

Week	Class	Day	Date	Format	Medium	Topic
1	1	Wed	9/2	Lecture	In Person	Introduction to Class, Quaternary Paleoecology
	2	Mon	9/7	Lecture	Online	Paleoclimatology Primer: 65 million years in 75 minutes
2	3	Wed	9/9	<b>Lab</b>	In Person	<b>Neotoma Explorer</b>
	4	Mon	9/14	Discussion Outside/Online		Why Study the Past?
3	5	Wed	9/16	<b>Lab</b>	In Person	<b>Introduction to R, Rstudio</b>
	6	Mon	9/21	Discussion Outside/Online		Zoom Lens: Vegetation Dynamics across Space and Time
4	7	Wed	9/23	<b>Lab</b>	In Person	<b>Age-Depth Modeling</b>
	8	Mon	9/28	Discussion	TBD	Pollen and Depositional Processes
5	9	Wed	9/30	<b>Lab</b>	TBD	<b>neotoma R Package; Making a Pollen Diagram</b>
	10	Mon	10/5	Discussion	TBD	Foundations: Niches, Gradients, Individualism & Associations
6	11	Wed	10/7	<b>Lab</b>	TBD	<b>Introduction to Matrix Algebra &amp; Exploratory Data Analysis (Covariance &amp; Correlation)</b>
	12	Mon	10/12	Discussion	TBD	Novelty and No-Analogs
7	13	Wed	10/14	<b>Lab</b>	TBD	<b>Dissimilarity Analyses &amp; Rates of Change</b>
	14	Mon	10/19	Discussion	TBD	Equilibrial and Disequibrial Dynamics: Rates of Forcing and Response
8	15	Wed	10/21	<b>Lab</b>	TBD	<b>Novel Climates and Communities</b>
	16	Mon	10/26	Discussion	TBD	Abrupt Ecological Change: Extrinsic or Intrinsic Drivers?
9	17	Wed	10/28	<b>Lab</b>	TBD	<b>Multivariate Ordination I: PCA</b>
	18	Mon	11/2	Discussion	TBD	A brief detour to the PETM
10	19	Wed	11/4	<b>Lab</b>	TBD	<b>Multivariate Ordination II</b>
	20	Mon	11/9	Discussion	TBD	Quaternary Conundrum
11	21	Wed	11/11	<b>Lab</b>	TBD	<b>General Additive Models (GAMs)</b>
	22	Mon	11/16	Discussion	TBD	Late Quaternary Megafaunal Extinctions: Causes & Consequences
12	23	Wed	11/18	Discussion	Online	Vegetation and Fire
	24	Mon	11/23	Discussion	TBD	Biodiversity Legacies of the Last Ice Age
13	25	Wed	11/25	--	--	[No Class: Thanksgiving]
	26	Mon	11/30	Discussion	TBD	sedaDNA: New Proxies, New Insights
14	27	Wed	12/2	Discussion	Online	The Early Anthropocene
	28	Mon	12/7	'resentation	Online	Research Presentations
15	29	Wed	12/9	'resentation	Online	Research Presentations