

Soil Ecology F 2020 Schedule (best approximation in unknown times)

	Topic	Lecture format	ACTIVITY	PRODUCT (@ approx deadlines)
MODULE 1 ::: GETTING STARTED, COURSE BUSINESS				
Week 1 Course Overview and Soils Intro				
31-Aug	What is this course about? What are the requirements and expectations?	In class	online learning best practices; how to read a scientific paper	
2-Sep	Soil as a habitat for organisms	In class	how to find a "good" scientific paper; group accountability and contracts	
MODULE 1 ::: SOIL ORGANISMS - BIODIVERSITY & METHODS				
Week 2				
7-Sep	LABOR DAY - NO CLASS			
9-Sep	Soil biota; research teams/proposal overview	In class	Discuss paper	
Week 3				
14-Sep	Spatial and temporal distribution of soil organisms	In class	BYOP #1 (methods)	update annotated bibliography daily
16-Sep	Methods in Soil Ecology	none	BYOP #1 (methods)	update annotated bibliography daily
Week 4				
21-Sep	Methods in Soil Ecology	none	BYOP #1 Synthesis	update annotated bibliography daily
23-Sep	Methods in Soil Ecology	none	BYOP #1 presentations	group ::: methods assignment due (Wed 11:59pm) individual ::: annotated bibliography
ONLINE	Application of -omics tools in Soil Ecology	out of class		
Week 5				
28-Sep	Soil biodiversity	In class	discuss paper	
30-Sep	Factors affecting soil organism growth and activity	In class	growth and activity in-class activity	individual ::: turn in by Wed 11:59 pm
Week 6				
5-Oct	Growth and activity continued; microbial energetics, assembly	In class	redox in class activity	individual ::: turn in by Wed 11:59 pm
7-Oct	EXAM REVIEW & Launchpad into Discovery/exploration modules - Assembly... considering biotic and abiotic interactions, random factors	none	START OF BYOP PROJECT # 2	
Week 7				
12-Oct	Midterm exam		MIDTERM	MIDTERM
MODULE 2 ::: WHAT FACTORS AFFECT "WHO'S THERE?"				
14-Oct		none	BYOP #2 ::: discuss	update annotated bibliography daily
Week 8				
19-Oct		none	BYOP #2 ::: discuss	update annotated bibliography daily
21-Oct		none	BYOP #2 ::: synthesize	Synthesis document draft due Wed 11:59 pm
Week 9				
26-Oct		none	BYOP #2 ::: peer review & refine	Peer review (prepare before class, perform during class, assessment due Monday 11:59 pm)
28-Oct		none	BYOP #2 ::: finalize products	BYOP assignment #2 due Wed 11:59 pm

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MODULE 3 ::: HOW DOES "WHO'S THERE" AFFECT ECOSYSTEM FUNCTION?				
Week 10				
2-Nov	Role of soil organisms in carbon and nitrogen cycling, PART 1: C cycling, SOM formation and turnover	online	START OF BYOP PROJECT #3	
4-Nov	Role of soil organisms in carbon and nitrogen cycling, PART 2: N cycling	none	BYOP #3 ::: discuss	update annotated bibliography daily
Week 11				
9-Nov	Aboveground-belowground interactions	online	BYOP #3 ::: discuss	update annotated bibliography daily
10-Nov		none	BYOP #3 ::: synthesize	Synthesis document draft due Wed 11:59 pm
Week 12				
16-Nov		none	BYOP #3 ::: peer review & refine	Peer review (prepare before class, perform during class, assessment due Monday 11:59 pm)
18-Nov		none	BYOP #3 ::: finalize products	BYOP assignment #3 due Wed 11:59 pm
MODULE 4 ::: SYNTHESIS - ARE CHANGES IN FUNCTION DUE TO MICROBIAL ADAPTATION, SHIFTS IN COMPOSITION, OR PHYSIOLOGY?				
Week 13				
23-Nov		none	START OF BYOP PROJECT #4 ::: Compile docs & brainstorm... what missing issues are there?	
25-Nov				
Week 14				
30-Nov	Aboveground-belowground interactions	online	BYOP PROJECT #4 ::: READ/WRITE/REVIEW	update annotated bibliography daily
2-Dec		none	BYOP PROJECT #4 ::: READ/WRITE/REVIEW	Synthesis document draft due Wed 11:59 pm
Week 15				
7-Dec		none	BYOP PROJECT #4 ::: READ/WRITE/REVIEW... PEER FEEDBACK	Peer review (prepare before class, perform during class, assessment due Monday 11:59 pm)
9-Dec	LAST DAY OF CLASS ::: Research presentations / synthesis day		BYOP PROJECT #4 ::: PRESENT FINAL PRODUCT	BYOP assignment #4 due Wed 11:59 pm
Week 16/17				
TBD	FINAL		FINAL	FINAL