

Update from Animal Science Teaching Section

A.S. Leaflet R2242

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Summary and Implications

Animal Science undergraduate admissions for each of the 2005 and 2006 academic years increased dramatically, impacting laboratory space, teaching demands and advising loads. Placement rates and starting salaries for graduates of animal and dairy science remained excellent.

Major curriculum revisions were implemented in calendar 2005. The primary result of the curriculum changes is a set of revitalized sophomore and senior species-related courses in animal production and enterprise management. These changes also led to major increases in enrollment from students from other departments in the College of Agriculture. Additionally, the changes increased significantly the number of agriculture majors electing animal science minors.

The new ISU Dairy nears completion and planning for a new multi-purpose animal pavilion is in the early stages. It is predicted that each of these building programs will also have a positive impact on enrollment. The college responded to the dramatically increased teaching/advising load in the department by granting increased teaching support for the coming calendar year.

Introduction

The past two academic years have brought significant increases in enrollment for Animal and Dairy Science. In fall 2004 undergraduate enrollment was 576; in 2005, enrollment was 616; and in 2006, enrollment increased to 659. Increased enrollment in animal and dairy science reflects a reasonably solid farm economy and confidence in the career market. Placement rate, reported for fiscal year 2006 (FY2006), remained strong at 95% for Animal Science and 100% for Dairy Science. Salary information estimated average starting wage at about \$35,000. Selected enrollment information for fall 2006 is included in Table 1.

Table 1. Fall 2006 Enrollment at Iowa State University.

Animal Science undergraduate majors	561
Dairy Science undergraduate majors	44
General Preveterinary students*	54
Total, department undergraduates	659
Animal Science graduate students	82
Total, department	741
Total undergrads, College of Agriculture	2,539
Total, Iowa State University	25,462

* Majors in animal or dairy science may declare preveterinary medicine options, but the department also manages the undeclared preveterinary medicine program (General Preveterinary Medicine) for the university.

Teaching Facilities Update

The building and planning processes for two major construction projects for the department are making good progress. Both projects are phases of the ISU Dairy project. Major funding came from the sale of the Ankeny Dairy. Phase 1 is the completion of the new ISU Dairy approximately one mile south of the Elwood Drive exit from Highway 30 in Ames. The education and research farm will house 450 milking cows. Most barns are well under construction and relocation from Ankeny is planned during late summer of 2007.

Phase two of the building project is the proposed new animal science pavilion. The pavilion project has moved to the architectural concept and initial budget proposal stage. The pavilion project is proposed as a multi-use facility that will accommodate classes, outreach activities, and animal events open to the public. The proposed site for the multi-use pavilion is on Mortensen Road east of the old ISU-Ames dairy site.

Enrollment and Career Placement

Career opportunities and job placement continued to be excellent for animal and dairy science graduates. The latest figures received from ISU Agriculture Career Services for FY2005 are illustrated in Table 2. The fall 2006 Agriculture Career Day at ISU was the largest in the nation with over 150 companies or organizations meeting with our students. It was a 'good news-bad news' situation, with a Memorial Union full of opportunities for our students, but a number of companies had to be turned away. During FY2006, 122 companies completed 889 formal interviews at Agriculture Career Services in Curtiss Hall. For more information on ISU's Agriculture Career Services program, please go to: www.career.ag.iastate.edu/

Graduates of Animal and Dairy Science continue to be highly selected for colleges of veterinary medicine and graduate schools. This past year 39 students entered professional programs. Many of these programs select primarily students who rank within the top 20% of ISU's graduating class.

The department graduated 12 Master of Science students; 6 entered employment and 5 continued in Doctor of Philosophy (PhD) or other professional programs. Ten students completed PhD programs; nine entered professional positions.

Iowa State University Animal Industry Report 2007

Table 2. Fiscal year 2005 undergraduate employment: results for animal science and dairy science students.

	Number:
Graduates	113
Placed or further education (95%)	106
Placed in agriculture careers	67
Employment within Iowa	41
Further education*	39
Estimated average starting salary	\$35,000

* "Further education" included graduate studies (MBA, M.S., Ph.D.); colleges of law, medicine, and veterinary medicine; or a second bachelor's program.

Impact of Changes in the Teaching Program

During the 2005-2007 catalog biennium, Animal Science began offering an expanded series of sophomore level species-oriented production science courses. Added to the curriculum were sophomore courses in beef, poultry, sheep, and swine. Courses already existed in companion animals, dairy, equine, and foods of animal origin. Animal Science majors must complete at least three of the 200-series courses. The philosophy behind these added courses is to offer basic production early in the student's career so that they begin to understand why the intense junior-level discipline course (such as breeding/genetics, reproduction, etc.) are such an important part of the student's education. The senior species courses follow with a specific focus on enterprise management.

The addition of these courses came at the same time that new student enrollment in Animal Science was increasing dramatically. Concurrently, enrollment in these courses by non-majors blossomed. In academic year 2005, the department offered 19 total sections of these 200-level courses. By fall 2006, it became apparent that section offering must be increased significantly. Starting in spring 2007, at least 30 sections of the sophomore courses will be offered. Additionally, the department was rewarded by the college for its success in recruiting. In 2007, the department will receive support to hire an additional permanent Lecturer in equine studies and, at least temporarily, four ¼ time teaching assistant positions. Any new faculty hires will also have a significant undergraduate teaching component in their assignment.

Discussion

During the past three semesters, dramatic changes in curriculum elements and tremendous progress in facilities development have combined to bring renewed excitement to the teaching programs in the Animal Science Department. Coupled with significantly increased enrollment in the freshman and sophomore classes, the department has had both rewards and challenges for its strong recruiting efforts. There is considerable need to add new faculty members to the teaching and advising core. To track new developments in animal science teaching programs, facilities, faculty and staff, please sign on to the following website:

<http://www.ans.iastate.edu/>