

**PROGRAM REVIEW IMPLEMENTATION PLAN
PROGRESS REPORT
UK Ag Equine Programs
2019 - 2020**

Background: University of Kentucky Ag Equine Programs (EP) completed a program review in September 2014. This review focused primarily on the Equine Science and Management (ESMA) undergraduate degree program. An implementation plan was submitted in February 2015 and finalized in May 2015. Recommendations that were rejected have been omitted from this report. Throughout the document, the external review committee refers to the “ESM Program.” At times, we believe they are referring specifically to ESMA, while at other times, we believe they intended to refer to the entire EP. We note those differences in this annual review.

- 1. The current administrative position of the ESM Program within CAFE structure should be evaluated. Specifically, is the program positioned appropriately for continued and future success through its association with the experiment station versus the office of academic programs?** (This recommendation refers to EP.)

Assessment Method: The focus of discussions involving College of Agriculture, Food and Environment (CAFE) administration, EP leadership, and the EP Advisory Board on where to place EP emphasized that it is a multidisciplinary, interdepartmental program and covers all three land-grant mission areas - research, teaching, and extension/outreach. Although not a stand-alone department, the consensus is that EP does represent a discreet academic unit that warrants college-level status.

Results: College administration, in conjunction with EP leadership and through the strategic planning process, determined that the most appropriate reporting structure for EP would be directly to the College Dean instead of one of the Associate Deans. This new structure was implemented in January 2017.

Analysis of results and reflection: The rapid and continued growth of EP, combined the importance of engagement and productivity in all three land-grant mission areas make this new structure more logical.

Ongoing improvement actions: CAFE administration and EP leadership have continued to assess the correct reporting structure for this program. It is clear that the new reporting structure is better suited for EP. Moving forward this relationship is expected to remain in place.

- 2. The existing structure and alignment of the committees and councils within ESM should be streamlined and/or consolidated with defined roles for individuals.** (This recommendation refers to EP.)

Assessment Method: EP leadership has worked with CAFE administration to determine the most effective organizational structure within EP. Assessment with regard to 'effective' is primarily experiential, based on perceived efficiency and success of communication and administrative processes.

Results: Deliberations by EP leadership, the CAFE Dean, and the Advisory Board has resulted in the current structure (Figure 1, Appendix). Four subcommittees, curriculum, research, extension, and communications are led by chairs selected by the EP Director. These chairs, in turn, are responsible for scheduling meetings and associated deliberations/activities. The EP Executive Committee consists of the Director together with the chairs of these four subcommittees. External counsel and support for EP is received through an Advisory Board composed of equine industry stakeholders, as well as a representative from the alumni network of ESMA graduates.

Analysis of results and reflection: The organizational structure within EP currently is working well. However, collaborative, and optimally synergistic, relationships with academic departments remains an area of unrealized potential and opportunities.

Ongoing improvement actions: Efforts to cultivate active participation of academic departments and individual faculty programs across CAFE and the university, together with a shared commitment to the interdepartmental and multidisciplinary structure of EP, are continuing. Additionally, participation and contribution opportunities by members of the Advisory Board have been more clearly defined based on multiple discussions over the past year. One of the priority goals is to position the Advisory Board to be more philanthropic going forward, to better help the program meet its goals and objectives while being able to address challenges.

3. The Equine Programs Organizational Chart is unduly complicated and convoluted. A simpler chart should be developed.

A revised organizational chart has been developed and implemented (Figure 1, Appendix, and response to recommendation #2 above). The chart was presented to the Advisory Board in December, 2019, and adopted. Within this chart, the roles and relationships of the various stakeholder groups and elements of the three land-grant groups are simplified and streamlined. The chart clearly defines the administrative relationship of the CAFE Dean and EP Director, with inputs from the Advisory Board and Alumni Network. Office staff for EP report to the Director, who also interacts with the four core academic committees (curriculum, research, extension and communications). The chart also illustrates both internal and external stakeholder relationships within EP.

- 4. An ESM program strategic plan should be developed with long-term goals and measurable benchmarks, emphasizing “managed growth” in the ESM program to protect the quality of the program and avoid outstripping resources. (This recommendation refers to EP.)**

Assessment Method: Planning is underway to develop an updated strategic plan. Dr. Annie Weber, Assistant Provost for Strategic Planning and Institutional Effectiveness, is working with the EP Director and core faculty and staff on this endeavor.

Results: Initial discussions have been held, with group working sessions currently scheduled at four-week intervals. Additionally, a timeline for the upcoming year has been developed, with plans for the substantive information gathering process to occur between the fall and spring semesters. These sessions will be similar to focus groups and concentrate on the perceptions of the various internal and stakeholder groups of EP. Following this information gathering, early spring will see a draft of the report compiled and circulated, with a period given for additional feedback on that document. The goal is to finalize a new strategic plan by June, 2021 in time for the next fiscal year starting July 1.

