

**“Active Research Experience: Wetland Restoration at
the Jackson Lane Preserve”**

BSCI 389

Updated January 21, 2025

Spring, 2025

Week	Discussion (2:00-2:50)	Lab Activities (3:00-5:00)	Assignments
1 27 Jan	Seminar Introduction: 1. Wetland ecosystems 2. “Wild by Design” 3. Jackson Lane Preserve 4. Semester goal	No Lab	<ul style="list-style-type: none"> Culler et al. 2014, Culler&Lamp 2009 Martin, 2022: Introduction
2 03 Feb	“Research on wetlands”: Dr. Lauren Culler, Dept of Biological Sciences, Dartmouth College, NH	<ul style="list-style-type: none"> Create hay infusion Orders of macroinvertebrates 	<ul style="list-style-type: none"> Martin, 2022: Part 1, Chaps 1-3
3 10 Feb	Martin: Conservation, Preservation, Restoration Research proposal: Title and objectives	<ul style="list-style-type: none"> Hay infusion@7 days Families of Non-Insecta 	<ul style="list-style-type: none"> Example of a research proposal
4 17 Feb	“Agriculture, wetlands, and hydrology”: Dr. Ken Staver, Wye Research and Education Center, University of Maryland	<ul style="list-style-type: none"> Hay infusion@14 days Families of Ephemeroptera, Odonata 	<ul style="list-style-type: none"> Proposal: Background assigned
5 24 Feb	Development of a research proposal	<ul style="list-style-type: none"> Hay infusion@21 days Families of Hemiptera, Minor Orders 	<ul style="list-style-type: none"> Spadafora et al. 2016
6 03 Mar	Background and methods Jackson Lane Preserve, revisited	<ul style="list-style-type: none"> Hay infusion@28 days Families of Coleoptera 	<ul style="list-style-type: none"> Proposal: Methods assigned
7 10 Mar	Martin: American bison, nature reserves, naturalistic gardening	<ul style="list-style-type: none"> Hay infusion@35 days Families of Trichoptera, Diptera 	<ul style="list-style-type: none"> Martin, 2022: Part 2, Chaps 4-5
17 Mar	Spring Break!		
8 24 Mar	“The Nature Conservancy: Mission and practice”: Dr. Deborah Landau, The Nature Conservancy	No Lab	<ul style="list-style-type: none"> Proposal: Full review
9 31 Mar	Sample processing	No Lab	<ul style="list-style-type: none">
10 07 Apr	Martin: The nuclear age, ecosystems, radioisotopes	No Lab	<ul style="list-style-type: none"> Martin, 2022: Part 3, Chaps 6-8
11 14 Apr		No Lab	<ul style="list-style-type: none">
12 21 Apr	Martin: Endangered Species Act, compensatory mitigation, TNC and restoration	No Lab	<ul style="list-style-type: none"> Martin, 2022: Epilogue
13 28 Apr		No Lab	<ul style="list-style-type: none">
14 05 May	Martin: Epilogue: Design for the future Restoration: Hope and issues	<ul style="list-style-type: none"> Hay infusion: Conclusions Jackson Lane: Status of restoration research 	

*Field trips will be scheduled for full day trips based on weather: one for March, one for April, and possibly one for May.