Instructor: Roger D. Havlak
Email: rhavlak1@angelo.edu
Phone: 325/245-1518
Office: N/A
Office Hours: N/A

Course Information

Course Description
Class Times: Monday (6 pm to 9 pm)
Class Location: CHP Bldg.: Room 205

This course provides an in-depth study of all components relating to proper turfgrass and outdoor resource management. Topics include: understanding plant parts, soils management, turfgrass selection and establishment, sports field construction, importance of mowing, cultivation practices, irrigation and nutrient management, turfgrass mathematics, calibrations and applications, budget concerns, park maintenance, tree issues, and pest management (weeds, diseases, and insects). Approximately 20 to 30 percent of this course will be field trips to locations for hands-on demonstrations of proper turfgrass and outdoor resource maintenance practices.

Course Credits
3 credit hours

Prerequisite and Co-requisite Courses
None
Prerequisite Skills
Accessing Internet websites, using ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint is required for this course.

Program Outcomes
Upon completion of the program of study for the Turfgrass and Outdoor Resource Management Course, the graduate will be prepared to:

Student Learning Outcomes

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Assignment(s) or activity(ies) validating outcome achievement:</th>
<th>Mapping to Program Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify turfgrass species and soils for Texas landscapes</td>
<td>Periodic exams, field trips, class discussions, and assigned report</td>
<td>Class attendance, exam grades, participation in class discussions, and assigned report</td>
</tr>
<tr>
<td>Understand proper cultural practices for turf and landscape management</td>
<td>Periodic exams, field trips, class discussions, and assigned report</td>
<td>Class attendance, exam grades, participation in class discussions, and assigned report</td>
</tr>
<tr>
<td>Create water budgets for turf and landscape sites</td>
<td>Periodic exams, field trips, and class discussions</td>
<td>Class attendance, exam grades, and participation in class discussions</td>
</tr>
<tr>
<td>Understand best management practices for turf and landscape sites</td>
<td>Periodic exams, field trips, class discussions, and assigned report</td>
<td>Class attendance, exam grades, participation in class discussions, and assigned report</td>
</tr>
</tbody>
</table>

Course Delivery
This is a face-to-face course with learning resources and supplemental materials provided in class.

Required Texts and Materials
None
Recommended Texts and Materials

1. *Turfgrasses: Their Management and Use in the Southern Zone.* Richard L. Duble

Technology Requirements

To successfully complete this course, students need to be skilled with online resource research and use of a standard calculator.

To participate in one of ASU’s distance education programs, you need this technology:

- A computer capable of running Windows 7 or later, or Mac OSX 10.8 or later
- The latest version of one of these web browsers: internet Explorer, Firefox, or Safari
- Microsoft Office Suite or a compatible Open Office Suite
- Adobe Acrobat Reader
- High Speed Internet Access
- Ethernet adapter cable required (wireless connections can drop during tests and Collaborate sessions)
- Webcam

Refer to Angelo State University’s Distance Education website for further technology requirements: [Angelo State University's Distance Education Website](#)

Topic Outline

1. Introduction to turfgrass and outdoor resource management
2. Identification of plant parts; turfgrass growth and development
3. Turfgrass selection (warm season grasses)
4. Turfgrass selection (cool season grasses)
5. Soil selection and management
6. Trials and tribulations of building a sports complex
7. Turfgrass establishment/over-seeding with cool season grasses
8. Mowing management
9. Proper cultivation practices
10. Irrigation management—soil/plant/water relationships
11. Irrigation management—water sampling and analysis
12. Irrigation management—irrigation audits
13. Irrigation management—water budgets
14. Nutrient management—soil sampling/analysis, turfgrass requirements, and types of fertilizers
15. Weed management in turfgrass
16. Disease management in turfgrass
17. Insect management in turfgrass
18. Turfgrass mathematics—surface area measurements
19. Turfgrass mathematics—sprayer calibration/application/environmental issues
20. Turfgrass mathematics—pesticide application calculations
21. Budgets: Are you prepared to justify?

**Communication**

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

**Grading**

**Evaluation and Grades**

Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent/Points of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam #1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam #2</td>
<td>20%</td>
</tr>
<tr>
<td>Exam #3</td>
<td>20%</td>
</tr>
<tr>
<td>Reports/Notebooks</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance/Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
**Grading System**

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

- A = 90.00-100 points
- B = 80.00-89.99 points
- C = 70.00-79.99 points
- D = 60.00-69.99 points
- F = 0-59.99 points

**It is the responsibility of the student to contact the instructor prior to any exam or assignment date if the student is unable to be present to complete the exam/assignment.**

**Teaching Strategies**

Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (beyond the materials and lectures presented in the course) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material and clinical experiences with their peers.

