

Notes from MS AFLS Steering Committee Meeting
Monday, October 29, 2007 – 8:00 am
Honors Hall, AFLS Building

Luttrell called the meeting to order at 8:00 am and distributed a detailed agenda and draft policy statements for:

- a. Expectations of Students, Major Advisors and Advisory Committee Members
- b. MS AFLS Special Project or Thesis Requirements
- c. Guidelines for Selecting and Appointing a Student Advisory Committee
- d. Suggested Rotation of Core Classes

The committee considered admission issues and confirmed the existing concept of unconditional admission for students with 3.0 gpa on the last 60 hours (see attached agenda statement).

The committee also confirmed the existing concept of conditional admission for students with 2.5 to 3.0 gpa on the last 60 hours if the application is reviewed by the Steering Committee representative and academic department of question. Required conditions would be a written requirement of the conditional admission (see attached agenda statement).

The committee considered and approved the suggestion (see attached agenda) of counseling students with gpa on the last 60 hours less than 2.5 and recommending additional undergraduate course work.

Luttrell sought advice from the Steering Committee on the policy statements distributed. All were approved with the idea that Steering Committee members would further edit the documents and return them for a final revision. The revised documents are contained in the attached document. In summary, the Steering Committee approved:

- a. A statement of Expectations of Students, Major Advisors and Advisory Committee Members
- b. A statement of MS AFLS Special Project or Thesis Requirements
- c. A statement of Guidelines for Selecting and Appointing a Student Advisory Committee.

The Steering Committee also approved the concept of a defined course rotation that provides essential core courses for the different emphasis areas and the need to have these courses identified and published several semesters in advance (see attached and edited Suggested Rotation of Core Classes).

A discussion of two approved MS AFLS Seminars resulted in approval of the idea with two structure one-hour seminars (Seminar I – Overview of the Agricultural, Food and Life Sciences, and Seminar II – Skills for the Agricultural, Food and Life Science Scientist) planned for alternate year offering in the fall semester. Seminar II is tentatively scheduled for Fall 2008 via CIV delivery.

Agenda for MS AFLS Steering Committee Meeting
8:30 am, Monday, October 29, 2007, Honors Hall, AFLS Building

I. Update on recent program activities.

- a. Enrollment, graduation, admission, new courses, linkages to Continuing Education, thesis option, listserv, advisory committees, annual progress reports
- b. Formation of food safety advisory group (other similar groups)
 - i. Serve as discipline area advisors on admission and expectations
 - ii. Recommend curriculum and learning outcomes

II. Admission issues.

- a. Regular admission 3.0 gpa or higher, conditional 2.5-3.0, below 2.5???
- b. Additional undergraduate courses, availability of undergraduate course.
- c. Core science or agriculture requirements (math, chemistry, biology)
- d. Strong academic applicants without core science or agriculture background
- e. Lutt suggestion for steering committee guidance:
 - i. Students with less than 3.0 but greater than 2.5 gpa will be evaluated on an individual basis for admission. Steering committee representatives for the discipline area of interest to the student will evaluate the application and determine if conditional admission should be considered. A written expectation of the conditions will be filed with the MS AFLS Coordinator and included on the conditional admission by the Graduate School.
 - ii. Students with less than a 2.5 gpa (last 60 hours) will be counseled and evaluated by appropriate representatives of the discipline area of interest. Additional undergraduate course work will be suggested that would allow a student to be considered for conditional admission at a later date.
- f. How does demonstrated work experience impact admission?

