

College of Science and Engineering Technology

Department of Agricultural Sciences

Course Syllabus

PLSC 2375 – Turfgrass Science

Fall Semester 2017

3 credit hours (2-2 Format)

LOCATION/TIME:

Lecture: Pirkle 310, Tu & Th 11:00-11:50 a.m.

Lab: Pirkle 310 & various locations, Thursday 1:00 – 2:50 p.m.

INSTRUCTOR:

Robert A. Lane, Professor

Pirkle 450A, phone 294-1225

e-mail: blane@shsu.edu

Office hours: posted on door. E-mail for alternate appointment

TEXT:

Turfgrass Science and Management - 5th ed., Robert Emmons, Delmar
Reference: PGA Turfgrass Management, Linkages to Golf Course Design, Maintenance, and Environmental Sustainability, Level 2 Pre-seminar.

All PowerPoint presentations used in lecture will be made available through BlackBoard after the lecture has been presented in class. You should take adequate notes in class to supplement any lecture materials presented in class. Readings from various sources will be assigned, both in class and through announcements on BlackBoard. Students are expected to keep up with all assignments and expected to use the internet to find additional information related to the subjects being discussed in class.

COURSE OBJECTIVES:

This course is designed to place emphasis on the scientific principles of turfgrass culture that will provide Professional Golf Management students with a sound basis for communicating with course superintendents to formulate management decisions and methods of operation. Students should become familiar with growth and development of the grass plant and turfgrass communities. While a number of turfgrass species and situations other than those found on golf courses will be discussed, due emphasis will be directed toward the game of golf and specific applications to golf courses. Proper species and cultivar selection and maintenance practices under various uses and environments will be stressed.

COURSE OUTLINE:

- I. Introduction
 - A. Careers in Turf
 - B. Turf Quality
- II. Laboratory Safety
- III. Growth and Development
 - A. The Grass Plant
 - B. Germination and Seedling Development
 - C. Leaf Formation
 - D. Turfgrass Stems
 - E. Tillering
 - F. Turfgrass Roots
- IV. Turfgrass Species
 - A. Climatic adaptation
 - B. Characterization of Turfgrasses
 - C. Criteria for Selecting Turfgrass Species
- V. The Turfgrass Environment
 - A. Atmospheric
 - B. Edaphic
 - C. Biotic
- VI. Primary Cultural Practices
 - A. Mowing
 - B. Fertilization
 - C. Irrigation
- VII. Supplementary Cultural Practices
 - A. Cultivation
 - B. Rolling
 - C. Topdressing
 - D. Turf Colorants
- VIII. Pest Management
 - A. Weed Control
 - B. Disease Control
 - C. Insect Control
 - D. Nematode Control
 - E. Large Animal Pests
- IX. Propagation
 - A. Site Preparation
 - B. Turfgrass Selection
 - C. Planting Procedures
 - D. Post-planting Culture
 - E. Renovation
 - F. Temporary Winter Turfs

SELECTED LABORATORY TOPICS:

- 1. Laboratory Safety
- 2. Golf Course Maintenance
- 3. Turfgrass Species Identification
- 4. Weed Identification & Control
- 5. Roadside Turf Management
- 5. Sprayer Calibration
- 6. Athletic Turf Management
- 7. Grounds Maintenance
- 8. The Lawn Maintenance Industry
- 9. Turf Fertilization

COURSE EVALUATION:

This course consists of 2 hours lecture plus 2 hours laboratory per week. Three lecture exams will be given, of which one is the final, covering approximately equal amounts of material and carrying equal weight. The lecture exam average will comprise 65% of the course grade. The laboratory portion of the course grade (35%) will be derived from a combination of lab attendance/participation (15%), lab exercises (15%) and homework assignments (5%).

RECOMMENDED OR REQUIRED READINGS:

Reading assignments covering materials in the text and on the internet, or copies of reference materials posted to BlackBoard or handed out in class will be made regularly. Students are

expected to keep up with readings and will be held responsible for them on examinations or other assignments.

ATTENDANCE POLICY

Regular and punctual attendance to class and lab is expected. My attendance policy will be in accordance to that established by the university. Attendance will be recorded daily. Please do not make a habit of arriving to class late.

MAKEUP POLICY

There will be no makeups for missed laboratory or homework assignments. The lowest lab grade will be dropped. Lecture exam makeups will be administered at the end of the semester, but only with a valid and verifiable excuse.

ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. Any students found to engage in dishonest activities related to this class may receive a grade of F for the course.

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: “a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...” A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the University. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance are expected to visit with the Office of Services for Students with Disabilities located in the Counseling Center. They should then make arrangements with their individual

instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center.

VISITORS IN THE CLASSROOM:

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office

THE WRITING CENTER:

The Sam Houston Writing Center, located in Farrington 111, is open from 8 a.m. until 7 p.m. Monday through Thursday, 8 a.m. until 3 p.m. on Friday, and 2 - 7 p.m. on Sunday. Writing tutors will work with you at any stage of the writing process (brainstorming, generating a draft, organizing a draft, or revising a draft) for any written assignment. The Writing Center operates on an appointment system, so please call (936) 294-3680 to schedule a session with a writing tutor. Skype sessions are available for distance students, and a tutor is available at the University Center. See website for more information: www.shsu.edu/wctr.

CELL PHONE USAGE:

Unless one is expecting an urgent call or communication, I expect cell phones to be silenced and put away during class/lab. I consider text messaging and other means of communicating with others while class is in session to be distracting and disrespectful. If an urgent contact is expected, please let me know before class. Inattention to this request may result in expulsion from class.