SUSAG 103 Course Outline as of Fall 2015

CATALOG INFORMATION

Dept and Nbr: SUSAG 103 Title: AGRICULTURAL COMPOSTING
Full Title: Composting for Commercial Organic Farming and Gardening
Last Reviewed: 2/8/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00 Total Student Learning Hours: 52.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 125

Catalog Description:
Composting is the cornerstone of soil fertility management in all segments of organic agriculture production. Successful composting requires at least a minimum of technical knowledge of soil structures and organic matter decomposition processes. Topics will include these basics and a survey of a variety of composting methods. Focus will be on composting for small commercial fruit, vine and vegetable operations, but the information will be of almost equal importance for dairy farmers or hay producers, as well as for residential and commercial settings. This is an introductory course aimed at the professional or serious student of agriculture.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
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knowledge of soil structures and organic matter decomposition processes. Topics will include these basics and a survey of a variety of composting methods. Focus will be on composting for small commercial fruit, vine and vegetable operations, but the information will be of almost equal importance for dairy farmers or hay producers, as well as for residential and commercial settings. This is an introductory course aimed at the professional or serious student of agriculture. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended:
Limits on Enrollment:
Transfer Credit:
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Describe and apply proper technical skills required for composting settings and applications.
2. Discuss issues in compost management and recommend solutions.

Objectives:
Upon completion of this course, students will be able to:
1. Define the basic process of composting and identify key reasons/benefits for composting.
2. Evaluate the function of basic composting components (carbon, nitrogen, water and oxygen) as "essential ingredients" in the composting process.
3. Analyze a variety of composting methods, their purposes, strengths, weaknesses, and appropriate applications in residential, commercial, and agricultural settings.
4. Identify key factors affecting the composting process.
5. Evaluate a demonstration of proper composting techniques appropriate to Sonoma County.
6. Recommend specific compost uses for a variety of settings.
7. Analyze the qualitative characteristics of finished compost.
8. Evaluate proper technical skills required for composting settings and applications.
9. Evaluate issues in compost management and recommend solutions.

Topics and Scope:

1. Composting process
   a. Identification
   b. Analysis
   c. Benefits for large and small-scale systems and operations
2. Basic composting requirements
3. Composting methods
   a. Residential settings
   b. Commercial settings
   c. Agricultural settings
4. Key factors that influence the composting process
   a. Carbon to nitrogen ratio
   b. Surface area
   c. Aeration
   d. Moisture
   e. Temperature
   f. Microorganisms
5. Technical skills required for composting
6. Utilization and application of finished compost
7. Management and troubleshooting of compost piles

Assignment:

1. Read in textbook about the variety of composting methods and materials and turn in a summary of the reading.
2. Write a research paper on one type of composting method.
3. Objective examinations: multiple choice, true/false, matching, essay.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, Independent research	Writing 25 - 35%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams	Skill Demonstrations 25 - 40%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Quizzes, exams and essay exams	Exams 30 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
THE RODALE BOOK OF COMPOSTING, By Martin & Gershuny, Rodale Press, 1992. (Classic)