

COLLEGE OF NATURAL AND APPLIED SCIENCES
AGRICULTURE
BACHELOR OF SCIENCE IN TROPICAL AGRICULTURE
(APPLIED EMPHASIS OR RESEARCH EMPHASIS)
IN TROPICAL AGRICULTURE SCIENCE

AGRICULTURE CURRICULAR MAPPINGS (CMs)

GE SCIENCE SLOs	AGRICULTURE DEGREE PROGRAM SLOs
<p>SC GE-1: observe, describe, and interpret natural and experimental phenomena within the context of a scientific paradigm;</p> <p>SC GE-2: develop and employ skills of logical and critical thinking to collect and analyze data, interpret results, and write reports;</p> <p>SC GE-3: characterize scientific knowledge as theories and principles that result from experimentation that are subject to revision based on new observations and discoveries;</p> <p>SC GE-4: apply basic scientific principles and methods to explore the workings of the natural world, particularly in this region;</p> <p>SC GE-5: apply basic scientific principles and methods to solve real-world problems, and make appropriate use of science in their choices as citizens.</p> <p>SC GE-6: identify the capabilities and limitations of science, and distinguish science from pseudoscience;</p> <p>SC GE-7: identify how scientific ideas and values have been integrated into society and how other aspects of society affect science as a human activity.</p>	<p>AG PROG-1: TECHNICAL KNOWLEDGE. Graduates will gain the theoretical and practical scientific knowledge needed for continued effective and sustainable crop production, as well as the information and subject-matter mastery required for exercising wise judgment in dealing with complex issues in resource management and conservation. And, it must be instilled that education is a life-long pursuit.</p> <p>AG PROG-2: PROFESSIONAL AND COMMUNICATION SKILLS. Students will develop the human and technical skills needed to function in the forefront of an increasingly complex and competitive society: oral and written communication, and leadership skills, and the critical, integrative thinking capacity supports competent problem solving and decision making.</p> <p>AG PROG-3: TECHNOLOGICAL LITERACY: Graduates are competent at applying technological skills to their chosen work. They are also competent in the use of analog and digital equipment used in modern agricultural systems. Graduates effectively judge the usefulness and appropriateness of existing and new technologies in their professional endeavors.</p> <p>AG PROG-4: PERSPECTIVE. The graduate should have a holistic perspective of agriculture; an appreciation of agriculture as a highly sophisticated, integrated system that operates within a political environment and on a global scale. He/she must be able to visualize what makes the whole work, and understand the responsibilities of the agriculturist within the system with respect to production of an abundant, safe, and nutritious food supply within the context of wise management of natural resources.</p> <p>AG PROG-5: ETHICS/VALUES. The curriculum should lead students in development of an appreciation of ethical resource management responsibilities in regional, national and world social and economic contexts. It must instill awareness for sustainable management of energy, soil, water, wildlife and other natural resources.</p> <p>AG PROG-6: DIVERSITY. For society to function effectively and justly for each person, graduates must appreciate the richness that our diverse backgrounds and philosophies bring to the whole. Understanding of and appreciation for the political, cultural, and religious opinions and practices of others is the hallmark of an educated person.</p> <p>AG PROG-7: ANALYTIC SKILLS. Graduates are competent at collecting, organizing, analyzing, interpreting and presenting quantitative and qualitative data in agricultural science and natural resources.</p>

AGRICULTURE GE CM								AGRICULTURE DEGREE PROGRAM CM							
COURSE NO.	LINK TO GE SCIENCE SLOs ¹							COURSE NO.	LINK TO PROGRAM SLOs ¹						
	SC GE-1	SC GE-2	SC GE-3	SC GE-4	SC GE-5	SC GE-6	SC GE-7		AG PROG-1	AG PROG-2	AG PROG-3	AG PROG-4	AG PROG-5	AG PROG-6	AG PROG-7
AG101	2,3	2,3	1	4	2,3	1	1	AG101	1,2,	4	2,3	3	4	1	4
AG102	1,5	3	3		1,3,10	10	2	AG102	1,10			2			3
AG109	1,2,3,4,5	4	1,2,3,4	1,2,3,4,5	2,3,4	4	1,2,3	AG109	1,2,3,4,5	1,2,3,4	4				1,2,3,4,5
AG136/AG136L	2,3,4,5	4	3	5	5,6			AG136/AG136L	1,2,3,4,5,6			1,3	6		4,5,6
								AG211	1,2,3,4	4	2,3,4	3	3		4
								AG281	1,2,3,4,5	1,2,3,4,5	3,4,5	3,4,5	3,4,5	4	1,2,3,4,5
								AG321	1,2,3,4						5,6
								AG323		1,2,3	3		1		2,3
								AG340	1,2,3,4	4	3	4	3	3	1,2,3,4
								AG342	1,2,3,4,5	2,4	1,4	2,3	3		1,3,4,5
								AG/BI345	1,2,3,5	4	1,2,3,5	2,4	4		1,2,4
								AG/NS380	4			1,2,3,6	5		6
								AG392	1,2	3,4	1,2	1,2	3		2
								AG/PA401 ²							
								AG423		1,2,3	1,2		1		2,3
								AG/BI430		1,6,8	1,2,3,4,5,7,9		8		7,8,9
								AG451 ²							
								AG480	1			123	3		
								AG481	4			1236	5		5
								AG484	1,2,3,4	1,2,4	4	4	3,4		4
								AG485	1,2,3		1,2	1,2,3		1	1,2,3
								AG486	1	2,4	2,3,4				2,3