III. Advice for Program Coordinator

- a. Student, major advisor and committee member expectations
 - i. Lutt suggestion – post statement on website (see attached draft statement)
- b. Expectations of special projects
 - i. Lutt suggestion – strongly encourage the development of a project proposal before work begins (see attached draft statement)
- c. Structure of student advisory committee
 - i. Lutt suggestion – require that students have on-campus co-major advisor with experience in directing M.S. students (see attached draft statement)
- d. Encourage scheduling a few courses at least two semester in advance
 - i. Lutt suggestion – see attached recommendation to Associate Dean

IV. Review Concept of Proposed MS AFLS Seminars

- a. Seminar I – Overview of the Agricultural, Food and Life Sciences
- b. Seminar II – Skills for the Agricultural, Food and Life Science Scientist

V. Other Issues Identified By Steering Committee

Expectations of Students, Major Advisors and Advisory Committee Members, MS AFLS Degree Program, University of Arkansas

Students

The MS AFLS program is a Master of Science degree that includes a wide breadth of agricultural, food and life sciences. Graduates of the program understand science and its application to agricultural, food and life science problems. Students are expected to demonstrate an understanding of science and a breadth of appreciation for the agricultural, food and life sciences in their course work, their special project or thesis, and their final oral examination.

Major Advisors

Major advisors of MS AFLS students work closely with their students to select a committee and organize an overall academic program that includes appropriate course work and a special project. The overall program should be developed by the second semester of enrollment and it should reflect academic interests of the student.

Appropriate projects should address issues or questions of mutual interest to the student and the advisor. This may be a component of ongoing research by the advisor, but it should clearly reflect a definable and independent topic area for the student. A written proposal of the project and a proposed program of study should be presented to the committee for review and approval, ideally in a formal committee meeting, before the project is initiated. A final paper describing the project should be reviewed and approved by the major advisor before it is submitted to the committee at least two weeks before the final examination. The initial proposal and final paper should reflect knowledge of scientific literature and a scientific approach to the chosen project. Topics of interest may range from highly empirical works to more descriptive and/or creative scholarly works.

Advisory Committee Members

Responsibilities of MS AFLS advisory committee member are those typical of all Master of Science committees. The committee should assist the student and the major advisor in developing and implementing the overall academic program. This will include but not be limited to serving as a source of advice and expertise for the student, critically evaluating and reviewing the proposed program of study, the final project paper or thesis, and the student's fulfillment of degree requirements.

Graduate School Requirements

Students, major advisors and advisory committee members are governed by the rules of the Graduate School. Specific definitions of Graduate School responsibilities for each can be found in the Graduate Catalog or on the Graduate School website at <http://www.uark.edu/depts/gradinfo/dean/handbook/intro.html>.

MS AFLS Special Project or Thesis Requirements

The MS AFLS degree program requires that students complete a 3 hr special project. The purpose is to foster student problem solving and understanding of science in an area of defined emphasis. The MS AFLS program does not offer thesis credits but accepts thesis credits from other academic departments as fulfillment of the special problem requirement. Students pursuing a thesis problem must meet the expectations and requirements of the academic department administering the thesis credit.

Requirements for special problem activities are determined by the student in consultation with the major advisor and advisory committee. There are no defined limits on project content or guidelines for acceptable work other than it must meet the approval of the student's advisory committee. Students should develop a proposal for the project and have it approved by the major professor and advisory committee in advance of the work, or by the second semester of enrollment. Students are limited to a maximum credit of 6 hr of special problems with no more than 3 hr for a specific problem. Additional special problem credits should address different definable problems.

The amount of time devoted to the special problem is also left to the discretion of the advisory committee, but ideally it would be reasonably associated with standard credit hours for university graduate credit. Certainly, different students work at different paces and progress toward a graduate project should not be based on simple time allocation. For comparative purposes, a 3 hr lecture course would include ~45 hours of contact time with the professor, and an additional one to two hours of independent study outside the classroom, perhaps more. Thus a 3 hr lecture course would involve as much as 135 hours of student work. A 3 hr lecture-laboratory course would involve as much as 150 hours of student work. This is not to suggest that special problems should be limited to a specific requirement of time, indeed a graduate education should require a high level of information synthesis and creativity regardless of the time required.

Understanding science, specifically the scientific method, and the breadth of agricultural, food and life sciences are overarching goals of the MS AFLS degree program. This does not mean that students and advisory committees are limited to empirical research in the special project. There are many forms of academic scholarship that demonstrate creativity and synthesis beyond simple experimentation. Knowledge of the scientific literature, appreciation for the scientific method and demonstrated ability to synthesize information and articulate its relevance to the agricultural, food and life sciences are guiding principles for the development of appropriate student special problem projects.

