

UNDERGRADUATE DEGREE

# Turfgrass Management









### WHAT IS "THE RUTGERS ADVANTAGE"?

- ▶ Nationally recognized turfgrass program
- World-class faculty
- ▶ Focused turfgrass curriculum
- Low student/teacher ratios
- Strong faculty commitment to students

- ▶ Assistance with Internship placements
- Excellent scholarship opportunities
- ▶ Flexible degree options
- Applied learning opportunities
- Outstanding educational facilities

#### **UNDERGRADUATE DEGREE OPTIONS**

A world of opportunities will open up to you when you pursue a degree in Turfgrass Management at the School of Environmental and Biological Sciences at Rutgers University. The undergraduate program in turfgrass management at Rutgers leads to a degree in Plant Science with an option in Horticulture and the Turf Industry. The Turfgrass Management curriculum is designed for students who are seeking a strong background in applied turfgrass science and entry into the turf industry upon graduation. Students who want a deeper understanding of the basic sciences can select a research option which is excellent preparation for graduate school.

### WHY TURFGRASS MANAGEMENT?

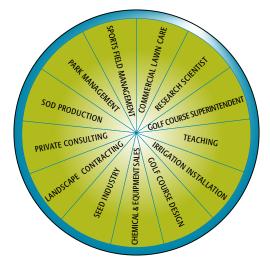
Turfgrass is a multi-billion dollar industry in the United States. Excellent turfgrass management skills are essential for the maintenance of golf courses, parks, athletic fields, and aesthetically pleasing landscapes for businesses, homes, and communities. However, opportunities in turfgrass management do not stop there; they expand well beyond the world of sports into park planning, wildlife preservation, and home and commercial landscape management.

A major in turfgrass management would appeal to people with an interest in environmental enhancement and the design, creation and preservation of quality recreational areas. Students in this major will also gain an understanding of the importance of turf in land use and development. The demand for turfgrass managers with a four-year degree continues to increase. Golf, for example, has grown in popularity over the past decade. In addition, the turfgrass industry associated with home lawns, parks, athletic fields, schools, and industrial parks employs thousands of people in NJ and throughout the country. The demand for sound turf management information creates a constant need for well-trained turfgrass managers.

#### WHAT ARE THE CAREER OPPORTUNITIES?

The world of turf management is vast and is constantly changing and expanding. Take a look at the Career Opportunities Chart below for a list of some exciting job possibilities

in this field.



If you don't like the idea of spending your day working on a beautiful golf course or at a finely-manicured sports facility, there are many career options for students with training in turfgrass management. You might consider a job in athletic field management, the lawn care industry, pest management, private consulting, or in the sale of turfgrass maintenance equipment, fertilizers, seed, or sod. How about consulting for an environmental firm or working with a landscape architect? Or, maybe you would like to write for a trade magazine or work at an academic institution or industry affiliated research facility. Whatever your choice, the opportunities are there if you have the necessary education and skills.

# HOW MUCH MONEY CAN YOU MAKE AS A TURFGRASS PROFESSIONAL?

In general, entry-level salaries currently range from \$40,000 to \$75,000, however, experienced career professionals can earn well over \$100,000 per year.

Here are a few examples:

- ▶ Golf course Superintendents can make over \$65,000, with high end salaries of well over \$150,000.
- Research scientists command salaries from \$60,000 to more than \$100,000 annually.
- Landscape contractors earn \$50,000 to \$80,000 annually.
- ► Irrigation contractors earn \$40,000 to \$70,000 annually.
- Lawn care professionals earn from \$40,000 to \$100,000 or more.









#### WHY RUTGERS?

The turfgrass program at the School of Environmental and Biological Sciences at Rutgers University is one of the world leaders in turfgrass research, teaching, and outreach. The Center for Turfgrass Science at the School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station has over 25 faculty members working in turfgrass science. This is more than double the number of faculty dedicated to turfgrass science at most universities. Our faculty are accessible and work directly with students to enhance their overall learning experience. Moreover, these educators bring a range of expertise and experience to the classroom that simply cannot be found elsewhere. This means that students in our turfgrass program receive personalized instruction from world-renowned experts. In addition to the many innovative courses in plant science, environmental science, and biology, the turfgrass option offers a wide range of courses that are entirely devoted to turfgrass science and new courses are being offered every few years.

The Rutgers Turf Program prepares students for a variety of jobs in turfgrass management. Students can expect to learn everything from plant biology, entomology, pathology, and soil science to maintaining athletic fields and golf courses. The challenging curriculum in turfgrass management and hands-on experience at the School of Environmental and Biological Sciences prepares individuals for a successful career in the ever changing "green" industry.

The School of Environmental and Biological Sciences at Rutgers University is located at a major center of turfgrass culture, with more golf courses and landscape turf within a 100-mile radius of New Brunswick than any other location in the world. New Jersey also offers great cultural diversity, with major metropolitan areas such as New York City and Philadelphia within a short drive or train ride. Moreover, outstanding outdoor activities abound throughout the region, with highlights such as the New Jersey shore and the Appalachian Mountains all close by.

