Lesson	Topic:	Learning Plan Details			
1	Course Overview Sustainable Philosophy Soil Physical Aspects	Course overview and "housekeeping"; introductions (if needed) Lecture: The whole soil course – an overview using a power point View: Demonstration/lecture: Physical properties, texture, aggregation			
	Reading & lecture	Thoughts on Soil - Essay Physical Properties – Essay & .pptx lecture			
	Discussion 1:	ntroduce yourself using the Blackboard disc	cussion forum	5	
	Assignment 1.1:	Overview worksheet		10	
	Assignment 1.2:	Vrite a 1 page reflection paper on Soil physi	ical qualities	10	
2	Soil Chemistry	lead: Soil Chemistry – Essays			
_	3011 CHEITHSTLY	'iew: Lecture, .pptx, Soil Chemistry			
	discussion 2:	Explain a chemistry term - group work, use an analogy			
	Assignment 2:	Soil chemistry worksheet			
3 Soil Nutrients		View: power point – main points on nutrients Read: What is a nutrient? pages 17-22 "Essays" booklet Read: Nutrient Cycling of Anions in the Soil, pages 23-26 "Essays" booklet			
	Discussion3 : due 11/4 Sunday	Auddiest point	5		
	Assignment 3: due 11/4 Sunday	Worksheet "Nutrients and their cycles"			
4	Soil Sampling & testing	Read: How to access the USDA web-soil survey - Essay			
	Soil Health tests Soil Nutrient tests Interpreting tests	Read: How to submit a Soil Sample for Testing - Essay Read: What are Ideal soil test numbers pages - Essays View Demonstrations: soil health tests. Infiltration, respiration, compaction			
		Interpreting soil test results -worksheet			
5	Organic Fertilizers, rates, conventional, applications	1) Organic Fertilizers – Essays & .p 2) How much fertilizer should I ap			
	Discussion 5:	A fertilizer I would use is	A fertilizer I would use is		
	Assignment 5:	Fertilizer rate worksheet	Fertilizer rate worksheet		

6	Green Manures, cover crops, OMRI, Amendments,	Read: Organic Soil Amendments - Essay and the OMRI website paper Explore: the OMRI website (see the link in class materials in BB)	
	Discussion 6:	A new practice I might try	5
	Assignment 6:	Amendment worksheet	10

7	Review – concepts and topics from the first	We go over the book and assignments using a practice test.	
	6 weeks		
	Discussion 7 :	Ask Questions & review for the mid-term test	5
	Assignment 7: e-TEST:		40

8	Soil biology	Video: The Once Good Earth. Read about the Soil Food Web - Essay	
	Compost	Read: The Secret of Compost –Essay	
	Assignment 8a:	Soil biology worksheet	10
	Assignment 8b:	Soil compost quiz	10

9	Organic Certification	Review concepts to-date, review organic certification, and other materials found in your Blackboard class materials section including info on USDA – NRCS conservation programs		
	Building Sustainable Soil Read "Ethical Predicament" and "Soil Comes Full Circle" Essays Video: watch the documentary: Searching for Sustainability			
	Discussion 9:	What soil conservation means to me	5	
	Assignment 9:	Complete your final assignment – a soil plan for your farm base on Section 5 NOP plan	40	

210

total



Graded	# of activities	Points per activity	Points possible	points	percent	grade
activities						
Discussions	8	5	40	210 - 185	> 88%	Α
Assignments	9	10	90	184 - 160	≻ 76%	В
e-test	1	40	40	159– 130	≻ 62%	С
Farm soil plan fina	al 1	40	40			



This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2019-38640-29879 through the North Central Region SARE program under project number ENC19-175. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.