



## **SCHOOL OF AGRICULTURE ANNUAL ASSESSMENT REPORT 2015-16**

### **GUIDING QUESTION RESPONSES**

**1. What are the Student Learning Outcomes (SLOs) for your unit? How do you inform the public and other stakeholders (students, potential students, the community) about your SLOs?** If your unit is accredited by an outside source, please attach the letter verifying your accreditation.

A student who graduates from the School of Agriculture should be able to:

1. Display knowledge of the local, state, and national agriculture industry and education system.
2. Perform critical reasoning, perceive assumptions, and make judgments based on the basic principles of animal science, plant and soil science, and agricultural economics.
3. Utilize sound decision-making techniques necessary for solving profitable farm and agribusiness management problems.
4. Identify prominent agricultural pests with their associated benefits/damages and the current management practices applied.
5. Demonstrate advanced knowledge and skills contained within courses for their chosen agriculture degree option.
6. Identify and successfully pursue employment opportunities in his/her chosen field of the agriculture industry.

The Student Learning Outcomes are communicated to students through the syllabus, exams, quizzes, laboratory exercises, case studies, homework assignments, reports, and presentations. The SLO's are communicated to the public, community, and other stakeholders through our UAM School of Agriculture website.

The learning outcomes are posted on the School of Agriculture website at

<http://www.uamont.edu/pages/department/school-agriculture/>

We do not have a separate accrediting agency.

**2. Describe how your unit's Student Learning Outcomes fit into the mission of the University.**

	UAM MISSION STATEMENT	Unit Learning Outcomes
	<p>The University of Arkansas at Monticello is a society of learners committed to individual achievement by:</p> <ul style="list-style-type: none"> <li>- Fostering a quality, comprehensive, and seamless education for diverse student learners to succeed in a global environment;</li> <li>- Serving the communities of Arkansas and beyond to improve the quality of life as well as generate, enrich, and sustain economic development;</li> <li>- Promoting innovative leadership, scholarship and research which will provide for entrepreneurial endeavors and service learning opportunities;</li> <li>- Creating a synergistic culture of safety, collegiality and productivity which engages a diverse community of learners.</li> </ul>	<p>SLOs 5 and 6</p> <p>SLOs 1 and 2</p> <p>SLOs 3 and 4</p> <p>SLO 1 and 6</p>

Student Learning Outcomes 5 and 6 embody a quality, comprehensive education that leads to success in a global environment.

By being knowledgeable about agriculture, and able to think critically (SLOs 1 & 2), students will be able to serve and improved their communities and sustain economic growth.

Correctly identifying and solving farm profitability and pest management issues (SLOs 3 & 4) will allow students to be innovative in leadership, scholarship, research and entrepreneurial ship as it pertains to agriculture.

Agriculture naturally enjoys a “comradery of the soil.” As students master SLOs 1 and 6 together, a community of learners emerges with a synergistic culture of safety, collegiality and productivity.

### **3. Provide an analysis of the student learning data from your unit. How is this data used as evidence of learning?**

Pre/post test evaluations were conducted for the ninth year in Fall 2015 and Spring 2016 on eight courses. Results by individual course are available in the School of Agriculture. The eight courses tested in 2015-2016 were: AGEC 2273 Agricultural Economics, AGEC 4613 Agricultural Policy, AGEC 4623 Farm Management, AGEC 4683 Commodity Marketing, AGEC 4703 Contract Marketing & Futures Trading, AGEC 4713 Agricultural Finance, AGEC 4803 Agribusiness Firm Management, and AGEC 4823 Economics of Environmental Management. Pre-tests again were previous year final exams. The final exams for the respective Fall 2015 and Spring 2016 courses were used as post-tests for this year.

A comparison of the 2015-2016 results for students completing the courses indicated that student score improvement within the semester ranged from 40.52% to 62.79% by specific course. This is comparable to previous years. AGEC 4703 Contract Marketing & Futures Trading, and AGEC 4713 Agricultural Finance, showed the greatest improvement in student knowledge. These two courses are intensive and specific to their discipline. It makes sense that students would know little at the beginning of the semester. The marked improvement shows the course accomplished its SLOs. AGEC 2273 Agricultural Economics, showed the least improvement in student knowledge. This is a broad, introductory course and one would expect students to have reasonable knowledge at the beginning of the semester. The course still achieved its SLOs by increasing the students' knowledge by over 40% on average.

