

PROGRAM OUTCOMES ASSESSMENT MODEL

Department of Horticulture and Landscape Architecture

Oklahoma State University, Stillwater, OK

Programs Assessed:

Degree of Bachelor of Science in Agricultural
Sciences and Natural Resources
Horticulture Major

Horticulture Option (Institutional Program Code = HORT)
Turf Management Option (Institutional Program Code = TURF)
Public Horticulture Option (Institutional Program Code = PHRT)

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This document describes an assessment model for undergraduate programs within the Horticulture major. Separate documents prepared by other faculty members outline assessment procedures for the Landscape Contracting major and the Landscape Architecture major, as well as for graduate programs.

Program Mission

The mission of the Horticulture, Turf Management, and Public Horticulture programs in the Department of Horticulture and Landscape Architecture is to provide well-educated, employable professionals through curricula incorporating strong liberal and professional education components and emphasizing advanced level courses both within the major and in supporting disciplines.

Program Goals

Four overarching goals for academic programs have been identified in the departmental strategic plan. Some specific desired student outcomes have been listed *in italics*.

1. To recruit increased numbers of high-quality students for our programs, and to retain students once they enter our programs.
2. To provide students with empathetic assistance in adjusting to the college experience, and correct guidance in meeting graduation requirements.

Qualified students will successfully complete their degrees in a timely manner. Students will be satisfied with academic advising in the department.

3. To provide effective, high-quality resident instruction in the latest technologies in our disciplines.

Graduates will be generally satisfied with academic instruction in the department. Graduates will have a strong background in basic sciences so that they understand the "why" as well as the "how" of horticulture.

4. To ensure that students possess the skills and experience necessary to meet the employment needs of our industries.

Graduates can compete successfully for positions in the horticultural industry. In addition, those who have identified graduate school as a career objective will have completed a curriculum appropriate for admission to graduate study. Graduates will have learned practical horticultural techniques, both through formal academic instruction and through experiential learning. Every graduate will have had "real-world" experience through an internship or other appropriate activity.

This document is concerned with program outcomes assessment. Goal 1 relates to providing the student base necessary for successful programs. While this clearly is an essential component of the total departmental teaching mission, it does not pertain directly to the assessment of program outcomes. Detailed objectives and methods of assessment for Goal 1 are provided in the departmental strategic plan for teaching, but are not included in this document.

Program Objectives for Goals 2, 3 & 4

Goal 2: To provide students with empathetic assistance in adjusting to the college experience, and correct guidance in meeting graduation requirements.

2.1. To have all our students express satisfaction on University-wide instruments measuring student satisfaction with undergraduate academic advising.

Assessment: Population assessed and time line will conform with the guidelines developed for the University-wide instruments.

2.2. To have all eligible students cleared for graduation when final deficiency lists are issued for each graduation date.

Assessment: Counts have been made of students on the College-issued graduation deficiency lists, beginning with Fall, 1992. With this information, the Department Undergraduate Advising Coordinator can note any chronic problems and devise solutions.

Goal 3: To provide effective, high-quality resident instruction in the latest technologies in our disciplines.

3.1. To provide a quality liberal and professional education which is competitive with the best Horticulture, Turf Management, and Public Horticulture programs in the nation.

Assessment:

3.1.1. College of Agricultural Sciences and Natural Resources (CASNR) Core Curriculum. Competency in the area of General Education is targeted for mid-level assessment on a university-wide basis. The CASNR has developed a core curriculum to further ensure the quality of its graduates. All students graduating from the CASNR now come under the guidelines of the CASNR Core Curriculum. Core curriculum courses must be passed as part of the overall graduation requirements. This is a measure of cognitive outcomes.

3.1.2. Grade point average (GPA) in the major. Since Fall, 1992, all graduating seniors have had a grade point average within the major (courses with a HORT prefix) calculated as a part of their graduation checks. Our specific objective is to have all of our graduates achieve at least a 2.5 GPA within the major. The GPA within the major is one measure of the quality and effectiveness of our courses. In addition, a 2.25 GPA or higher in courses listed in the Major Requirements column of our option sheets is a requirement for graduation. This includes core courses and controlled electives from other departments and other colleges within the university. Grade point averages are measures of cognitive outcomes.

3.1.3. Student survey of instruction. Present departmental and university policies require student evaluation of all lecture and laboratory courses. A standardized form is used. Results are analyzed by UTES and returned to the instructor, who then can make course improvements as indicated. While the data and comments generated by this evaluation are primarily for internal use, they are an integral part of the process of course improvement.

3.1.4. Intercollegiate competitions. A small group of students voluntarily enrolls in the Flower Judging and Design Team each semester. Another small group participates in the Horticulture Club Judging Team; this group begins formal practice sessions in November

of each year. These groups compete in regional and national events. Placement at these events can be used as one external measure of program quality. The faculty member who coaches the Flower Judging and Design Team also teaches the two Floral Design courses, and can use his knowledge of student strengths and weaknesses to adjust the curricula of these courses as needed. Performance in an intercollegiate judging contest is a measure of both cognitive and affective outcomes.