¹The numbers are course SLO numbers that link the course to the program SLO (See UOG/CNAS/CNAS Assessment Website for detailed descriptions of these course SLOs by visiting: <http://www.uog.edu/dynamicdata/CNASAssessment.aspx?siteid=2&p=20>).

²Pending Faculty Input

AGRICULTURE PROGRAM ASSESSMENTS

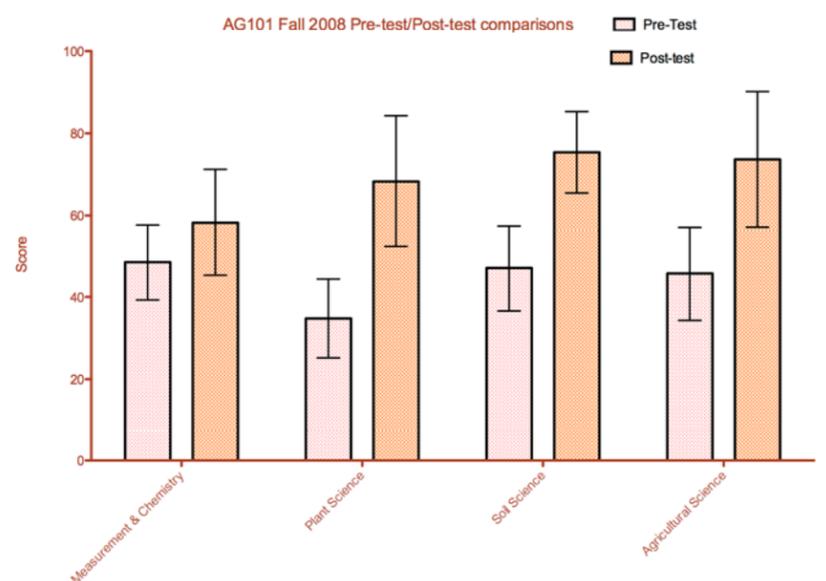
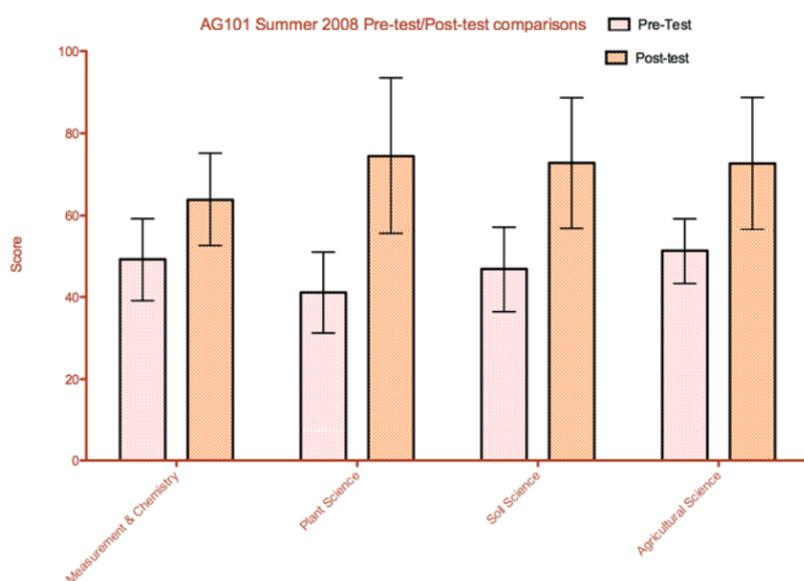
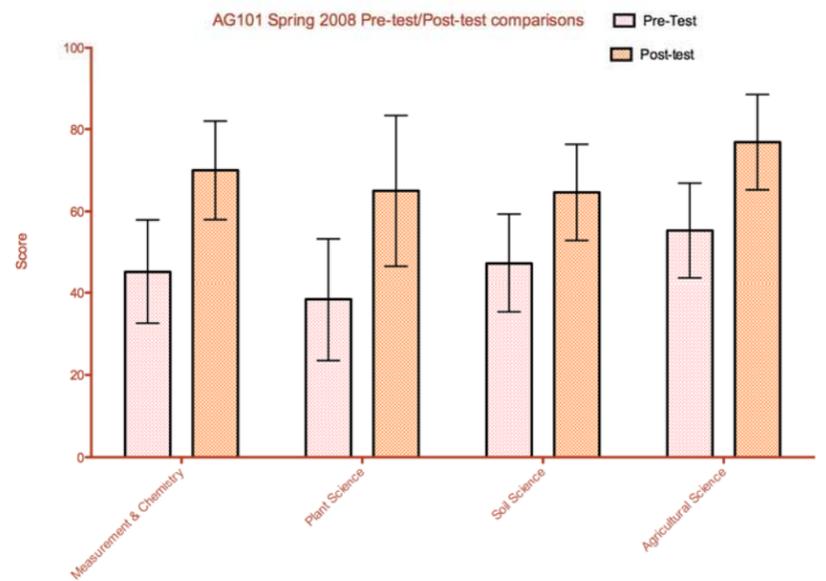
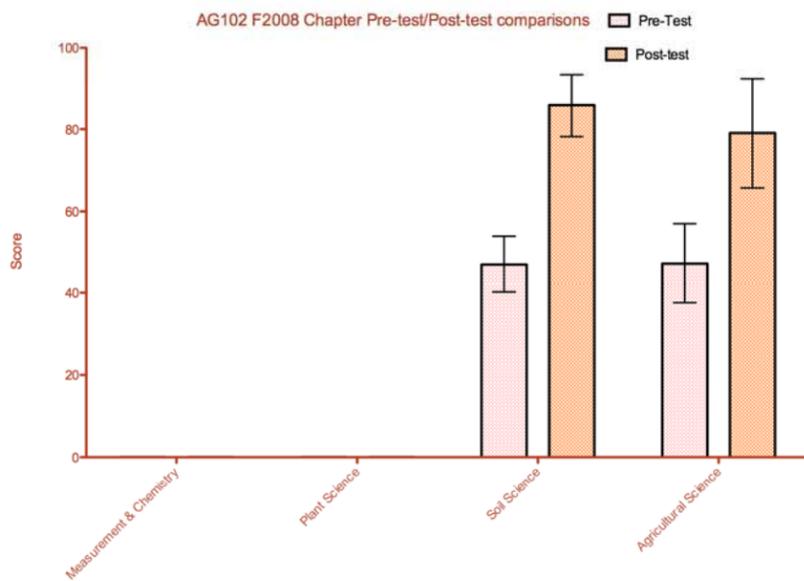
ASSESSMENT ACTIVITY	ASSESSMENT RESULTS AND RECOMMENDATIONS FOR PROGRAM IMPROVEMENTS
1. Pre- and Post-Test assessments are now used in numerous courses: AG101, AG102, AG281 AG380, and AG/BI430	Course lecture schedules are adjusted in response to pretest results. This has generally resulted in improvement in post-test scores. Rubrics are being developed for use in AG281 to assess students' oral reports on journal articles.
2. Observation of student activity by a supervisor and report submission to instructor by the supervisor to the teaching faculty (AG498 intern program)	Success of the intern program is indicated by the good communications among the supervisor, student and instructor. Faculty use these results to adjust / change /select the collaborative institution where they would accept our students as interns.
3. Program Goals were revisited and revised to agree with current courses offered	During the Program Review from 2006-2008, the program goals were revised. SLOs presented in this report are based on the new program goals.
4. Program Review from 2001-2007 was done recently to assess the program. A survey of graduates opinions of the program was conducted. The program was revised to include two tracks.	