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		proposed in Spring 2012, the effective semester i	s Spring 2013. See help for more information.	

- 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	Describe	Explain	List and	List the	Wear and	Duild	Carry out	Extract	Identify
- Januar Debi Gompeterioj		the role of							
				parts of a	use the	a bee		honey	
				commercial			maintenance	from a	pests and
	biology		pollinators.	beehive	equipment		activities.	hive.	diseases of
	of bees.	agriculture		and	to safely				honeybees
		systems		beekeeping	handle				and
		and		equipment					recommend
		natural		and explain					control
	1	systems.		their					
		ayatems.		4					measures.
				function.					
Explain the biology of honeybees, means	V	Y	∀ í					A	
of pollination, and the role that pollinators									
play in the environment.									
Retrieve and evaluate information	1	V		Ø	M	V	Ø	——	-
regarding the best management practices		(37)		(32.)	(32)	(30.)	Œ		
of apiculture, including hive management,									
honey production, and honeybee									
husbandry.									
Identify honeybee diseases and									₹
recommend the most environmentally and			ļ						tuini
economically appropriate control]		1				
measures.			1					l l	
	1	I	1					L	

Course SLO/GESLO	1 0 11/ 1
Course SLO/GESLO	Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.
Explain the biology of honeybees, means of pollination, and the role that pollinators play in the environment.	
Retrieve and evaluate information regarding the best management practices of apiculture, including hive management, honey production, and honeybee husbandry.	Ø
Identify honeybee diseases and recommend the most environmentally and economically appropriate control measures.	M

Course SLO/PSLO	Recommend	Explain the
	cultural	relationships
	practices.	between
		agroecosystems
	problems.	economics.
	plan projects.	
	and cultivate	
	horticultural	environments.
	crops in a	
	sustainable	
	manner	
	based on	
	sound	
	biological and	
	technological	
	principles.	
Explain the biology of honeybees, means of pollination, and the role that pollinators play in the environment.		S Ú
Retrieve and evaluate information regarding the best management practices of apiculture, including hive management, honey production, and honeybee husbandry.	S	
dentify honeybee diseases and recommend the most environmentally and economically appropriate	Ø	

In a water I was a sure or a sure of the s		
control measures.	1	í ;

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

	1	· · · · · · · · · · · · · · · · · · ·		T	·					
Competency/Content			Races of	Behavior of	Diseases	Reproduction	Honey and Its	Alternative	Hive box	Cultural
	to beekeeping	nistory	Honeybees.			and	characteristics			
	and	workers.	(1-2 wks)	(2-4 wks)		development	(1-3 wks)	(1-3 wks)	(1-4 wks)	such as
	pollination.				of the	(1-3 wks)			Ī	hive
	(1-2 wks)	and			hive. (2- 4 wks)					inspection,
l .	(1-2 41(3)	drones.			4 W(S)					swarm
t	1	(1~								collection,
	1	2wks)								requeening, and honey
	1	2.000,						İ		extraction.
										(4-8wks)
Describe the basic		€	W	(4)		W				\
biology of bees.										
Explain the role of	∀ í									
pollination in										
agriculture systems	l									
and natural systems.		<u> </u>								
List and identify		ĺ						V		
alternative pollinators.									<u> </u>	
List the parts of a						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				€
commercial beenive		ĺ								
and beekeeping										
equipment and explain their function.										
Wear and use the										₩
proper equipment to safely handle bees.		l .								
Build a bee hive										
bunu a bee nive.									Ø	
Carry out basic hive										Ø
maintenance activities.										CEJ
Extract honey from a							8			3 0
hive.							i.X.J			שט
identify common pests					V					S ⁄
and diseases of					ببقنة					EX.
honeybees and					,					
recommend control					,					
measures.		L								

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.

