

[View Outline](#)View: [Compressed](#) | [Expanded](#)**Sust Crop Production**[Print friendly](#)**1. Course Alpha. See HELP for information.**

AG

2. Course Number. See HELP for information.

251

3. Course Title/Catalog Title. See HELP for information.

Sust Crop Production

4. Number of Credits. See HELP for information.

4

5. Contact Hours/Type. See HELP for information.

- Hour lab (6)
- Hour lecture (2)

6. Course Description. See HELP for information.

Introduces production methods for selected crops including propagation, planting, fertilization, irrigation, pest control, harvesting, and marketing. Evaluates conventional and alternative methods of production and analyzes effects of these practices. Evaluates cost of production.

7. Pre-Requisites. Please click on HELP icon for style sheet.

AG 103	Sustainable Agriculture Systems ; OR consent
AG 104	Food Safety and Post Harvest Handling ; OR consent

8. Co-requisites

AG 103	Sustainable Agriculture Systems ; OR consent
AG 104	Food Safety and Post Harvest Handling ; OR consent

9. Recommended Preparation.

ENG 19	with a C or better; or
ENG 22	Placement at least
MATH 18	with a C or better; or
MATH 82	Placement at least

10. Is this a cross-listed course? See help for information.

NO

11. Reason for Proposal. Why is this course being proposed or modified? See help for information, as this question requires specific information as part of the explanation.

Hour lab

Add pre-requisites and correct recommended preparation. (placement in MATH 18 and ENG 22 are mistakenly in pre-requisites in F10 amnesty outline) Also modify SLO's, competencies and course content to reflect the movement of some of the content to the pre-requisites or co-requisites of AG 103 and AG 104.

12. Effective Semester and Year. For new or modified courses, the effective year is one year from the semester proposed. For example, if proposed in Spring 2012, the effective semester is Spring 2013. See help for more information.

Fall 2012

13. Grading Method. What grading methods may be used for this course? See help for information.

- Standard (Letter,Cr/NCr,Audit) (0)

14. Is this course repeatable for credit? How often can this course be counted toward a degree or certificate? See help for information.

NO

15. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE LEARNING OUTCOMES" and enter in that screen. Course Student Learning Outcomes (Course SLOs). These need to be added before the connections are made in question 20. See help for information.

Course SLO/Competency	Plan the production of a crop.	Propagate and plant various crops.	Maintain a crop till harvest.	Explain pest control measures.	Harvest, grade and pack one or more crops for market.	Market one or more crops.	Examine economics of the various production systems.	Compare various methods of fertilization including conventional fertilizers, cover crops, mulches, composts, and manures.	Compare various alternative pest control measures.	Discuss production practices of a range of crops.	Compare various production practices.
Produce crops in a sustainable manner.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Course SLO/GESLO	Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.
Produce crops in a sustainable manner.	<input checked="" type="checkbox"/>

Course SLO/PSLO	Use basic business principles to manage projects or design a horticultural business enterprise.	Recommend cultural practices, solve problems, plan projects, and cultivate horticultural crops in a sustainable manner based on sound biological and technological principles.	Explain the relationships between agroecosystems, economics, human culture, and natural environments.
Produce crops in a sustainable manner.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

16. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE COMPETENCIES/ISSUES/SKILLS" and enter text in that screen. Competencies/Concepts/Issues/Skills

Competency/Content	Produce Crops.	Market Crops	Evaluate the sustainability of various production and marketing practices.	Examine cultural practices in various crops including soil fertility, planting, harvest, post harvest, and practice costs.
Plan the production of a crop.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Propagate and plant various crops.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Maintain a crop till harvest.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Explain pest control measures.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Harvest, grade and pack one or more crops for market.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Market one or more crops.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Examine economics of the various production systems,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compare various methods of fertilization including conventional fertilizers, cover crops, mulches, composts, and manures.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compare various alternative pest control measures.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Discuss production practices of a range of crops.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compare various production practices.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

17. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "RECOMMENDED COURSE CONTENT..." and enter text in that screen. Recommended Course Content and Timeline. See HELP for information.

Content
Produce Crops.
Market Crops
Evaluate the sustainability of various production and marketing practices.
Examine cultural practices in various crops including soil fertility, planting, harvest, post harvest, and practice costs.