3.1.5. Exit interviews. All graduating seniors have been afforded an opportunity to participate in an exit interview with the Department Head since Fall, 1992. The Department Head has developed a standard list of exit interview questions. He also provides an opportunity for unstructured discussion. The Department Head passes on appropriate aggregate information to the departmental Undergraduate Horticulture Teaching Committee and to individual instructors for consideration of possible program improvements. Student anonymity is assured beyond the confines of the exit interview. This is a measure of affective outcomes.

Goal 4: To ensure that students possess the skills and experience necessary to meet the employment needs of our industries.

4.1. To ensure that students are receiving the subject-matter training that employers expect in a Bachelor's-level employee.

Assessment:

4.1.1. Internship. All Horticulture, Turf Management, and Public Horticulture students are required to participate in HORT 2010, Internship, for three credits (480 hours of work experience). Students complete a formal evaluation as part of the internship requirements, which provides an opportunity for input on how well they were prepared for their jobs. Students also present a seminar describing their internship experience, allowing further feedback to faculty and to fellow students. Finally, the employer/cooperator completes a formal evaluation of student competence. Part of this evaluation specifically asks, "How well was the student prepared for this job? Can you suggest course areas which would benefit this student?". The employer's evaluation form is subject to revision based on input from representative industry cooperators. All of this information will be used by the departmental Undergraduate Horticulture Teaching Committee to ensure that our curricula are relevant. Improvements may include addition or deletion of prerequisites, changes in the recommended sequencing of courses, changes in which courses are required, or changes in the content of courses. Both student and employer surveys also are returned to the student's advisor. One departmental seminar period is reserved each year for advisors to present the results of these surveys to the Undergraduate Horticulture Teaching Committee and the rest of the faculty. The seminar is devoted to evaluation of the internship program and to the appropriateness of the curriculum in preparing students for their work experiences. The first such seminar was held in Fall, 1992. Student evaluations are measures of cognitive outcomes; employer evaluations are measures of both cognitive and affective outcomes.

4.1.2. Commodity Advisory Committees. The Department Head meets periodically with these committees, which provide opportunities for direct input from industry as to perceived quality of the programs.

These meetings take place on an annual basis, or more frequently as required.

4.1.3. Alumni Surveys. The department has participated in these surveys since their inception by the Office of University Assessment. Program-specific questions have been developed. The results of these surveys have been shared with the department. Information from these surveys will be used for program improvement by the departmental Undergraduate Horticulture Teaching Committee in much the same way as information from the internship program. Alumni surveys are primarily measures of affective outcomes.

General Comments on Analysis and Interpretation

Most of the data to be collected will be tabulated by Dr. Brian A. Kahn, the Program Outcomes Assessment Coordinator (POAC) for Horticulture, Turf Management, and Public Horticulture. Original records will be kept by the POAC and in the departmental office. Data can be converted to graphical forms (charts, histograms, etc.) for presentation as required. Note that reports to the Oklahoma State Regents for Higher Education will need to be concise and are not to include raw data. Examples of items likely to be included in these reports include results of intercollegiate competitions and summarized comments from exit interviews, internship evaluations, advisory committees, and alumni and employer surveys. The frequency of reporting results from a particular component of the model will be determined as the model evolves, but will conform to any guidelines issued by the Office of University Assessment.

Tracking of students is essential to successful implementation of the program outcomes assessment model. Individual advisors are responsible for obtaining the following information and communicating it to the POAC following the close of each semester (i.e. in January and in May):

1. Numbers and source institutions or departments of transfer students entering the programs.
2. Counts of active advisees at the end of the subject semester [to be broken down by student category (Freshman, Sophomore, etc.)], and of inactive advisees, as a measure of retention.
3. When an advisor receives the final grade report for a graduating student, he/she calculates the grade point average in the major and communicates this to the POAC.

A form (Form 1) has been developed to facilitate collection of this information. Note that each advisor is responsible for completing Form 1 twice a year. Form 1 is designed to be used internally by the POAC for tracking students and to facilitate the collection of information; it is not a document to be used in reports to external assessors. Advisors filled out Form 1 for the first time at the close of the Fall, 1992 semester. It has been periodically revised and it is working well.

Student Involvement in the Assessment Process

The POAC will meet with undergraduate students in Horticulture, Turf Management, and Public Horticulture during scheduled student

internship seminar periods. This is an opportunity to provide information on program assessment and to solicit suggestions for improvement of the assessment process and the programs. Student input also can be provided during the annual Internship Assessment Seminar conducted by departmental faculty advisors; during exit interviews; and on alumni surveys.

Feedback

Information on how results of the program outcomes assessment process will be communicated to those responsible for instructional and curricular improvements is provided under each goal. The POAC (Dr. Kahn) will be responsible for compiling most of the data, as noted. Dr. Kahn also serves as the Department Undergraduate Advising Coordinator and the Department Undergraduate Horticulture Teaching Coordinator, and thus is in a position to act directly on this information. Dr. Kahn, along with the Department Head, will play a key role in communicating results of the assessment program to faculty. These two individuals also will act as leaders in identifying appropriate improvements and in planning for implementation of these improvements.

Time Line

The initial model was approved on 2 October 1992 and overall implementation began immediately. Assessment has been on-going since that time. The present document is the second revision of the model.