, InsightMaker, and R](LAB1.html) |  |  |  |
| Week 2 | 1/29/2024 | LECTURE: [Intro to Population Ecology; Exponential growth](LECTURE2.html) |  |  |  |
|  | 1/31/2024 | LECTURE: [Malthus and exponential growth](LECTURE3.html) | Gotelli Chapter 2 |  |  |
|  | 2/2/2024 | [LAB 1 (cont’d)](LAB1.html) |  |  |  |
| Week 3 | 2/5/2024 | LECTURE: [Density-dependent population growth](LECTURE4.html) | Gotelli Chapter 2 |  | Instructor away |
|  | 2/7/2024 | LECTURE: [Density-dependent population growth](LECTURE4.html) |  |  | Instructor away |
|  | 2/9/2024 | LAB 2: [Density-dependent populations in InsightMaker; MSY](LAB2.html) |  | Lab 1 |  |
| Week 4 | 2/12/2024 | LECTURE: [Passenger pigeon/Allee Effect](LECTURE5.html) | Gotelli Chapter 3 |  |  |
|  | 2/14/2024 | LECTURE: [Age-structured populations](LECTURE6.html) | Gotelli Chapter 3 |  |  |
|  | 2/16/2024 | LAB 3: [Age-structured populations in Excel and InsightMaker](LAB3.html) |  | Lab 2 |  |
| Week 5 | 2/19/2024 | President’s Day (no class) |  |  |  |
|  | 2/21/2024 | LECTURE: [Age-structured populations](LECTURE6.html) | Gotelli Chapter 3 |  |  |
|  | 2/23/2024 | LAB 4: [Matrix population models in R and InsightMaker](LAB4.html) |  | Lab 3 |  |
| Week 6 | 2/26/2024 | LECTURE: [Matrix population models](LECTURE7.html) | [Heppell 1998](heppell1.pdf) (Optional) |  |  |
|  | 2/28/2024 | LECTURE: [Matrix population models](LECTURE7.html) |  | [Get in project groups](FINAL_PROJECTS.html) |  |
|  | 3/1/2024 | [Work in final project groups: PVA proposals](FINAL_PROJECTS.html) |  |  |  |
| Week 7 | 3/4/2024 | LECTURE: [Matrix population models](LECTURE7.html) |  |  |  |
|  | 3/6/2024 | LECTURE: [Stochasticity and uncertainty](LECTURE8.html) | [Regan 2002](Regan_2002.pdf) |  |  |
|  | 3/8/2024 | LAB 5: [Stochasticity and uncertainty](LAB5.html) |  | PVA proposals, Lab 4 |  |
| Week 8 | 3/11/2024 | Review for Midterm #1 |  |  |  |
|  | 3/13/2024 | MIDTERM #1 |  |  |  |
|  | 3/15/2024 | [PVA projects](FINAL_PROJECTS.html): group meetings (or make alternate arrangements for a group meeting time) |  |  |  |
| Week 9 | 3/18/2024 | LECTURE: [Stochasticity and uncertainty](LECTURE8.html) |  |  |  |
|  | 3/20/2024 | LECTURE: [Small population paradigm](LECTURE9.html) | [Caughley 1994](caughley1.pdf) |  |  |
|  | 3/22/2024 | Work on [PVA projects](FINAL_PROJECTS.html) ([PVA models](LECTURE12.html) due Apr 10) |  | Lab 5 |  |
| Week 10 | 3/25/2024 | Spring Break (no class) |  |  |  |
|  | 3/27/2024 | Spring Break (no class) |  |  |  |
|  | 3/29/2024 | Spring Break (no class) |  |  |  |
| Week 11 | 4/1/2024 | LECTURE: [Declining population paradigm](LECTURE11.html) | [Caughley 1994](caughley1.pdf) |  |  |
|  | 4/3/2024 | LECTURE: [Metapopulations](LECTURE13.html) | Gotelli Chapter 4 |  |  |
|  | 4/5/2024 | LAB 6: [Metapopulation modeling in InsightMaker](LAB6.html) |  |  |  |
| Week 12 | 4/8/2024 | LECTURE: [Metapopulations](LECTURE13.html) | Gotelli Chapter 4 |  |  |
|  | 4/10/2024 | LECTURE: [Source-sink dynamics](LECTURE13.html) | [Griffin et al](griffin1.pdf) | PVA models due |  |
|  | 4/12/2024 | [PVA projects](FINAL_PROJECTS.html): group meetings (working model and description) |  |  |  |
| Week 13 | 4/15/2024 | Review for Midterm #2 |  |  |  |
|  | 4/17/2024 | MIDTERM #2 |  |  |  |
|  | 4/19/2024 | LAB 7 (optional-no assignment): [Parameter estimation: mark-recapture data](LAB7.html) |  | Lab 6 |  |
| Week 14 | 4/22/2024 | LECTURE: [Species interactions: competition](LECTURE16.html) | Gotelli Chapter 5 | Complete PVA drafts |  |
|  | 4/24/2024 | LECTURE: [Species interactions: competition](LECTURE16.html) | Gotelli Chapter 5 |  |  |
|  | 4/26/2024 | LAB: Final Project Peer Review (submit peer review) |  |  |  |
| Week 15 | 4/29/2024 | LECTURE: [Species interactions: predator-prey](LECTURE17.html) | Gotelli Chapter 6 |  |  |
|  | 5/1/2024 | LECTURE: STUDENT PRESENTATIONS |  |  |  |
|  | 5/3/2024 | LAB: STUDENT PRESENTATIONS |  |  |  |
| Week 16 | 5/6/2024 | LECTURE: [Parameter estimation](LECTURE15.html) |  |  |  |
|  | 5/8/2024 | NO CLASS: Prep Day |  |  |  |
| Week 17 | 5/13/2024 | FINAL EXAM (10:15am to 12:15pm) |  |  |  |
|  | 5/15/2024 | FINAL PAPERS DUE |  | Final PVA write-up, Extra credit assignments |  |