Grade distributions for the prerequisite courses in animal science, plant and soil science, and agriculture economics were examined. Pass rates are one indication of student learning in specific courses. Principles of Animal Science had an 86% pass rate. Field Crops had a 95% pass rate. Agricultural Economics had a 66% pass rate. Further examination of this class revealed that students receiving the ten failing grades included five who chose not to take the Final Exam (40% of semester grade). All but two of those ten failing students had 7 or more absences during the semester. These 10 students certainly had an attendance problem. Whether they didn't understand or lacked commitment is not easy to discern. However, the GPA of these 10 students for the semester in question averaged 0.629 on 13 hours. Seven of the 10 students did not return to UAM for the spring semester. Their obstacle to learning in Agricultural Economics also prevented their learning in the rest of their classes. It is worth noting that 7 additional students with passing grades in Agricultural Economics also had 7 or more absences, so lack of attendance was not the sole problem.

The ultimate determination of student learning and university production should be the number of students graduating. In the 2015-2016 academic year, the School of Agriculture graduated 18 students. This is down from the previous two years of 21 and 25, but is consistent with the long run average.

**4. Other than course level/grades, describe/analyze other data and other sources of data whose results assist your unit to improve student learning.**

Incoming freshmen students for the School of Agriculture were screened over a ten year period to identify the annual cohort requiring one or more developmental course as a percentage of total entering agriculture freshmen. Of the four hundred students in the data base, 189 required at least some remediation. Grades in developmental course(s) were compiled along with cumulative grade point average, credit hours earned, and final outcomes, i.e. graduation, transfer, or continuing. Correlations were calculated between extent of developmental work required and student outcomes.

To date, 21.16% of developmental students in the study have graduated with an agriculture degree and 16.93% remain in the program. The numbers suggest that 25% to 30% of the 189 students will likely graduate with an agriculture degree or some other 4 year degree. These percentages are in line with the success rate of the campus at large. The success rate of the 211 students who did not need remediation will be determined in the coming year for comparison.

Another information source used in unit decisions comes from the Graduating Senior Agriculture Major Survey. The survey is administered each semester to members of the AGRI 4771 SEMINAR course. Agriculture majors typically take this course during their final semester prior to graduation. Students gave outstanding marks to the faculty for their knowledge in their field, dedication/accessibility to students, and their advising efforts. Students recommended improvements in facilities. Courses that this year's graduating seniors listed as particularly useful included Soils, Commodity Marketing, Accounting and the classes that utilized accounting, Internships, and Plant Pathology.

Additional information to determine unit decisions was gathered from student evaluations of specific classroom activities such as field trips and group presentations. Most special assignments are followed up with a student report that expresses their opinions about that activity. Students receive class credit for simply submitting a complete, well-written report. Faculty then read the submitted reports to evaluate the appeal and effectiveness of the activity.

Success of an academic program is reflected in alumni personal comments after graduating. The School of Agriculture hosted a breakfast in January at the Arkansas Crop Management Conference for UAM alumni. The event gave us positive feedback on our efforts to educate students who can have successful careers in the crop management field.

**5. As a result of the review of your student learning data in previous questions, explain what efforts your unit will make to improve student learning over the next assessment period. Be specific indicating when, how often, how much, and by whom these improvements will take place.**

Five weeks into the semester all of the teaching faculty will meet to identify those students who are not readily mastering the learning outcomes in multiple courses. The Dean and the advisor of each identified student will then formulate a plan of action. These students identified as “at risk” will also be tracked to determine how well we did at identifying those who ultimately are not successful.

All faculty will use Blackboard on at least a minimal level in 2016/17. The Dean and faculty will build on this basic instruction in subsequent Agriculture faculty meetings. Utilizing new, available technology can facilitate learning in all School of Agriculture courses.

The Dean will continue to explore scholarship development possibilities. The 2015-2016 year saw a \$10,000 increase (from \$35,714 to \$45,586) in the overall scholarship awards won by Agriculture students. This is the result of additional entities willing to invest in our students. More scholarship support allows students to focus more of their time and effort on learning.

**6. What new tactics to improve student learning has your unit considered, experimented with, researched, reviewed or put into practice over the past year?**

Drs. Francis, Spurlock and Stark continue to develop a curriculum in Site Specific Agricultural Management. This an exciting and ever developing frontier in agriculture. A special problems class has been taught on two separate occasions, and our Plant Pathology course included a substantial amount of material on remote sensing and spatial dynamics this year. Dr. Francis has identified a curriculum from South Dakota State University we may use as a blueprint for a minor in this field at UAM.