<p>Overall there is a great need for the maintenance and purchase of equipment for the instructional lab. Faculty need to be hired with expertise needed in TASP. Faculty also need the support from the administration in developing assessment capacity in the basic operations of the program. There needs to be transparency in the budgeting, expenditures and space allocations related to TASP. The following are recommendations which were identified during the review process:</p> <ol style="list-style-type: none"> Hire faculty that have expertise needed in TASP. The number of faculty in CES has dropped from 20 to 8. In AES, faculty have been hired without input from faculty concerning the needs of TASP. Investigate the potential for linkages to Distance education programs in Mainland Land Grant Institutions. (recommended by outside reviewers) Form a Stakeholder based advisory committee Establish a curriculum committee Prioritize needed supplies and equipment for TASP and establish a budget for the Program Set up a classroom computer lab Install a wireless computer network with internet access in the classroom area. Develop an AG minor (Target business, public administration and tourism majors) Investigate the potential for an Ag graduate program (recommended by outside reviewers) Investigate developing the major with disciplinary focused subject matter such as: Horticulture, Sustainable Agriculture and Animal Science. This restructuring will utilize the recommendations of the Stakeholder Advisory Committee. Develop a student recruitment program targeting K-12. Expand and enhance our scholarship program. Explore requiring certifications for Ag majors (Pesticide Applicator, Farm Safety, Organic Production, Horticulture, Ag Equipment Operation, Invasive Species First Detector) Establish a procedure to insure that TASP faculty are involved in the approval of -90 series courses. Also establish an assessment procedure for these courses. List specific AG courses in the Science GE table in the catalog.

