

Department of Agriculture
Illinois State University

Program Learning Objectives
(Updated Nov 2003)

B.S. Agriculture

The Department of Agriculture houses two undergraduate degree programs - Agribusiness and Agriculture. The Agribusiness program is comprised of three sequences: (a) Agribusiness Management, (b) Food Industry Management and (c) Horticulture. The Agriculture program is comprised of four sequences including (a) Agriculture Industry Management, (b) Agricultural Science, (c) Agriculture Education and. The Department has one graduate program - Agribusiness. That program has two sequences: Agribusiness and Agriscience. Learning objectives, for assessment purposes, have been developed specific to each degree programs.

The B.S. in Agriculture Program at ISU is designed to meet the needs to those who will enter careers in agriculture, both as agricultural producers and in agriculturally related fields. Upon completion of the integrated manufacturing systems sequence students will be able to:

The specific objectives of the B.S. in Agriculture Program are to educate students in the:

1. Basic principles and practices of the sciences of agricultural production, maintenance, breeding, and development of grain, soybean, and forage crops, and livestock and livestock products;
2. Sciences of management, utilization and conservation of soils and other resources which support agriculture enterprises; and
3. Engineering principles and operating practices of agricultural machinery, equipment, and instruments utilized in plant, animal, and soil management.

Graduates will be able to:

1. Demonstrate appropriate interpersonal skills and ethics necessary for successful employment;
2. Understand and communicate the relationship between agriculture and U.S. and world cultures/societies;
3. Apply the concepts and principles of science and technology for the needs of agriculture;
4. Manage resources for the production, processing, and marketing of food and fiber; and,
5. Utilize a knowledge base in agriculture to adapt to changes and challenges in present and future societies.

Feedback of Assessment Information for Sequence or Program Improvement

The Department of Agriculture has two undergraduate programs, with a total of seven sequences, and one graduate program with two sequences. As mandated, student learning objectives for each program were submitted to the Provost's Office on June 1, 2001.

The assessment methods described here have been and are used to assess our programs and student outcomes and to improve curriculum, instruction and learning. These represent the systematic and periodic activities engaged in by the Department of Agriculture and its faculty to collect qualitative and quantitative information that helps ascertain the extent to which the programs' curriculum, instruction and learning are successful.

The career and markets in the food and agricultural industries that our graduates enter are ever changing and evolving which requires the Department and its faculty to be vigilant. And, they are vigilant as they periodically assess the requirements of those markets --- and new markets --- and use the knowledge gained to improve curriculum, instruction and learning so that they are not just teaching "right" but, more importantly, they are teaching the "right stuff". Fortunately for our students and other stakeholders the faculty in the Department of Agriculture were all educated in Colleges/Schools of Agriculture where that attitude prevailed. It is in our tradition, culture and behavior to be focused on the potential of our students and their future prospects for successful lives.

The following activities will be used to collect information for and program improvement in any component of curriculum, instruction or learning objectives.

1. The faculty, individually and in interest groups, will periodically gather input from employers of graduates and interns, alumni and discipline based groups concerning what knowledge, skills and other attributes graduates need to be successful.
2. The following research report, published by the United States Department of Agriculture every five years, will be utilized to help faculty see major areas of careers where there is a shortage of qualified college graduates. [Most recent report: Employment Opportunities for College Graduates in the Food and Agricultural Sciences. CSREES-USDA, 1999.]
3. The faculty will use data collected as part of the regular institutional program assessment process, to whatever extent it is valuable, in ascertaining any changes necessary to improve any components of curriculum, instruction or learning objectives.
4. The CAST Outcome Assessment Panel Study information will be utilized to provide input to the Department on possible improvements in curriculum, instruction and learning objectives.
5. Summary of all assessment information will be included in an annual report.
6. The faculty teaching in each sequence are encouraged to hold at least one sequence meeting annually to discuss potential improvements in curriculum and instruction and indicated areas of concern.