The School of Agriculture invested in the latest audio visual equipment for lecture room 114. A request for one-time funds was made to update rooms 105 and 109 also. The result of that request is not known at this time.

The number of students finding summer internships continues to grow. Nine students are working on an internship for academic credit during the 2016 summer. These students will return in the fall and each make a presentation to the freshman class. This seems to educate and motivate the freshmen to find their own internship before graduating.

The Dean is exploring a sophomore level internship that will give students experience on the UAM beef cattle farm.

**7. How do you ensure shared responsibility for student learning and assessment among students, faculty and other stakeholders?**

Faculty accommodate students with different learning styles by combining traditional lectures, PowerPoint slide presentations, individual pace laboratory exercises, and class group laboratory experiences. As needed, Special Topics and Independent Study courses are offered. The "hands-on" nature of many UAM agriculture courses give the students experience they would not get elsewhere. For example, many animal science programs at other Universities do not have ready access to beef cattle like we do at UAM.

Within the existing courses, students often are given the responsibility of picking their class project topic after receiving some guidance by faculty and can choose their research topic for Seminar as a final semester senior. Students are provided with graded, optional extra credit assignments in some courses. The assignments allow students to improve their course grade, if they choose, and reinforce topics discussed in class discussion. This reinforcement can benefit students on course exams and quizzes if they choose to complete the assignments.

Students are encouraged to find an internship that will give them experience in their area of interest. Faculty make students aware of internship opportunities. A faculty member teaches the internship course to manage the learning experience and provide college credit.

All courses taught in the School of Agriculture are evaluated by students in each semester that they are offered. Compiled results of the student evaluations are read by the Dean who then meets with the specific faculty member responsible for the course. Points of excellence and points needing improvement are both noted and recommendations for future offerings are developed jointly by the Dean and respective faculty member. Peer evaluations of all faculty are made annually and the results are included in the Dean and faculty member meetings.

**8. Describe and provide evidence of efforts your unit is making to recruit/retain/graduate students in your unit/at the University. (A generalized statement such as “we take a personal interest in our students” is not evidence.)**

Letters are sent to prospective students as they apply for admission to UAM and identify agriculture as their chosen field of study. Contact information is provided by the Admissions office and a letter from the School of Ag is sent on behalf of the Dean welcoming the students and encouraging them to contact our office if we can be of service.

First time freshmen are expected to know their advisor through an activity in their Ag Orientation class. An “Advisor Visit” is part of AGRI 1101. This year an entire class period was dedicated to this purpose. Students were divided into groups and ate lunch with their advisor. Students could then recognize fellow students who share their advisor, and learned about their advisor and what to expect as a UAM Agriculture major. Agriculture faculty members strongly supported this activity.

Incoming students who have preregistered for Fall 2016 were provided faculty contact information at preregistration sessions and encouraged to contact a faculty member if they have questions or concerns prior to the first day of classes. Cards expressing congratulations were sent as follow-ups to Scholars Day participants. The School of Agriculture faculty also try to send an advisor welcome letter to each new student. The letter welcomes them to UAM and encourages the student to visit the advisor’s office and become involved in school activities.

Acclimation into the student body can be a major factor in student retention. Several years ago, School of Agriculture faculty established an annual “Back to School Picnic” for all agriculture majors. Held shortly after the Fall Semester begins, the event enables new students to meet upper level agriculture students and establish solid relationships with faculty. Over 70 students attended the Fall 2015 picnic and games that were held at the Rodeo Practice Facility. Agriculture organizations also hold various types of activities throughout the year to further connect students.

The major retention activity in our unit is student advising sessions. Advisees sign up for appointments prior to the two-week preregistration period. Students select a 30 minute period where they will discuss their current semester progress and plan a schedule for the next semester. A closing plan is often developed by advisors with Junior and Senior level students to facilitate course selection and degree requirement completeness, helping to ensure graduation on time.

Students who excel in a semester (Chancellor’s List, Dean’s List, etc.) are often congratulated by a letter from their Advisor and/or the Dean. Students with unsatisfactory academic performances (Conditional Academic Standing, Suspension, etc.) also receive a personal letter encouraging them to visit with their Advisor to discuss the issues and make schedule adjustments as needed.

The 2015-2016 year saw a \$10,000 increase in the overall scholarship awards won by Agriculture students. This is the result of additional entities willing to invest in our students. More scholarship support allows students to stay in college and graduate.