Guidelines for Selecting and Appointing a Student Advisory Committee MS AFLS Degree Program, University of Arkansas

The structure of MS AFLS student advisory committees is defined in the MS AFLS Program Description posted on the program's website (<http://bumperscollege.uark.edu/544.htm>).

“A graduate advisory committee is appointed for each student, consisting of a major professor from the department in which the heaviest concentration of agriculture courses will be developed. The major advisor is selected by the student and the Program Coordinator with the approval of the Dean of the Graduate School. At least two other committee members are selected by the student and the major professor with approval of the Dean of the Graduate School. At least one committee member should be from outside the department in which the major professor is located, and one member must be a member of the Steering Committee. A committee will include at least three members of the graduate faculty”.

Given the expanding scope of the MS AFLS degree and the growing involvement of off-campus faculty in the program, we further suggest that all MS AFLS graduate advisory committees include at least one on-campus co-major professor with prior experience in successfully guiding M.S. student projects. This is not to dilute the influence of the highly valued off-campus faculty that are providing significant support and growth to program. This resource of scientific expertise and interest in off-campus students has been historically underutilized and is now greatly enhancing the MS AFLS degree program. The suggestion of an experienced on-campus co-advisor is simply intended to provide all students with experienced advisors that understand and work closely with the Graduate School and the Bumper's College on a routine basis. The concept of co-major advisors is endorsed by the Steering Committee as a preferred approach to graduate advisory committee structure.

Suggested Rotation of Core Classes for MS AFLS Degree Program

- a. Assumes that students can complete emphasis areas in animal science, plant science, pest management and agricultural education within a 3-year cycle.
- b. Assumes that all food safety courses will be in addition but supplemental to this list. Additionally the distance courses listed here could be used in the food safety emphasis area, especially those listed as General Education.
- c. Assumes that each emphasis area would have a conceptual base for learning outcomes. For example:
 1. The three courses in Animal Science would not all be production courses. Ideally you would include courses that emphasize animal nutrition and animal reproduction in the sequence.
 2. The three courses in Plant Science would not all be different crop production courses. Ideally you would include courses that emphasize soils, plant physiology and plant genetics in the mix.
 3. The three courses in Pest Management would not all be from a single pest discipline, but would emphasize a balance of information from entomology, plant pathology and weed science.
- d. Each of the emphasis areas could, and should, develop additional courses to supplement these core courses. A capstone experience targeted at students with a specific emphasis area would be helpful.

Academic Year 1 --- Fall Semester

Animal Science Graduate Course I
General Education Graduate Course I
AFLS Seminar I

Plant Science Graduate Course II
General Education Graduate Course I

Academic Year 1 --- Spring Semester

Plant Science Graduate Course I
General Education Graduate Course II
AFLS Seminar II
On-Campus 3-Week Courses
Pest Management Graduate Course I
General Education Graduate Course III

Academic Year 2 – Summer Semester

On-Campus 3-Week Courses
Agricultural Education Grad. Course III
Animal Science Graduate Course I

Academic Year 3 – Fall Semester

Plant Science Graduate Course III
General Education Graduate Course II
AFLS Seminar I

Academic Year 1 -- Summer Semester

On-Campus 3-Week Courses
Agricultural Education Grad. Course I
Agricultural Education Grad. Course II

Academic Year 3 – Spring Semester

Pest Management Graduate Course III
General Education Course I
AFLS Seminar II

Academic Year 2 – Fall Semester

Pest Management Graduate Course II
General Education Graduate Course II
AFLS Seminar II

On-Campus 3-Week Courses
Animal Science Graduate Course III
General Education Course III

Academic Year 2 – Spring Semester

Animal Science Graduate Course II
General Education Graduate Course III
AFLS Seminar I
On-Campus 3-Week Courses

Academic Year 3 – Summer Semester

On-Campus 3-Week Courses
Agricultural Education Grad. Course IV
Plant Science Graduate Course I

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