**Assignment and Activity Descriptions**

1. Each student will be responsible to complete and present a one-page report on a turfgrass species that is used in the United States. The report will describe the species, history of the species, and proper cultural practices.

2. A comprehensive, outlined notebook is required that includes all handouts, exams, and any material provided or completed for this course.

**Assignment Submission**

All assignments will be submitted to the instructor during the class period it is due.
Late Work or Missed Assignments Policy

Due dates and times for assignments will be provided. Failure to submit your assignments on the assigned date will result in a 10-point deduction for each day after the posted deadline. No papers or postings will be accepted more than one week past the assigned due date.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Student Responsibility and Attendance

All students are expected to attend class. If you are going to be late or absent, you are required to contact the instructor to inform him of your anticipated absence. Deductions in the attendance/participation scores will be assessed based on excused (reasonable excuse) versus unexcused (no contact) absences as well as participation in class.

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Health and Human Services adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.
Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

**Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 *Grading Procedures* for more information.

**Plagiarism**

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.
Student Absence for Observance of Religious Holy Days
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Copyright Policy
Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Syllabus Changes
The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student’s responsibility to look for such communications about the course on a daily basis.

Title IX at Angelo State University
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: www.angelo.edu/incident-form
Face to face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.boone@angelo.edu
Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit: www.angelo.edu/title-ix.

**Course Schedule**

**Week 1 (January 13)**

Review syllabus  
Introduction to turfgrass and outdoor resource management

**Week 2 (January 20)**

NO CLASS--Holiday

**Week 3 (January 27)**

Identification of plant parts; turfgrass growth and development  
Turfgrass selection (warm season grasses)  
Turfgrass selection (cool season grasses)

**Week 4 (February 3)**

Soil selection and management  
Trials and tribulations of building a sports complex

**Week 5 (February 10)**

Turfgrass establishment/over-seeding with cool season grasses  
Mowing management  
Proper cultivation practices  
Review for Exam #1
Week 6 (February 17)

**Exam #1  
Irrigation management—soil/plant/water relationships  
Irrigation management—water sampling and analysis

Week 7 (February 24)

Irrigation management—irrigation audits  
Irrigation management—water budgets  
Nutrient management—soil sampling/analysis, turfgrass requirements, and types of fertilizers  
Review for Exam #2

Week 8 (March 2)

**Exam #2

Week 9 (March 9)

**SPRING BREAK

Week 10 (March 16)

Field trip:  
Demonstrations for turf/tree identification, soils, mowing, cultivation, etc.  
Demonstrations of irrigation audits  
Soil and water sampling

Week 11 (March 23)

Weed management in turfgrass  
Disease management in turfgrass  
Insect management in turfgrass

Week 12 (March 30)

Turfgrass mathematics—surface area measurements  
Turfgrass mathematics—sprayer calibration/application/environmental issues  
Turfgrass mathematics—pesticide application calculations  
Review for Exam #3
Week 13 (April 6)

Field Trip: Demonstrations of surface area measurements
            Spreader and sprayer calibration/application/environmental issues
            Troubleshooting turf issues, pesticides, sampling techniques, etc.

Week 14 (April 13)

**Exam #3
Budgets: Are you prepared to justify?

Week 15 (April 20)

Field Trip: Park systems and sports field management; infields and equipment maintenance

Week 16 (April 27)

**Turfgrass Reports/Presentations
**Comprehensive Course Notebooks Due
Review of course material, demonstrations, field trips, and final exam

Week 17 (May 4)

**Final Exam (Comprehensive)

Grading Rubrics

Student Evaluation of Faculty and Course

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences. Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.
1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Learning to apply course material (to improve thinking, problem solving, and decisions)
3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
4. Acquiring skills in working with others as a member of a team
5. Developing skill in expressing oneself orally or in writing
6. Learning how to find, evaluate, and use resources to explore a topic in depth
7. Developing ethical reasoning and/or ethical decision making
8. Learning to analyze and critically evaluate ideas, arguments, and points of view
9. Learning to apply knowledge and skills to benefit others or serve the public good
10. Learning appropriate methods for collecting, analyzing, and interpreting numerical information

End of Syllabus

2. https://www.angelo.edu/catalogs/
4. https://www.angelo.edu/services/disability-services/
5. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
7. https://www.angelo.edu/dept/writing_center/academic_honesty.php
8. https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of