

Department of Horticulture and Landscape Architecture
Horticulture Undergraduate Program
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Degree Program(s) Assessed	Assessment Methods	Number of Individuals Assessed
B.S., Agricultural Sciences and Natural Resources Horticulture Major Options: Horticulture (HORT), Turf Management (TURF), Public Horticulture (PHRT)	1. As a measure of advising outcomes, counts were made of students on the College-issued graduation deficiency lists.	18 (HORT) 5 (TURF) 10 (PHRT)
	2. 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.	23
	3. Students participated in intercollegiate competitions.	(Teams only) 4 and 4, plus three individuals
	4. Six students graduating in 2003 participated in an exit interview process. All three options (HORT, TURF, PHRT) were represented.	6
	5. 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.	20

Analysis and Findings

1. For Spring 2003, twelve students graduated and six had deficiencies. Two students experienced delays in transferring in credits (one graduated in Summer 2003 and the other graduated in Spring 2004). Three students had academic deficiencies (upper-division grade point averages < 2.0 and/or failure in core courses). One student had been planning to complete two courses by correspondence since 2002 but had never done so. For Summer 2003, two students graduated, and three of the Spring deficiencies carried over. For Fall 2003, nine students graduated and one had deficiencies (due to an "I" grade in HORT 4990 and lack of one correspondence course).
2. Our objective is to have all graduates achieve at least a 2.5 GPA within the major. Twenty graduates met the goal; one did not in each of the three options (Horticulture, Turf Management, and Public Horticulture), but all of these had major GPA's > 2.3. The overall mean GPA in the major was 3.42 for graduating Horticulture students, 2.94 for graduating Turf Management students, and 3.23 for graduating Public Horticulture students.
3. A four-person 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 1-4 February 2003 in Mobile, Alabama. Three other HORT students also competed as individuals. Our team (2 PHRT majors and 2 HORT majors) placed first in fruit and nut judging and third in greenhouse floral and foliage plant judging. Three students also earned individual awards: second and third place in fruit and nut judging, and third place in woody ornamental judging.

Our Floriculture Crop Judging and Design Team participated with teams from ten other schools in the 62nd Annual National Intercollegiate Floral Crop Quality Evaluation and Design Competition, held on 2-4 April 2003 at New Mexico State University. Our team (which included four HORT majors) placed eighth overall in judging, while one student was in the top ten in judging potted plants. This student also won a third place individual award in a specific floral arrangement category.

4. The students rated their OSU education in their major as follows: 3-average, 1-above average, 2-excellent. The two TURF students wanted more turf-related classes. Two students (one TURF and one HORT) were dissatisfied with the Irrigation Principles course (not taught in our department); they wanted hands-on practice and more information on horticultural systems. The three HORT students were satisfied with the scientific and applied components of the HORT curriculum. Several students commented that our faculty were helpful and the quality of teaching was good. Advising ratings were: 2-average, 1-above average, 2-excellent.
5. Eight faculty members provided input, including all members of the Department Undergraduate Horticulture Teaching Committee (UHTC) and the POAC. There were 20 student interns in 2003 from the three options being assessed. Three of the students interned outside of Oklahoma, including one in Germany and one in Greece. A fourth student split time between a primary internship in Oklahoma and a supplementary experience in Illinois.

Use of Assessment Results

1. Reasons for delays in transfer of credit are being investigated; at least one appeared to have resulted from lack of initiative by the affected student. 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.
2. 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. Most of our students now are on these option sheets.
3. 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.
4. 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. Efforts continue to creatively add more turf-specific information to the TURF curriculum. At present, we have only one teaching faculty member with specific expertise in turfgrass science. The Irrigation Principles course is an on-going concern, but we do not control the class. Options being studied include utilizing some material from OSU-OKC and developing a modular course specific to landscape/turf irrigation.
5. Progress from 2002: 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. More of our students are taking advantage of this course, and there were fewer comments from 2003 cooperators about the need for student training in Spanish compared to previous years. 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-five students and five faculty members were present to hear seven student speakers at the HORT/PHRT seminar fest. 3) Communication between faculty advisors and internship cooperators was improved compared to 2002. 4) One cooperator from 2002 wanted a place on the monthly reports to document hours worked by the intern. In response, the monthly report form was modified for 2003 to provide documentation of hours worked. The new form seemed successful.

Notes from 2003: * A few students (primarily in Landscape Contracting, a major that is assessed separately) complained that they had to give up their own business in order to do an internship. The general issue of students working in their own family business for the internship was raised. Action: The written "Requirements and Policies for HORT 2010" (syllabus) states: "Another objective of HORT 2010 is to enhance the educational experience of the student by broadening his/her horizons beyond familiar surroundings. No credit will be granted to a student working for one of his/her family's businesses." A lively discussion ensued. Occasionally, a situation has occurred where a

student had an opportunity to do an internship where a direct supervisor was not available. In such cases, a "mentor" (perhaps another business person or even a faculty member) was assigned to oversee the internship and to provide guidance. This model could in theory be applied when a student worked for themselves or for their family business. However, the broadening aspect would be lost, and there are accountability issues if a family member (or the self-employed student) is keeping track of hours worked. Also, several alternatives are available for students who claim a hardship in completing a traditional internship. These include opportunities in Stillwater for place-bound students; the option to do an internship at times other than the summer (such as accumulating hours during the week or on week-ends while school is in session in an approved work situation); the option to accumulate internship hours by working part-time for an outside firm (perhaps over more than one year) and part-time for oneself or one's family; and (with proper approval) substitution of a student special problem (HORT 4990) for HORT 2010. Landscape Contracting students also have the option to do their internship through a different course (LA 3010). With all these alternatives, most if not all situations should be accommodated without changing the present policy. We will continue to monitor this issue and will revisit it at the next internship assessment seminar.

* Two situations were noted where students had a poor experience due to a problem with their supervisor and/or a preponderance of menial tasks. Action: Advisors have been steering students away from situations where difficulties have been encountered in the past. Students sometimes have chosen convenience and/or a "prestige" name (such as Karsten Creek golf course in Stillwater), even if the work situation has not been the best. Students also network among themselves (especially in Turf Management), and word gets around quickly about good and bad situations.

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. One student was offered (and accepted) a permanent position by their cooperator upon graduation, and another is being recruited by her cooperator. Cooperators generally felt that students were enthusiastic and well prepared, and several specifically noted that they wanted interns from our programs in 2004. One specific comment about a Turf Management student was that "his knowledge and work ethic put him miles ahead of everyone else." Overall, the internship program continues to be a success.

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. One exit interview comment, "Plant propagation is a course that will be used in most areas of horticulture", provided validation for that class being included in the core for the minor in Horticulture. 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.