7. The faculty teaching in each sequence are strongly encouraged to share their annual assessment report with a focused Advisory Committee and solicit input from all stakeholders on recommended improvements from employers and graduates.
8. The one faculty meeting, annually, and periodic summer retreats the faculty will discuss assessment information and any indicated improvements in curriculum, instruction and learning objectives for the future.
9. Faculty members will be vigilant and objective in gathering information from employers, current and potential, that may be useful in suggesting improvements in curriculum, instruction and learning objectives.
10. The Intern Evaluation form completed by the employers will include a question asking how well prepared the student was for the intern job.
11. Examination and performance activities in specific classes. Many instructional outcomes may be assessed from grade and/or evaluation of projects, activities, and exams in key classes in each program.
12. Other measures as determined by faculty.

Proposed improvements will be considered, evaluated discussed and voted on by department faculty at faculty meetings.

Evidence That The Assessment Of Student Learning And Stakeholder Feedback

Are Used To Improve Curriculum, Instruction And Learning

The Department of Agriculture in 2003 compared to 1998

Section I: Improvements in Sequences

Horticulture Sequence: In 2003 the minimum number of hours from selected ag courses is 12 as opposed to the minimum in 1998, which were 6.

Food Industry Management Sequence: Whole sequence is new in 2003. (not offered in 1998)

Food Industry Management Sequence: Awaiting approval at Senate level.

Agriscience Sequence in MS Program

2002 Curriculum Retreat: The goal of this retreat is to reach departmental consensus on the topics of the Food Industry undergraduate curriculum and the proposed Masters in Agriscience. This is your formal opportunity to give input/advice toward the future of these programs.

Section II: Courses Dropped to Improve the Curriculum since 1998

AGR 100, AGR 200, AGR 240, AGR 373, AGR 382

Section III: Courses Added to Improve Programs since 1998

AGR 203, AGR 254, AGR 257, AGR 271, AGR 311, AGR 317, AGR 383, AGR 395

Section IV: Improvements in Course Content

AGR 150- Principles of Agronomy formerly Introduction to Plant Science

AGR 201-can have Eng 101, and Com 110 conc. reg. req.

AGR 215-Farm Supply and Food Industry Management formerly Agribusiness Operations changed from 2 hours to 3 hours. Prerequisites-ACC 131 or AGR 216 or cons. inst. req.

AGR 394- Formerly AGR 396. Description of class added: pragmatic interfacing of learning theories, philosophy and guidance with instructional program in agriculture.

OTHER IMPROVEMENTS:

Taught soil classification and morphology (Fall 2003) as a special problems course to approximately 6 students to prepare them for possible careers with NRCS as soil conservationist/ soil scientists. See attached job announcement.

Hosted high school soil judging contest to

1. Expose high school students and vocational agriculture instructors to career opportunities in soil classification (see attached letters)
2. Recruit high school students for the ISU Department of Agriculture
3. Train our students currently enrolled in agricultural education

Illinois State University Crop Production And Marketing Contest The Department of Agriculture at Illinois State University has developed a crop production and marketing contest for undergraduate students that is designed to enhance learning through the application of classroom knowledge by developing and implementing crop production and marketing strategies on a 5-acre plot of land at the Illinois State University Farm near Lexington, IL. Teams have been organized and are currently planning their production and marketing strategies for next spring. The objective of the contest is the same as farming, to make the most money.

A Compendium of changes in some livestock production courses to meet market and student demands follows:

Changed the Agriculture Production Sequence to the Agriculture Industry Management (AIM) Sequence.

- Rationale: Employers told us our graduates needed more business courses in addition to production courses. Our students were not enrolling in the Ag. Production Sequence. Since the change, we have more students enrolled in the AIM sequence.

Increased the basic science requirement for the Agriculture Science Sequence.

- Rationale: Students in this sequence are preparing for advanced study in Veterinary Medicine or Master of Science/PhD discipline. Basic science requirements for entry into both Graduate School and Veterinary Medicine have increased.

Expanded the Agribusiness Masters Program to include an AgriScience Sequence and an Agribusiness Sequence.

- Rationale: To fulfill the Educating Illinois Mission.

Redesigned the content and titles of the two beef cattle management courses.

- Rationale: Fewer of our students are entering production management and more graduates are employed in the industries supporting production agriculture. Therefore, the change in course content reflects post-graduate career needs.