# WHAT KIND OF EDUCATIONAL EXPERIENCE WILL I GET AT RUTGERS UNIVERSITY?

The Turfgrass Center's faculty spans many disciplines, with expertise in turfgrass breeding, management, physiology, pathology, entomology, weed science, soil science, and molecular biology, just to name a few. Foran Hall, a large research and teaching facility, houses the Center for Turfgrass Science and the Department of Plant Biology and Pathology. This state-of-the-art building features teaching classrooms, research laboratories, and the Rutgers University Agricultural Library. Also available for turfgrass research and teaching is the Ralph Geiger Educational Center (a 5,000 sq. ft. facility housing classrooms, a computer lab, a small library, and the Rutgers Plant Diagnostic Laboratory), a 27,000 sq. ft. computer controlled greenhouse facility, and three turf research farms spanning more than 300 acres and a range of soil and climatic conditions. Rutgers has the largest collection of cool-season turfgrasses in the world and our research farms serve as outdoor classrooms, providing students with unparalleled hands-on experience.

Students majoring in turfgrass management are encouraged to spend each summer working in the turfgrass industry or with Rutgers faculty through our Summer Internship Program. Our









excellent rapport with the private industry, sports facilities, and golf courses throughout the world allows us to provide students with an extensive list of internship opportunities. In addition to making the classroom more relevant, the internship experience will be invaluable as you seek permanent employment.

At Rutgers, we also provide students with an opportunity to conduct turfgrass research. The Turfgrass Center offers a unique opportunity for undergraduates to participate in laboratory and field research. In this program, participants develop a research proposal in an area of personal interest. Such one-on-one interactions with a faculty member outside the classroom provides invaluable practical experience, new skills, and enhanced job prospects. Research internships are provided to qualified students on a competitive basis.

#### TURFGRASS MANAGEMENT CURRICULUM: A TYPICAL 4 YEAR PROGRAM

	FALL SEMESTER	SPRING SEMESTER	SUMMER
FRESHMAN	<ul> <li>General Biology</li> <li>General Chemistry</li> <li>Math (i.e., Precalculus)</li> <li>Expository Writing</li> <li>Freshman Seminar</li> </ul>	<ul> <li>General Biology</li> <li>General Chemistry</li> <li>Introduction to Experimentation</li> <li>Multicultural Elective</li> <li>Human Behavior Elective</li> </ul>	Summer Co-op/ Internship
SOPHOMORE	<ul> <li>Introduction to Horticulture</li> <li>Geology and Geology Lab</li> <li>Planning &amp; Planting in the Residential Environment</li> <li>Microeconomics</li> <li>Humanities/Art Elective</li> </ul>	<ul> <li>Plant Science</li> <li>Soils and Water</li> <li>Landscape Management &amp; Maintenance</li> <li>General Microbiology</li> <li>International Studies Elective</li> </ul>	Summer Co-op/ Internship
JUNIOR	<ul> <li>Turf Management</li> <li>Application of Irrigation, Math &amp; Equipment in Turf*</li> <li>Agribusiness Marketing</li> <li>Public Speaking or Technical Writing</li> <li>General Plant Pathology</li> </ul>	<ul> <li>Soil Management for Sports and Landscape Applications*</li> <li>Plant Physiology</li> <li>Agribusiness Management</li> <li>Agric. Entomology &amp; Pest Management</li> <li>Political Processes Elective</li> </ul>	Summer Co-op/ Internship
SENIOR	<ul> <li>Soil Fertility</li> <li>Weeds: Impact and Management*</li> <li>Plant Genetics</li> <li>Special Problems in Plant Science</li> <li>Environmental Ethics</li> </ul>	<ul> <li>Turfgrass Pest Science*</li> <li>Fine and Sports Turf*</li> <li>Jr./Sr. Colloquium</li> <li>Basic Statistics</li> <li>Humanities/Art Elective</li> </ul>	

<sup>\*</sup> Turfgrass Pest Science and Fine and Sports Turf are offered odd numbered years. Soil Management for Sports and Landscape Applications, Weeds: Impact and Management, and Application of Irrigation, Math & Equipment in Turf are offered even years only.

#### WHAT ABOUT FINANCIAL AID?

Rutgers University offers a comprehensive program of federal and state grants, loans and work-study jobs, based on financial need and scholastic achievement. In addition, numerous student scholarships, grants and awards are available to students majoring in Turfgrass Management. More than \$90,000 in financial aid is awarded annually to turfgrass students at Rutgers University by the New Jersey turfgrass industry. The turfgrass industry in New Jersey also works closely with the turfgrass program at Rutgers University, providing a great avenue for future career opportunities

## **HOW DO I GET MORE INFORMATION?**

The Center for Turfgrass Science is located at: Rutgers University School of Environmental and Biological Sciences 59 Dudley Road Foran Hall, Room 366 New Brunswick, New Jersey 08901-8520.

Think this major is for you? Check out our website: turf.rutgers.edu.

If you still have questions or would like to arrange a campus visit, contact us through turf.rutgers.edu/education/undergraduate.html.

Come see for yourself all that the Rutgers Turfgrass Program has to offer!





Photo credits: *Cover*: iStockphoto; *page 2*: (from top to bottom) Nick Romanenko, iStockphoto, James Murphy; *Page 3*: Emily Merewitz; Page 4: (from top to bottom) Pradip Majumdar, Brad Park, John Inguagiato; *Page 5*: Brad Park; *Page 6*: (from top to bottom) Jack Rabin, iStockphoto, John Inguagiato; *Page 7*: iStockphoto.

