Department of Horticulture and Landscape Architecture

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) Prepared by: Brian A. Kahn, Ph.D. Time Period Covered: Spring, Summer, and Fall Semesters, 2002

Assessment Method: As a measure of advising outcomes, counts were made of students on the Collegeissued graduation deficiency lists.

Numbers Assessed: 14; 2; and 9

Analyses and Findings: For Spring 2002, eleven students graduated and three had deficiencies. Two students were short due to one or more failures in core courses (both had failed BIOC 2344). A third student had not scheduled a required upper-division communications course, despite guidance from his advisor. For Summer 2002, two of the Spring deficiencies carried over (the third student was not put up for graduation). For Fall 2002, six students graduated and three had deficiencies. One student was planning to complete two courses by correspondence but did not do so. The other two students each withdrew from, and/or failed, two core courses.

Changes/Use of Results: Advisors are asked to discourage students from trying to complete graduation requirements via correspondence courses due to a history of graduation deficiencies resulting from the use of such courses. However, students do have the right to choose this option. Problems are most likely to result when a student leaves for a job and attempts to finish the last course or two by correspondence. Students have several options for meeting the organic chemistry requirement. BIOC 2344 is a relatively difficult course, but no more so than some other required courses. The Department Undergraduate Horticulture Teaching Committee (UHTC) believes a basic knowledge of organic chemistry is important to our majors.

Assessment Method: All graduating seniors had a grade point average (GPA) within the major (courses with a HORT prefix) calculated as a part of their graduation checks.

Numbers Assessed: 17

Analyses and Findings: Our objective is to have all graduates achieve at least a 2.5 GPA within the major. Fifteen graduates met the goal; one Horticulture and two Turf students did not (all of these had major GPA's > 2.3). The overall mean GPA in the major was 3.36 for graduating Horticulture students, 2.93 for graduating Turf Management students, and 3.78 for graduating Public Horticulture students.

Changes/Use of Results: Students appear to be motivated and generally are performing well in their majors. In an effort to further raise student quality, a 2.25 GPA has been required in the Major Requirements section of the option sheets (includes several non-HORT-prefix courses) starting with the 2000-2001 option sheets. These new sheets are phasing in as new students begin matriculation.

Assessment Method: Students participated in intercollegiate competitions.

Numbers Assessed: (Teams only) 3 and 7

Analyses and Findings:

- A team from our Horticulture Club participated in the Association of Collegiate Branches (ACB) Horticulture Judging Contest, held during the Southern Region, American Society for Horticultural Science (ASHS) meeting on 2-5 February 2002 in Orlando, Florida. Our team

(2 PHRT majors, a HORT major, and one former minor in Horticulture) placed first overall; first in greenhouse floral and foliage plant judging; second in vegetable judging and in fruit and nut judging; and third in woody ornamentals judging. One HORT major was the highest overall individual and one PHRT major was the third highest overall individual. Two other HORT majors who participated as individual competitors earned individual awards in greenhouse floral and foliage plant judging.

- Our Floriculture Crop Judging and Design Team participated with teams from ten other schools in the 61st Annual National Intercollegiate Floral Crop Quality Evaluation and Design Competition, held on 3-5 April 2002 at the University of Wisconsin - River Falls. Our team placed seventh overall in judging. Four students each won individual awards in specific floral arrangement categories (one first, one third, one fourth, and one fifth).

Changes/Use of Results: The faculty member who coaches the Floriculture Crop Judging and Design Team also teaches our Floral Design courses. He has used his knowledge of team strengths and weaknesses to adjust his curricula as appropriate. The Horticulture Club judging team showed strength in multiple horticultural crops.

Assessment Method: Five students graduating in 2002 participated in an exit interview process. The HORT and TURF options were represented.

Numbers Assessed: 5

Analyses and Findings: The students rated their OSU education in their major as follows: 2-above average, 3-excellent. Suggestions for improvement included more turf-specific classes and more hands-on experience in labs. All five students felt that our faculty were helpful and the quality of teaching was good. Advising ratings were: 1-above average, 4-excellent.

Changes/Use of Results: A new course called "Turfgrass Integrated Pest Management" (PLP 3663) was developed and added as a requirement for the Turf Management degree starting with the 2001-2002 option sheets. Several students are taking advantage of HRT 1163, "Bilingual Horticultural Communications", which is now being offered on the Stillwater campus via distance education from OSU-Oklahoma City.

Assessment Method: All Horticulture, Turf Management, and Public Horticulture students are required to participate in HORT 2010, Internship, for three credits (480 hours of work experience). Outcomes were assessed through student and employer evaluations, student seminars, and a specific departmental internship assessment seminar.

Numbers Assessed: 18

Analyses and Findings; Changes/Use of Results: See appended notes from the annual Departmental Internship Assessment Seminar; these notes were distributed to all Horticulture teaching faculty.