ife history of workers, queens and drones. (1-2wks) laces of Honeybees. (1-2 wks) lehavior of honeybees. (2-4 wks) liseases and enemies of the hive. (2-4 wks) leproduction and development (1-3 wks) loney and Its characteristics (1-3 wks) Ilternative pollinators. (1-3 wks)	Content
lehavior of honeybees. (1-2 wks) lehavior of honeybees. (2-4 wks) liseases and enemies of the hive. (2-4 wks) leproduction and development (1-3 wks) loney and Its characteristics (1-3 wks) lternative pollinators. (1-3 wks)	Introduction to beekeeping and pollination. (1-2 wks)
iseases and enemies of the hive. (2-4 wks) leproduction and development (1-3 wks) loney and Its characteristics (1-3 wks) Ilternative pollinators. (1-3 wks)	Life history of workers, queens and drones. (1-2wks)
liseases and enemies of the hive. (2-4 wks) leproduction and development (1-3 wks) loney and Its characteristics (1-3 wks) Iternative pollinators. (1-3 wks) live box construction. (1-4 wks)	Races of Honeybees. (1-2 wks)
leproduction and development (1-3 wks) loney and Its characteristics (1-3 wks) Iternative pollinators. (1-3 wks) live box construction. (1-4 wks)	Behavior of honeybees. (2-4 wks)
Iternative pollinators. (1-3 wks) Iternative box construction. (1-4 wks)	Diseases and enemies of the hive. (2-4 wks)
Iternative pollinators. (1-3 wks) live box construction. (1-4 wks)	Reproduction and development (1-3 wks)
live box construction. (1-4 wks)	Honey and Its characteristics (1-3 wks)
	Alternative pollinators. (1-3 wks)
ultural practices such as hive inspection, swarm collection, requeening, and honey extraction. (4-8wks)	Hive box construction. (1-4 wks)
	Cultural practices such as hive inspection, swarm collection, requeening, and honey extraction. (4-8wks)

- 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: 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)
- Includes, but is not limited to: term papers, essays, creative writings, reports, or reaction papers; appropriate rubrics. (0)

Mathad of	Indudes Site	II	h	¥. , ,		
Method of Evaluation	Includes, but is not				Includes, but is not	
Evaluation	limited to:	limited to:		limited to: group	limited to: lab	not limited to:
		attendance,	tests, objective tests,		assignments, lab	term papers,
	outside of class in	participation,		projects, group	projects, field	essays,
	any discipline, such			presentations,	assignments, field	creative
		projects, media		group exercises,		writings,
	reading and			group/team work in-		reports, or
		to speakers,			building work, or	reaction
	questions, critical	critical thinking		classroom;	hands-on projects;	
	thinking questions,	exercises, or		appropriate rubrics.		appropriate
			appropriate rubrics.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	rubrics.	rubrics.
	appropriate rubrics.		''			
		appropriate				
		rubrics.				
Course SLOs					<u> </u>	
Explain the biology	l .			I .	I	r
of honeybees.	ŀ					
means of pollination,						
and the role that	l .					•
pollinators play in						
the environment.						
Retrieve and						
evaluate information						l J
regarding the best						
management						
practices of						
apiculture, including						
hive management,						
honey production,						
and honeybee						
husbandry.						
Identify honeybee						
diseases and						
recommend the						
most						
environmentally and						
economically						
appropriate control						
measures.						
Course Competenci	es					
Describe the basic						
biology of bees.						
Explain the role of						
pollination in						
agriculture systems						
and natural systems.						
List and identify						
alternative]		
pollinators.						
List the parts of a						
commercial beehive						
and beekeeping						
equipment and						
explain their						
function.						
Wear and use the						
proper equipment to]				
safely handle bees.						
Build a bee hive.						
Carry out basic hive						
maintenance						
activities.						
Extract honey from a						
hive.						
Identify common						
pests and diseases						
of honeybees and						
recommend control						
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easures.	1		<u> </u>			. 1	
ethod of Eva							
cludes, but is lestions, critic	not limited to: a al thinking que	assignments done ou stìons, class preparat	tside of class in any tion; appropriate rub	y discipline, such as brics.	math problems, read	ing and questions, o	chapter
cludes, but is ercises, or re	not limited to: a flective exercis	attendance, participat es; appropriate rubric	ion, readings, art pr s.	rojects, media reviev	vs, reactions to speal	kers, critical thinking)
cludes, but is al, computeri	not limited to: e zed, in-class, ta	essay tests, objective ake-home, at testing s	tests, mid-term and sites; appropriate ru	d final exams, unit ex brics.	xams, quizzes of all t	ypes, tests may be v	written,
the classroor	n; appropriate i						
nas-on proje	cts; appropriate						٢
cludes, but is	not limited to: t	term papers, essays,	creative writings, re	ports, or reaction pa	pers; appropriate rut	orics.	

19. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "PLOs" and enter text in that screen. Program Student Learning Outcomes (PLOs) supported by this course. If you are not a "program" use the Liberal Arts PLOs, view them by clicking on the HELP icon.

Program SLO

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.

20. General Education Student Learner Outcomes (CASLOs). FIRST, fill out the CASLO grid located in the UHMC tab above. Click on the HELP icon for tips on determining support for the CASLOs and indicate your choices below by clicking on the box in front of each supported CASLO. NOTE: Our campus does not use the Preparatory Level, Level 1 and Level 2 designations in the chart below.

	Creativity - Able to express originality through a variety of forms.
V	Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.
	Preparatory Level
	Information Retrieval and Technology - Access, evaluate, and utilize information effectively, ethically, and responsibly.
	Oral Communication - Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.
	Quantitative Reasoning - Synthesize and articulate information using appropriate mathematical methods to solve problems of quantative reasoning accurately and appropriately.
	Written Communication - Write effectively to convey ideas that meet the needs of specific audiences and purposes.

	Creativity	Critical Thinking	Information Retrieval and Technology	Oral Communication	Quantitative Reasoning	Written Communication
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, takehome, 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: term papers, essays, creative writings, reports, or reaction papers; appropriate rubrics.	•		

	SL	

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

Text: No formal text. Use publications and websites from United States Department Agriculture, UH College of Tropical Agriculture and Human Resources, and other land grant institutions.

Materials: Beekeeping suit, hat, mask and gloves

24. Maximum enrollment. See Help for information.

Maximum enrollment is 10. Limited enrollment is necessary for safety reasons. Ten students is the most an instructor could supervise safely when working with the bee hives.

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

NC

Needs a room close to bee yard so can transition to lab activities.

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

YES

Schedule when other students are not working near bee yard.

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

Beekeeping equipment - boxes and a bee yard area.

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

Students may be asked to purchase a beekeeping suit. These can be ordered online.

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

No - it is an elective.

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 All	PE - Program Elective
BAS:		
Developmenta Remedial:	11/	

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

AAS in Sustainable Tropical Crop Management at UHMC.

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.		0
Outcome 1.2 - Identify and analyze the audience and purpose for any intended communication.		o
Outcome 1.3 - Choose language, style, and organization appropriate to particular purposes and audiences.		0
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 quantative reasoning accurately and appropriately.	
Outcome 2.1 - Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately.	0
Outcome 2.2 - Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate.	0
Outcome 2.3 - Communicate clearly and concisely the methods and results of quantitative problem solving.	0
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.	0
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.	o
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.	2
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.	0
Outcome 4.2 - Gather, evaluate, select, and organize information for the communication.	0
Outcome 4.3 - Use language, techniques, and strategies appropriate to the audience and occasion.	0
Outcome 4.4 - Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion.	o
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.	0
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.	o
Outcome 5.2 - Identify and analyze assumptions and underlying points of view relating to an issue or problem.	1
Outcome 5.3 - Formulate research questions that require descriptive and explanatory analyses.	0

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.	1
Outcome 5.6 - Apply problem-solving techniques and skills, including the rules of logic and logical sequence.	0
Outcome 5.7 - Synthesize information from various sources, drawing appropriate conclusions.	2
Outcome 5.8 - Communicate clearly and concisely the methods and results of logical reasoning.	0
Outcome 5.9 - Reflect upon and evaluate their thought processes, value system, and world views in comparison to hose of others.	0
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	0
outcome 6.6: Build upon or adapt the ideas of others to create novel expressions or new solutions.	0

34. Additional Information

Outline Information

Proposer:

ANN EMMSLEY

Progress:

APPROVAL

Modify Date:

02/07/2012 9:56 PM

Approved Date:

approval history (9) | Print friendly

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