

## Turfgrass Online Educational Program Developments

A. J. Turgeon

Professor of Turfgrass Management

By the end of 2005, we completed the eighth year of online certificate programs in Turfgrass Management, including a total of eight courses (Table 1) and more than 2700 enrollments, including students from North and South America, Europe, Asia, and Africa. This year also saw the initiation of the online Bachelor of Science (B.S.) Degree Program in Turfgrass Science and preliminary development of a ninth course (TURF 435, Turfgrass Nutrition, 4 credits, Schlossberg) to expand the program's offerings. Initial response to the online B.S. Degree Program has been tremendous, with special interest shown by graduates of the two-year Golf Turf Management Program who are granted 30 credits (for successful completion of that program) toward meeting the 120-credit requirement for the degree.

Table 1. Turfgrass Courses Currently Offered through the Penn State World Campus.

Course #	Course Title	Credits	Instructor(s)
TURF 230	Turfgrass Pesticides	1	Watschke
TURF 235	The Turfgrasses	3	Turgeon
TURF/HORT 238	Weed Control in Turf and Ornamentals	3	Watschke & Kuhns
ENT 317	Turfgrass Insects	3	Heller
PPATH 412	Turfgrass Diseases	3	Uddin
TURF 425	Turfgrass Cultural Systems	3	Watschke
TURF 434	Turfgrass Edaphology	3	McNitt
TURF 436W	Case Studies in Turfgrass Management	3	Turgeon

The methods employed in teaching online turfgrass courses were initially developed by the instructors, and then refined during successive offerings based on feedback from students. Cooperative research with faculty and students from the Instructional Systems Program in the College of Education at Penn State have resulted in some of the advanced instructional techniques employed in these courses. The courses tend to be highly interactive, requiring regular (almost daily) participation in lessons and practical exercises by both students and instructors. Response to the courses and to the programs (basic and advanced certificates, B.S. degree) has been overwhelmingly positive.

In the future, we hope to be able to offer an online Master of Turfgrass Management (M.T.M.) degree for recipients of the B.S. degree who wish to expand their knowledge and skills in the management of turfgrass systems.