Analysis of results and reflection: Organized efforts are just underway, with initial discussions that have included consideration of the differences between ‘strategic’ and ‘operational’ plans. An approach characterized as “appreciative inquiry” is being explored that defines and builds upon what is working well in an organization, rather than the more traditional SWOT (strengths, weaknesses, opportunities, threats) analysis.

Ongoing improvement actions: Developing a new strategic plan will be a priority for the current academic year with the goal of completing the process by June 30, 2021.

- 5. New course(s) should be created that emphasize business/accounting education, as well as presentation/ communication skills and interactive skills.**

Assessment Method: Major program-wide curriculum review and mapping activities were completed in 2017, with changes implemented in 2018 and further adjustments approved in 2019. A new course with a strong communication (oral and written) emphasis (EQM 305; Equine Industry Issues) was developed and has been taught both fall and spring semesters since Fall 2018. In Fall 2019, the Wildcat Wrangler – Leadership and Outreach course was developed as a section of EQM 300 and offered as a yearlong program. The class promotes development of communication, teamwork, networking, and leadership skills through student outreach and recruitment activities as well as industry networking opportunities. Finally, an assessment subcommittee was formed to develop the Program Student Learning Outcome (PSLO) assessment plan to help evaluate students’ progress through the ESMA curriculum.

Results: The assessment subcommittee submitted the PSLO assessment plan in June 2020; and therefore, data are still in the collection phase. The assessment plan includes several sections related to written and oral communication skills and interactive skills with equine industry professionals. In particular, PSLO #3 and #5, listed below, address these areas.

- PSLO #3: Students will communicate effectively and professionally through written, oral and visual modes of communication. (Fulfills the Graduation Composition and Communication Requirement-GCCR)
 - A. Students will construct a variety of communication pieces to articulate topics within the equine industry.
 - B. Students will construct a variety of professionalism pieces to help prepare them for future careers.
 - C. Students will present equine and professionalism topics through various oral communication methods.
- PSLO #5: Students will work effectively in diverse environments as an individual or as a collaborative team.

In an initial review, the PSLO assessment plan was very well received by the Office of Strategic Planning and Institutional Effectiveness. In fact, a request was received from the Director of this office to use the ESMA assessment plan as an example for other programs across the University. While some preliminary data have been collected to pilot test assessment tools and rubrics, the formal data collection phase will start in Fall 2020.

In an independent effort over the past 18 months, EP developed a proposal for the Essential Employability Qualities (EEQ) program that has also been favorably reviewed. Full certification was received in April 2020. This process allowed the ESMA curriculum committee and teaching faculty to ensure that all eight EEQs are woven throughout the curriculum, helping to prepare students for future employment. These EEQ's include communication, problem solving & critical thinking, inquiry, collaboration, adaptability, principled and ethical, responsible and professional, and lifelong learners. The PSLO assessment plan will facilitate staying on track with reporting requirements necessary to maintain EEQ certification.

Analysis of Results and Reflection: We have now fully completed the curriculum assessment and revision process that was initiated by the programmatic review report from 2015. This has been a valuable exercise that engaged student, faculty, staff, and industry stakeholder input through collaborative discussion to strengthen the curriculum and ensure that we are meeting student learning outcomes. The robust assessment plan enables an ongoing evaluation of how the curriculum and supporting student activities are meeting program goals and facilitating continued innovation and program development.

Ongoing Improvement Actions: We will continue to assess student learning related to all five of our PSLO. The ESMA Curriculum Committee and assessment subcommittee, as well

as the EEQ project coordinators, will continue to be active and meet regularly. As noted above, EP will be conducting its next five-year strategic plan in the coming months and this will aid in directing the future of the undergraduate program.

6. A course in "alphabet organization" should be considered to provide insight into the horse industry. (The reference to "alphabet organization" refers to important high profile industry organizations and commonly used industry acronyms.)

Assessment Method: After further investigation and reflection on this recommendation by the curriculum committee, it was deemed not feasible at this time to offer a course solely for the topic of "alphabet organization." Instead, there is the option for this issue to be integrated into course discussions involving equine industry topics, including EQM 101 and EQM 305. In addition, a list of important high profile industry organizations and commonly used industry acronyms has the potential to be a resource hosted on the EP website.

Results: An alphabet organization resource will be developed in partnership with a student intern and/or as an independent student project during the Fall 2020 semester. This resource will be posted on the UK Ag Equine Programs website and will be utilized in the future for EQM 101, which has an equine industry module as part of the curriculum.

Analysis of results and reflection: A standalone course will not be created, but instead a resource will be developed highlighting the "alphabet soup" of the equine industry.

Ongoing improvement actions: The internet-based resource will need to be updated regularly to ensure accuracy, completeness, usefulness, and relevance.