18. Recommended Evaluation and Assessment Methods. See help for information.

- Includes, but is not limited to: group discussions, group projects, group presentations, group exercises, group/team work in- and out-side of the classroom; appropriate rubrics. (0)
- Includes, but is not limited to: assignments done outside of class in any discipline, such as math problems, reading and questions, chapter questions, critical thinking questions, class preparation; appropriate rubrics. (0)
- Includes, but is not limited to: attendance, participation, readings, art projects, media reviews, reactions to speakers, critical thinking exercises, or reflective exercises; appropriate rubrics. (0)
- Includes, but is not limited to: reading logs, reflective journals, mentoring logs, tutoring logs, personal growth journals, professional logs, service learning logs; appropriate rubrics. (0)
- Includes, but is not limited to: lab assignments, lab projects, field assignments, field projects, student teaching, skill-building work, or hands-on projects; appropriate rubrics. (0)

- Includes, but is not limited to: essay tests, objective tests, mid-term and final exams, unit exams, quizzes of all types, tests may be written, oral, computerized, in-class, take-home, at testing sites; appropriate rubrics. (0)

Method of Evaluation	Includes, but is not limited to: assignments done outside of class in any discipline, such as math problems, reading and questions, chapter questions, critical thinking questions, class preparation; appropriate rubrics.	Includes, but is not limited to: attendance, participation, readings, art projects, media reviews, reactions to speakers, critical thinking exercises, or reflective exercises; appropriate rubrics.	Includes, but is not limited to: essay tests, objective tests, mid-term and final exams, unit exams, quizzes of all types, tests may be written, oral, computerized, in-class, take-home, at testing sites; appropriate rubrics.	Includes, but is not limited to: group discussions, group projects, group presentations, group exercises, group/team work in- and out-side of the classroom; appropriate rubrics.	Includes, but is not limited to: lab assignments, lab projects, field assignments, field projects, student teaching, skill-building work, or hands-on projects; appropriate rubrics.	Includes, but is not limited to: reading logs, reflective journals, mentoring logs, tutoring logs, personal growth journals, professional logs, service learning logs; appropriate rubrics.
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Course SLOs

Produce crops in a sustainable manner.						
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Course Competencies

Plan the production of a crop.						
Propagate and plant various crops.						
Maintain a crop till harvest.						
Explain pest control measures.						
Harvest, grade and pack one or more crops for market.						
Market one or more crops.						
Examine economics of the various production systems.						
Compare various methods of fertilization including conventional fertilizers, cover crops, mulches, composts, and manures.						
Compare various alternative pest control measures.						
Discuss production practices of a range of crops.						
Compare various production practices.						

Method of Evaluation

Includes, but is not limited to: assignments done outside of class in any discipline, such as math problems, reading and questions, chapter questions, critical thinking questions, class preparation; appropriate rubrics.

Includes, but is not limited to: attendance, participation, readings, art projects, media reviews, reactions to speakers, critical thinking exercises, or reflective exercises; appropriate rubrics.						
Includes, but is not limited to: essay tests, objective tests, mid-term and final exams, unit exams, quizzes of all types, tests may be written, oral, computerized, in-class, take-home, at testing sites; appropriate rubrics.						
Includes, but is not limited to: group discussions, group projects, group presentations, group exercises, group/team work in- and out-side of the classroom; appropriate rubrics.						
Includes, but is not limited to: lab assignments, lab projects, field assignments, field projects, student teaching, skill-building work, or hands-on projects; appropriate rubrics.						
Includes, but is not limited to: reading logs, reflective journals, mentoring logs, tutoring logs, personal growth journals, professional logs, service learning logs; appropriate rubrics.						

GenED SLO
Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.

21. Linking Items in Course Outline. **CLICK ON CHAIN LINK ICON IN UPPER RIGHT HAND CORNER TO BEGIN LINKING.** See HELP for more information on Linking.

22. Method(s) of delivery appropriate for this course. See Help for information.

- Classroom/Lab (0)
- Hybrid (0)

23. Text and Materials, Reference Materials, and Auxiliary Materials. See Help for information.

No formal textbook. Use of UH Manoa College of Tropical Agriculture and Human Resources Extension Service publications, Knott's vegetable Farmers' handbook, NCAT Sustainable Agriculture electronic publications, USDA publications.

24. Maximum enrollment. See Help for information.

20. Maximum number of students that can be managed safely during farming operations.

25. Particular room type requirement. Is this course restricted to particular room type? See Help for information.

YES

Ho'oulu 104. Lab and proximity to agriculture fields.

26. Special scheduling considerations. Are there special scheduling considerations for this course? See Help for information.

YES

Some daylight hours required. Meet at least 2 times per week and preferably 3 or more in order to harvest crops in a timely manner.

27. Are special or additional resources needed for this course? See Help for information.

no

28. Does this course require special fees to be paid for by students? See Help for information.

NO

29. Does this course change the number of required credit hours in a degree or certificate? See help for information.

no

30. Course designation(s) for the Liberal Arts A.A. degree and/or for the college's other associate degrees. See Help for information.

Degree	Program	Category
AA Liberal Arts:	AA	LE - Elective
AS:		
AAS:	AG and NR - Sustainable Tropical Crop Mgt.	PR - Program Requirement
BAS:		
Developmental/ Remedial:		

Elective for AAS in Hort and Landscape Maintenance.