COMMENTS

The overall Horticulture and Turf Management curricula appear to be meeting the needs of students and employers. The Public Horticulture curriculum is relatively new and is just beginning to produce graduates. Possible program improvements identified during the assessment process will be considered at an upcoming meeting of the Undergraduate Horticulture Teaching Committee. Assessment results also are an integral part of departmental strategic planning.

Notes from Annual Departmental Internship Assessment Seminar: 27 January 2003

Compiled by Brian A. Kahn, Program Outcomes Assessment Coordinator (POAC) Horticulture, Turf Management, and Public Horticulture programs Oklahoma State University, Stillwater

Six faculty members provided input, including all members of the Department Undergraduate Horticulture Teaching Committee (UHTC) and the POAC. There were 18 student interns in 2002 from the three options being assessed. Six of the students interned outside of Oklahoma, including one in Denmark.

<u>Progress from 2001</u>: 1) Cooperators and students had repeatedly expressed a need for training in Spanish in previous assessments. We now have a class from OSU-OKC called 'Bilingual Horticultural Communications' being offered at OSU-Stillwater by distance education. 2) Student attendance at internship seminar presentations has been increased by the creation of two distinct "seminar fests," one for students specializing in Turf Management and another for those in Horticulture and Public Horticulture. Both seminars were tied to meetings of the respective student clubs. Twenty students and five faculty members were present to hear eight student speakers at the HORT/PHRT seminar fest. 3) A new course, 'Turfgrass Integrated Pest Management', came on line in 2002, in part in response to cooperator input that more training was needed in this area.

Notes from 2002:

* Cooperators noted several areas where more student training would be desirable. Three cooperators mentioned the need for training in Spanish. At least three cooperators stated the students were well prepared with horticultural subject matter but needed to work on communication and "people skills"; this comment also appeared in 2001. Students wanted more training in pest management and in irrigation system maintenance. Action: Availability of the 'Bilingual Horticultural Communications' course has already been mentioned. It is difficult to acquire "people skills" in a classroom setting; this is one motivation for requiring students to do an internship. We are considering adding a personnel management/human relations course to our curriculum. Most of our students already take one course in Business Communications, but many have not completed this course before they do their internship. Three students specifically mentioned that they gained experience in personnel management and customer relations; one called this "the best part of my internship." Students often have not completed all the pest management courses on their option sheets before doing the internship. A lecture on the certified pesticide applicator program has been added to Greenhouse Management (HORT 3113), which is a required core course for HORT and PHRT. The addition of the Turfgrass Integrated Pest Management course has already been mentioned. We are working with the Department of Biosystems and Agricultural Engineering to try to get more horticultural applications into the existing Irrigation Principles course. Some of the practical, hands-on skills that the students want need to be learned on the job; again, this is one reason we require students to do an internship.

Notes from Annual Departmental Internship Assessment Seminar: 27 January 2003

* At least two cooperators wanted an outline of what the intern was expected to learn. <u>Action</u>: We have had a golf internship task checklist available for several years. We now have a second checklist available for nursery/garden center internships. Both checklists were produced through joint student/faculty efforts. These should be available on line as well as in print in 2003.

* There were two complaints of lack of communication between faculty advisors and internship cooperators. <u>Action</u>: Most advisors call the cooperators; however, at times the cooperators are on the job and do not get to interact with the faculty member on the telephone. Site visits are common within Oklahoma (this is rarely possible with out-of-state cooperators). Advisors were encouraged to make an effort to communicate with cooperators.

* One Floriculture cooperator encouraged the use of field trips to floral wholesalers and growers in the curriculum. <u>Action</u>: Such field trips have been added to Greenhouse Management. Field trips also are part of Commercial Flower Production and Marketing (HORT 4313), which is being offered in 2003 (first time in several years due to a faculty vacancy).

* At least two students complained about the monthly reports. One cooperator also wanted a place on the monthly reports to document hours worked by the intern. <u>Action</u>: Originally, HORT 2010 required biweekly reports. A change was made to monthly reports largely to reduce paperwork for cooperators. Students are encouraged to keep a daily journal of their activities. One student wrote that the reports were a plus because they helped him to organize his thoughts. One cooperator actually wanted to return to biweekly reports. We anticipate no changes in the monthly reporting requirements. However, we will modify the monthly report form on a trial basis for 2003 to provide documentation of hours worked.

Positive comments were noted from students, cooperators, and faculty internship supervisors. Students reported that internships connected theory with practice and provided direction towards a specific career. At least two students indicated they expected to be offered permanent positions by their cooperators upon graduation. Cooperators generally felt that students were enthusiastic and well prepared, and several specifically noted that they wanted interns from our programs in 2003. Overall, the internship program continues to be a success.