AGRICULTURE PRE- AND POST-TESTS ASSESSMENT STUDIES

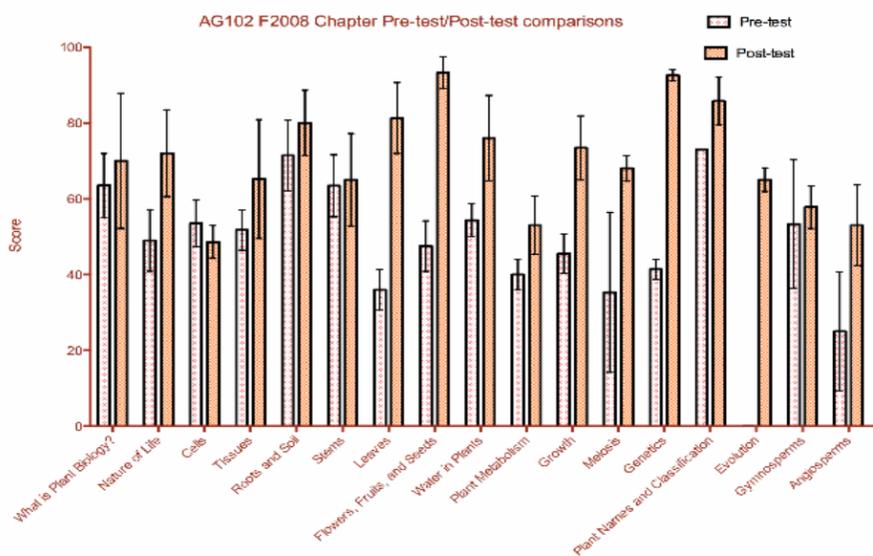
ASSESSMENT ACTIVITY 1 AG101 PRE-POST TESTS ASSESSMENTS	ASSESSMENT RESULTS AND RECOMMENDATIONS	ASSESSMENT ACTIVITY 2 AG102 PRE-POST TESTS ASSESSMENTS	ASSESSMENT RESULTS AND RECOMMENDATIONS
<p>1. The following GE Science SLO was selected for assessment: SC GE-4</p> <p>2. Assessment Methods Selected for Assessment (Pre/Post Tests Assessment Tool)</p>	<p>1. Summary of Assessment Results (See below) Pre-test results over four semesters suggest that, in general, students demonstrated increasing basic knowledge of the terminology, scientific concepts & principles and their application in plant sciences, soil science, scientific measurement & chemistry and agricultural science.</p> <p>2. Recommendations for Improvements Pre-tests scores will be used as indicators for determining time allocated to covering specific major topics of the course.</p> <p>3. Current GE Science SLOs need to be reviewed and updated. Currently the SLOs are not measurable. The UOG GE committee need to revise the SLOs.</p>	<p>1. The following program SLO was selected for assessment: SC GE-4</p> <p>2. Assessment Methods Selected for Assessment:</p> <p style="margin-left: 20px;">a. A comprehensive pre-test is given the first day of class and the same exam is given the last day of class.</p> <p style="margin-left: 20px;">b. Pre- and Post-test for each chapter (subject) to assess how the instructor is dealing with student weakness.</p>	<p>1. Summary of Assessment Results (See below)</p> <p>2. Recommendations for Improvements</p> <p style="margin-left: 20px;">a. Comparisons of the scores indicated that student scores increased in the post-tests indicating that they gained knowledge in the various subjects.</p> <p style="margin-left: 20px;">b. Improvement of scores from pre-test to post-test in certain subjects reflected the instructor's adjustments to time allocations for the subjects during class. Pre-test was done individually by students on-line before each lecture. Post-tests were given in class at the beginning of the lecture following completion of the chapter. Getting students to take the pre-tests has been difficult. Extra credit is given for each pre-test submitted before class time in an effort to encourage students to submit the pre-tests. The actual scores are not included in the grade and are only used for the assessment. Post-tests are graded and are included in the final grade.</p>

AGRICULTURE AG101 PRE-POST TESTS ASSESSMENT STUDY

Pre-test/Post-test Assessments of Four Semesters of AG101



AGRICULTURE AG102 PRE-POST TESTS ASSESSMENT STUDY



AG102 Fall 2008 Comprehensive Pre-test/Post-test Comparison