7. CAFE administration should allocate additional resources to the ESM program in the form of TAs and faculty lines in Animal and Food Sciences or Veterinary Sciences.

Assessment Method: In late 2019, the Director of Undergraduate Studies and the curriculum committee calculated the number of FTE associated with the instruction of required courses, equine-related emphasis area courses, and student advising in the ESMA major. This number was then compared to the number of actual teaching and advising related FTE provided by 1) faculty and staff with a teaching or advising appointment; 2) part-time instructors external to the University of Kentucky; and 3) part-time instructors internal to the University of Kentucky, but without a teaching appointment. The Academic Coordinator and the Director of Undergraduate Studies, with input from the Curriculum Committee, also identified courses that would benefit from graduate student teaching assistants (TAs). The Director of EP worked with department chairs in Animal and Food Sciences and Veterinary Sciences to identify graduate students both interested in and eligible for TA opportunities. Required administrative details were then completed at both departmental and university levels.

Results: In the 2019/2020 academic year, the instruction and advising needs for the ESMA program were estimated at 4.73 FTE. To meet these needs, 4.15 FTE were provided by University of Kentucky faculty and staff with a teaching and/or advising appointment, 0.30 FTE were provided by part-time instructors external to the University of Kentucky, and 0.29 FTE were provided by University of Kentucky staff without a formal teaching appointment. Required ESMA courses that were identified as classes positioned to benefit from a graduate student TA were EQM 101 (Introduction to the Horse and the Horse Industry; taught in both the fall and spring semesters), EQM 105 (Equine Behavior and Handling; taught in the spring semester), EQM 305 (Equine Industry Issues; taught both semesters) and ASC 320 (Equine Management; taught in the fall semester). In the Spring 2020 semester, a TA was identified for EQM 105 and for Fall 2020, TAs were identified for EQM 101 and ASC 320. All TAs to date have been graduate students in the Department of Veterinary Sciences. In addition to the graduate student TAs, there are also undergraduate peer instructors assisting with EQM 101 (Spring 2020 and Fall 2020) and EQM 106 (Introduction to Careers in the Equine Industry; Fall 2020). At this time, we have not been able to identify an appropriate TA candidate to assist with EQM 305.

Analysis of Results and Reflection: Presently, approximately 12% of the FTE teaching needs for the ESMA major are being met by part-time instructors. Additionally, in order to fulfill the teaching and advising needs, all of the CAFE faculty/staff with teaching appointments are currently participating at or above their targeted DOE for teaching. This has taken faculty effort away from areas such as research and extension. It also means that there is limited ability to create new courses for the students, add additional sections of existing courses, or advise additional students without imposing further effort reduction in non-instructional areas. Finally, the ability to respond to any unanticipated personnel challenges is very limited, increasing the level of vulnerability and risk to negative events.

To date, we have received excellent feedback from both students and faculty members regarding the inclusion of graduate TAs and undergraduate peer mentors in course offerings. These individuals have been very helpful in providing support to both the instructors and to the students enrolled in the classes.

Ongoing improvement actions: We will continue to work to identify experiential learning and career advancement opportunities for students interested in roles supportive of instructional efforts within the ESMA curriculum. Graduate students willing and eligible for TA fellowships will remain a core component of these initiatives.

- 8. To accommodate continued growth in the program, additional classroom and farm facilities will be necessary.**

Assessment Method: Student enrollment data and specific course needs within the ESMA curriculum are the primary variables that determine classroom and farm facility needs for teaching.

Results: A major financial bequest (Pirri gift) has expanded the Department of Animal and Food Sciences' equine facilities at Maine Chance Farm that are used for the teaching of ESMA classes. Classroom seating for up to 75 students and bathroom facilities are now available. Funding from the gift should enable continued investment and expansion of these facilities.

Analysis of results and reflection: Infrastructure to optimize pedagogical resources needed to educate the large number of undergraduate students in the ESMA major remains a high priority issue. Additional investment on campus to construct contemporary classroom facilities within CAFE buildings that are comparable to those found in other parts of the university is now widely recognized as an acute infrastructure need by students and faculty.

Ongoing improvement actions: COVID-19 regulations have disrupted almost everything, with the duration of these impacts still uncertain. Nonetheless, the review and assessment of priority classroom infrastructure needs is ongoing.

9. The ESM steering committee should review the appropriateness of ESM courses and make adjustments to minimize redundancy and increase the rigor of upper level classes.

Assessment Method: Responses to recommendation #5 above regarding the program-wide curriculum review, Program Student Learning Outcome (PSLO) assessment plan, and Essential Employability Qualities (EEQ) program are relevant here as well.

Results: The curriculum mapping exercise has been completed and program changes went into effect with the Fall 2019 cohort of students. Required upper level courses that were extensively revised to help ensure academic rigor and integration of core knowledge and employability skills include EQM 399 (Equine Science and Management Internship) and EQM 490 (Capstone in Equine Science and Management).