31. Course designation(s) for other colleges in the UH system.

No articulation at this time.

32. Indicate the year and page # of UHMC catalog referred to. For new or modified courses, please indicate the catalog pages that need to be modified to reflect the new or modified course and provide sheet outlining catalog changes.

2011-2012

33. General Education Student Learner Outcomes (CASLOs). Please click on the HELP icon for more information.

Standard 1 - Written Communication Write effectively to convey ideas that meet the needs of specific audiences and purposes.		
Outcome 1.1 - Use writing to discover and articulate ideas.		1
Outcome 1.2 - Identify and analyze the audience and purpose for any intended communication.		0
Outcome 1.3 - Choose language, style, and organization appropriate to particular purposes and audiences.		1
Outcome 1.4 - Gather information and document sources appropriately.		1
Outcome 1.5 - Express a main idea as a thesis, hypothesis, or other appropriate statement.		0
Outcome 1.6 - Develop a main idea clearly and concisely with appropriate content.		0
Outcome 1.7 - Demonstrate a mastery of the conventions of writing, including grammar, spelling, and mechanics.		0
Outcome 1.8 - Demonstrate proficiency in revision and editing.		0
Outcome 1.9 - Develop a personal voice in written communication.		0
Standard 2 - Quantitative Reasoning Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.		
Outcome 2.1 - Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately.		1
Outcome 2.2 - Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate.		1
Outcome 2.3 - Communicate clearly and concisely the methods and results of quantitative problem solving.		1
Outcome 2.4 - Formulate and test hypotheses using numerical experimentation.		0
Outcome 2.5 - Define quantitative issues and problems, gather relevant information, analyze that information, and present results.		1
Outcome 2.6 - Assess the validity of statistical conclusions.		0
Standard 3 - Information Retrieval and Technology. Access, evaluate, and utilize information effectively, ethically, and responsibly.		
Outcome 3.1 - Use print and electronic information technology ethically and responsibly.		1
Outcome 3.2 - Demonstrate knowledge of basic vocabulary, concepts, and operations of information retrieval and technology.		0
Outcome 3.3 - Recognize, identify, and define an information need.		1
Outcome 3.4 - Access and retrieve information through print and electronic media, evaluating the accuracy and authenticity of that information.		1
Outcome 3.5 - Create, manage, organize, and communicate information through electronic media.		0

Outcome 3.6 - Recognize changing technologies and make informed choices about their appropriateness and use.		0
Standard 4 - Oral Communication Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.		
Outcome 4.1 - Identify and analyze the audience and purpose of any intended communication.		1
Outcome 4.2 - Gather, evaluate, select, and organize information for the communication.		1
Outcome 4.3 - Use language, techniques, and strategies appropriate to the audience and occasion.		1
Outcome 4.4 - Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion.		1
Outcome 4.5 - Summarize, analyze, and evaluate oral communications and ask coherent questions as needed.		0
Outcome 4.6 - Use competent oral expression to initiate and sustain discussions.		1
Standard 5 - Critical Thinking Apply critical thinking skills to effectively address the challenges and solve problems.		
Outcome 5.1 - Identify and state problems, issues, arguments, and questions contained in a body of information.		1
Outcome 5.2 - Identify and analyze assumptions and underlying points of view relating to an issue or problem.		2
Outcome 5.3 - Formulate research questions that require descriptive and explanatory analyses.		1
Outcome 5.4 - Recognize and understand multiple modes of inquiry, including investigative methods based on observation and analysis.		1
Outcome 5.5 - Evaluate a problem, distinguishing between relevant and irrelevant facts, opinions, assumptions, issues, values, and biases through the use of appropriate evidence.		2
Outcome 5.6 - Apply problem-solving techniques and skills, including the rules of logic and logical sequence.		1
Outcome 5.7 - Synthesize information from various sources, drawing appropriate conclusions.		1
Outcome 5.8 - Communicate clearly and concisely the methods and results of logical reasoning.		1
Outcome 5.9 - Reflect upon and evaluate their thought processes, value system, and world views in comparison to those of others.		2
Standard 6 - Creativity Able to express originality through a variety of forms.		
Outcome 6.1: Generate responses to problems and challenges through intuition and non-linear thinking.		0
Outcome 6.2: Explore diverse approaches to solving a problem or addressing a challenge.		0
Outcome 6.3: Sustain engagement in activities without a preconceived purpose.		0
Outcome 6.4: Apply creative principles to discover and express new ideas.		0
Outcome 6.5: Demonstrate the ability to trust and follow one's instincts in the absence of external direction		1
Outcome 6.6: Build upon or adapt the ideas of others to create novel expressions or new solutions.		1

34. Additional Information