

## **SPORTS and URBAN TURFGRASS MANAGEMENT**

Turfgrass management is quickly becoming a profession requiring highly skilled personnel that can respond to individual clientele needs in a home landscape situation or, more commonly, in managing a turfgrass surface in a sports facility. Expertise in turfgrass management is an essential part of operations with college and university athletics, city parks systems and golf courses, and professional teams. Managers are responsible for maintenance and grooming of football, soccer, softball and baseball fields, as well as parks and golf courses. A manager must be competent in turfgrass and soil science, proper irrigation practices, pest control, budgeting of resources, personnel management and diplomacy. The demands are rigorous, but the rewards usually match such demands. Currently, there is an unsatisfied national demand for graduates with these skills and interests.

### **The Program**

The Department of Plant Sciences offers a four-year curriculum in sports and urban turfgrass management. The degree requires that students participate in at least one internship experience. These internships are an enriching process to the academic education and skills that students develop at North Dakota State University and greatly enhance their job opportunities after graduation.

### **Career Opportunities**

**Golf Course Superintendent** -- Nationally, between 200 and 300 golf courses are constructed each year in the United States and its territories. This pace is expected to continue throughout this decade and well into the next. Starting as an assistant, it is possible for a graduate to become a full-fledged golf course superintendent in three to five years. Starting salaries range from \$28,000 to \$35,000, with the national average of head superintendents reaching more than \$80,000. When the course is a private country club, usually a generous benefit package is included along with a house on the course property.

**Sports Turf Management** -- There are approximately 16,000 high school, 2,200 college/university and 800 professional sports facilities providing numerous job opportunities for turf managers. According to the Sports Turf Manager's Association (STMA), their membership exceeds 2,000. The average salary of sports turf managers is about \$44,000. Sports fields include baseball, football, soccer, lacrosse, rugby, lawn bowling and cricket.

**Lawn Care Operator** -- Lawn care operators comprise the largest single group of potential career opportunities for the graduate with more than 6,000 companies in the United States servicing millions of American lawns at the residential, commercial and institutional levels. The most current estimate of expenditures in this area of turfgrass management is pegged above \$17 billion. Often these companies are known as turn-key operations where the company is involved in property design, installation, landscape construction and landscape maintenance. Several companies at this capacity operate nationally, while others operate on a regional basis. Finally, for the entrepreneur, opportunities abound to establish one's own business.

**Facility Managers** -- The curriculum is inclusive enough for the graduate to move into facility management if the desire or opportunity arises. Golf course superintendents could move into managing a resort where golf courses, swimming pools and tennis courts are inclusive along with a dining facility.

### **Scholarships**

Although no specific scholarships have yet been designated for sports and urban turfgrass management, the student enrolled in this program would be eligible for some of the scholarships the department currently has under endowment. As interest and demand increase for this new program, additional scholarships are expected. Contact the Department of Plant Sciences or the College of Agriculture, Food Systems, and Natural Resources for more information.

### **Turf Club**

The goals of the Turf Club are to provide students with opportunities to share information, connect with the turf industry, gain real world experience and broaden their knowledge. The club organizes field trips, topic discussions and presentations by guest speakers. Other activities include attending regional and national turf conferences, community service and fundraising.

### **High School Preparation**

Turfgrass management requires the ability to work with others as well as independently, and also requires good organizational and communication skills. Additionally, a very good understanding of basic math, chemistry, physics and plant biology is essential in this field. Computers are used in all walks of life, and sports and urban turfgrass management is no exception. Comfort working with computers and a range of software is needed.

### **The Facilities**

Loftsgard Hall, a state of the art facility, houses the Department of Plant Sciences, which includes classrooms, research labs and student learning centers. Other facilities include a greenhouse newly constructed to be used for turfgrass research and teaching, as well as a variety of trial plots on the NDSU campus and at Research and Extension Centers in Dickinson and Williston.

## Sample Curriculum

### General Education Requirements Credits

First Year Experience	
AGRI 189 - Skills for Academic Success .....	1
Communication	
COMM 110 - Fundamentals of Public Speaking .....	3
ENGL 110, 120 - College Composition I, II .....	3, 3
English Upper Level Writing Course .....	3
Quantitative Reasoning	
STAT 330 - Introductory Statistics .....	3
Science & Technology	
CHEM 121, 121L - General Chemistry I and Lab .....	3, 1
PLSC 315, 315L - Genetics and Lab .....	3, 1
Science and Technology Elective .....	3
Humanities & Fine Arts .....	6
Social & Behavioral Sciences	
ECON 201 - Principles of Microeconomics <i>or</i>	
ECON 202 - Principles of Macroeconomics .....	3
Social and Behavioral Sciences Electives .....	3
Wellness .....	2
Cultural Diversity .....	-
Global Perspective	
ECON 201 - Principles of Microeconomics <i>or</i>	
ECON 202 - Principles of Macroeconomics .....	-

**Total .....** 40

### Major Requirements Credits

PLSC 210, 211 - Horticulture Science and Lab .....	3, 1
PLSC 323 - Principles of Weed Science .....	3
PLSC 341 - Land Bid and Contracting .....	2
PLSC 375, 375L - Turfgrass Management and Lab .....	3, 1
PLSC 381 - Sports Turf Operations .....	3
PLSC 468 - Golf Course Irrigation I .....	2
PLSC 469 - Golf Course Irrigation II .....	1
PLSC 491 - Seminar .....	1
PLSC 496 - Field Experience .....	2
PPTH 324 - Introductory Plant Pathology .....	3
PPTH 457 - Landscape Plant Pathology .....	3
<b>Total .....</b>	<b>29</b>

### Related Requirements Credits

AGRI 150 - Agriculture Orientation .....	1
ACCT 102 - Fundamentals of Accounting .....	3
AGEC 242 - Introduction to Agriculture Management <i>or</i>	
AGEC 244 - Agriculture Management .....	4 <i>or</i> 3
BIOL 150, 150L - General Biology I and Lab .....	3, 1
BOT 380 - Plant Physiology .....	3
ENT 350 - General Entomology .....	3
MATH 103 - College Algebra or higher .....	3
SOIL 210 - Introduction to Soil Science .....	3
SOIL 322 - Soil Fertility and Fertilizers .....	3
Plant Science Electives .....	5
<b>Total .....</b>	<b>33-34</b>

### Recommended Electives Credits

ADFH 140 - Introduction to Hospitality Industry .....	3
ADFH 141 - Tourism and Travel Management .....	3
ADFH 151 - Design Fundamentals Studio .....	3
ASM 373 - Tractors and Power Units .....	3
ASM 374 - Power Units Lab .....	1
LA 351 - Landscape Design .....	3
PHYS 211, 211L - College Physics I and Lab .....	3, 1
PHYS 212, 212L - College Physics II and Lab .....	3, 1
PLSC 150 - Introduction to Horticultural Therapy .....	3
SOIL 217 - Introduction to Meteorology and Climatology .....	3
<b>Total .....</b>	<b>17-18</b>

**CURRICULUM TOTAL .....** 128

**This sample curriculum is not intended to serve as a curriculum guide for current students, but rather an example of course offerings for prospective students. For the curriculum requirements in effect at the time of entrance into a program, consult with an academic advisor or with the Office of Registration and Records.**

### For Further Information

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