Analysis of Results and Reflection: Substantial time and effort has been invested in both revision and optimization of the ESMA undergraduate curriculum, including the design, implementation, and assessment of coursework, experiential learning, and student activities. The success and impact of these efforts have been independently validated by achieving EEQ certification and university-level recognition of the PSLO Assessment Plan. Priorities and direction going forward will be considered in detail through development of the new five-year strategic plan in the current academic year (Recommendation #4 above).

Ongoing Improvement Actions: Both the EEQ Certification and the PSLO Assessment Plan require annual monitoring and reporting. This will facilitate ongoing monitoring efforts by both the ESMA Curriculum Committee and the assessment subcommittee with independent

reviews to ensure that the program is meeting student, faculty and industry stakeholder needs.

10. The ESM Director position should be a full-time appointment as the program continues to expand, and the Co-Director position should have a more well-defined set of responsibilities, as well as an administrative stipend.

Assessment Method: The program recommended a full-time director in its strategic planning process. This recommendation parallels views expressed by the program's external Advisory Board. Assessment of this issue within EP is largely anecdotal, based on opinions and perceptions shared by faculty, staff, stakeholders, and CAFE administration.

Results: The current Director of EP, Dr. James MacLeod, has an administrative DOE of 40%, while maintaining an active research program in the Department of Veterinary Sciences and co-teaching the ESMA capstone course (EQM 490). Previous EP Directors have had administrative DOE as high as 70%.

Analysis of results and reflection: EP benefits greatly from an accomplished, dedicated, and highly productive staff of four individuals. The importance and quality of this current team cannot be overstated. They have enabled Dr. MacLeod to maintain his research laboratory and participate in the teaching program, both of which he deems highly beneficial to his leadership efforts and credibility among other faculty members.

Ongoing improvement actions: Optimization of EP Director DOE percentages will likely need to be considered on an individual basis going forward.

11. The ESM faculty should develop a University Scholars Program in conjunction with the graduate programs in Veterinary Science, Animal and Food Sciences, and Plant and Soil Sciences

Assessment Method: At this time, discussions regarding the development of a University Scholars program have been preliminary and informal.

Results: None to report.

Analysis of Results and Reflection: Although this issue is a clear opportunity, it is one that will require significant enthusiasm and support from the graduate studies programs housed in the individual academic departments mentioned in the recommendation and any other participating departments or units. At this time, a collaborative commitment along these lines has not gained traction. Nonetheless, even without a formal University Scholars program, ESMA graduates frequently go on to pursue graduate studies. In recent years,

ESMA alumni have enrolled in MS and/or PhD programs in all three of the programs mentioned in the recommendation. Additionally, we routinely have undergraduate students who complete their required EQM 399 internships in a research laboratory. For the 2019-2020 year, we had 9 students complete internships in CAFE research laboratories.

Ongoing Improvement Actions: Motivation within EP remains high to make progress on this recommendation. If and where this motivation is shared by any individual academic department(s), it is then anticipated that the EP Research Sub-committee would work with the department's Director of Graduate Studies together with Curriculum Committees from both EP and the department(s) to develop appropriate University Scholars Programs that can be submitted to the University Senate for review and hopefully approval.

12. The ESM program should promote the tremendous equine reproduction opportunities available to undergraduates at the Gluck Center and for students with an interest in the science of horses, other well-known research programs in Veterinary Science, Animal and Food Sciences, and Plant and Soil Sciences.

Assessment Method: This recommendation should probably read "member departments" instead of "Veterinary Science, Animal and Food Sciences, and Plant and Soil Sciences." The departments with which this program collaborates reach beyond VS, AFS, and PSS and also may well change over time. Additionally, it is important to note that disciplines and expertise recognized as points of excellence at UK extend beyond reproduction and also includes other programs such as genetics and genomics, parasitology, infectious disease, immunology, analytical chemistry, musculoskeletal science, nutrition, forages, racing and competition surface testing, economics, and others.

Results: Undergraduate course offerings from the Department of Veterinary Sciences now include Genetics of Horses (VS 307), Advanced Equine Reproduction (VS 500), Advanced Horse Genetics (VS 507), Literature in Veterinary Parasitology (VS 575), and assorted Special Topics in Veterinary Science (VS 597) offerings. Additional undergraduate classes taught by VS faculty are being contemplated.

Analysis of results and reflection: Faculty with a research emphasis are starting to engage in teaching programs to a greater degree, as reflected in Division of Effort (DOE) percentages.

Ongoing improvement actions: New course offerings are under discussion, with near-term progress interrupted to some extent by the COVID-19 pandemic.

Appendix Figure 1
UK Ag Equine Programs Organizational Diagram

