



Course Number and Title: AGS 136 Turf Equipment Operations

Campus Location:

Georgetown

Effective Date:

2020-51

Prerequisite:

ENG 090 or ENG 091 or EAP 093, AGS 101, AGS 105, SSC 100 or concurrent

Co-Requisites:

None

Course Credits and Hours:

3.00 credits

2.00 lecture hours/week

2.00 lab hours/week

Course Description:

This course covers the operation and maintenance of turf equipment, mower units, top dressers, core aerators, slit seeders, and miscellaneous turf equipment. Proper handling of equipment and safety are covered with emphasis on understanding equipment costs and shop area organization.

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:

Students will be required to have personal protective equipment (PPE) such as safety glasses and closed toe shoes.

Schedule Type:

Classroom Course

Disclaimer:

None

Core Course Performance Objectives (CCPOs):

1. Demonstrate safe operation of turf equipment, following manufacturers' suggested practices. (CCC 1, 2, 3, 4; PGC TMT 1, 4, 5, 6; LOH 1)
2. Properly maintain turf equipment, following manufacturers' recommendations. (CCC 1, 2, 3, 4; PGC TMT 1, 4, 5, 6; LOH 1)
3. Arrange equipment storage areas for best management and safety practices. (CCC 1, 2, 3, 4; PGC TMT 4, 5; LOH 1, 4)

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. Demonstrate safe operation of turf equipment, following manufacturers' suggested practices.
 1. Explain all safety rules for maintaining and operating equipment.
 2. Demonstrate proper handling of turfgrass equipment.
 3. Distinguish between safe and unsafe mowing practices.
2. Properly maintain turf equipment, following manufacturers' recommendations.
 1. Identify proper mowing techniques to minimize wear and compaction.
 2. Demonstrate proper procedures before, during, and after maintenance checks on all types of turf equipment.
 3. Complete a general maintenance schedule for a piece of turf equipment, including associated costs.
 4. Explain the calibration, maintenance, and operation of various types of sprayers and spreaders.
3. Arrange equipment storage areas for best management and safety practices.
 1. Create an inventory list of equipment parts needed for operation.
 2. Assemble materials needed for equipment maintenance.
 3. Practice weekly shop upkeep, including organization and cleanliness for best management and safety operations.
 4. Create an operating budget.

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%
Projects (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):**AGSAASLOH**

1. Safely operate landscape equipment.
2. Demonstrate basic greenhouse management functions to include environmental controls, scheduling, production, pest control, nutrient management, and marketing of floriculture crops.
3. Demonstrate effective customer service skills for horticulture business success.
4. Apply business principles and strategies to the landscape and ornamental horticulture industries.
5. Explain the importance of soil and water management to the landscape and ornamental horticulture industries.
6. Design and install a finished landscape plan.

AGSAASTMT

1. Select preventive maintenance programs for greens, fairways, and equipment.
2. Apply basic installation techniques for irrigation systems.
3. Explain the importance of soil and water management to the turfgrass management industry.
4. Safely operate turf equipment.
5. Apply business principles and strategies to the turfgrass industry.
6. Cultivate and maintain golf course landscapes.

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.