



Course Number and Title: AGS 224 Turf and Athletic Field Maintenance

Campus Location:

Georgetown

Effective Date:

2020-51

Prerequisite:

AGS 101, AGS 123, AGS 136

Co-Requisites:

none

Course Credits and Hours:

3.00 credits

2.00 lecture hours/week

2.00 lab hours/week

Course Description:

This course introduces specific sports field design, installation, and maintenance. Topics include baseball, softball, soccer, and football fields. Upon completion, students are able to perform specific tasks in layout, field marking, and preparing for tournament play.

Required Text(s):

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:

None

Schedule Type:

Classroom Course

Disclaimer:

None

Core Course Performance Objectives (CCPOs):

1. Describe principles of sports turf culture. (CCC 1, 2, 5, 6; PGC TMT 1, 2, 3, 4, 5)
2. Explain design methods of various fields and facilities: baseball, softball, football, soccer, lacrosse, field hockey, and track and field facilities. (CCC 1, 2, 5, 6; PGC TMT 1, 2, 3, 4, 5)
3. Identify factors that result in the quality and safety of sports facilities. (CCC 1, 2, 4, 5; PGC TMT 1, 2, 3, 4, 5)
4. Prepare athletic fields for competitive sports. (CCC 1, 2, 5, 6; PGC TMT 1, 2, 3, 4, 5)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Describe principles of sports turf culture.
 1. Discuss essentials of sports turfgrasses, including selection, soil establishment, and planting techniques.
 2. Describe fertility and fertilizer requirements.
 3. Discuss aeration, thatch, mowing, irrigation, drainage, turfgrass stresses, and the use of chemicals.
2. Examine design methods of various fields and facilities: baseball, softball, football, soccer, lacrosse, field hockey, and track and field facilities.
 1. Describe design and construction of athletic facilities.
 2. Compare reconstruction and renovations of various facilities.
 3. Describe maintenance and management of various facilities.
 4. Discuss rules and regulations of sports fields.
3. Identify factors that result in the quality and safety of sports facilities.
 1. Identify hardness and traction evaluation equipment.
 2. Discuss aesthetic appeal and field qualities.
 3. Explain player safety and spectator safety measures.
4. Prepare athletic fields for competitive sports.
 1. Layout an athletic field for baseball, softball, soccer, and football.
 2. Use equipment needed to manage an athletic field complex.
 3. Create a maintenance schedule needed for tournament play.
 4. Safely operate equipment needed to apply logo designs on an athletic field.

Evaluation Criteria/Policies:

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Final Course Grade:

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Exams (4-6) (summative) (equally weighted)	20%
Project/Serial Problems (summative) (equally weighted)	20%
Formative Assessments (Assignments/Activities/Quizzes)	30%
Labs (summative) (10-12) (equally weighted)	30%
TOTAL	100%

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

AGSAASTMT

1. Apply knowledge of landscape plants and grasses to cultivate and maintain golf course landscapes.
2. Implement preventive maintenance programs for greens, fairways, and equipment.
3. Operate irrigation systems for maximum efficiency.
4. Prepare soils for laying sod and seeding greens, tees, and fairways.
5. Operate turf equipment for maximum field efficiency.
6. Apply business principles and strategies to the turfgrass industry.

Disabilities Support Statement:

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.