FOR 4360 Urban Forest Drones  
Spring 2024

Instructor: Dr. David L. Kulhavy, Laurence C. Walker Distinguished Professor  
Office: Forestry Building, Room 203F; Phone: Work - 468-2081  
Office Hours: 8:00 am to 9:30 am and 4:30 pm to 5:00 pm Daily or By Appointment

Meeting Times: Lecture/Presentation: TBA, second eight weeks of the semester

Course Description: 3 Credit Hours; Planning, establishment, protection, and management of individual trees and forest systems within an urban environment.

Course Objectives: The principles of the Urban Forestry Intern will be discussed in presentations of Instagram and Powerpoint dedicated towards the preparation of a comprehensive Urban Forest Management Plan for Stephen F. Austin State University, Texas. The plan will be presented in Fall 2023 as a seminar for urban forestry.

Program Learning Outcomes: FOR 4360 is not a BSF core requirement course. FORS 460 is a required course for urban forestry students enrolled in the general forestry major with an emphasis in urban forestry.

The course shall meet the following BSF forestry learning outcomes:
1. Demonstrate understanding and competency of forest ecology and biology;
2. Demonstrate understanding and competency in the measurement of forest resources;
3. Demonstrate understanding and competency in managing forest resources;
4. Demonstrate understanding and competency of forest resource policy, economics, and administration.
5. Demonstrate understanding and competency in oral and written communication skills.

Items #1 - #4 above are required by the Society of American Foresters, the program’s accrediting agency.

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<tr>
<th>B.S. Forestry Program Learning Outcomes</th>
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<td>Proficiency Levels</td>
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<td>FORS 4360</td>
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1. A – Advanced – course supports Program Learning Outcome by providing students with transitional, high level topic-specific information, activities, and opportunities that enable the students to apply their critical thinking and tactical skills to resolved increasingly challenging strategic situations.
**Student Learning Outcomes:** Basic tree morphology and physiology will be reviewed (PLO1). Concepts and techniques in the diagnosis of individual trees exposed to abiotic and/or biotic stressors will be presented and practiced (PLO2). Methods to protect existing trees, and maintain and improve tree vigor will be discussed (PLO3). Knowledge of urban forestry as the foundation for developing and implementing sound urban forest management programs will be emphasized throughout the course; this will be coupled with the use of Geographic Information Systems in urban planning (PLO4). Professional ethics as it relates to the practice of urban forestry will be discussed (PLO4). Oral and written laboratory reports will be assigned to improve communication skills (PLO5).

**Course Goal:** Students will be introduced to planting methods, cultural practices and protection techniques for individual trees in an urban environment. Knowledge of the science of arboriculture is necessary to be effective in managing individual trees and forests in an urban setting.

**Topics Covered in For. 460 Urban Forest Intern Related to Urban Forestry, SFASU**

SFASU Gardens  
Southern Botanical, Dallas, Texas  
History of Urban Forestry/Distribution and Ownership of the Urban Forest 5%  
Functions and Values of the Urban Forest 5%  
Urban Forest Environment 5%  
Pictometry and Urban Forest Evaluation 5%  
Tree Hazard Assessment and Management 10%  
Street Tree Inventories and Valuation 5%  
iTREE Design, iTREE Eco, iTREE Hydro 10%  
DJI Phantom 4 Pro Drone Use in Forestry Evaluation 5%  
Urban Tree Management: Planting, Tree Maintenance, Removals 5%  
Urban Forestry Ordinances 5%  
State and Federal Urban Forestry Programs 5%  
Volunteers, Education, Public Relations, NGOs 5%  
Final project power point 25%

**General Course Policies:**

**Attendance:** Attendance is mandatory for lecture and laboratory. The student is responsible for making the instructor aware of an excused absence. Each unexcused absence will result in a final total point reduction of five percent. Refer to the SFASU Policy Manual on the SFASU web-site for more information.

**Assignments and Grades:** There are 500 points available in the course, a 200 point urban forest management plan, and a 100-journal presentation. The SFASU Urban Forest Management Plan is worth 200 points. A Power-point presentation of the management plan is worth 100 points. For the plan and presentation due dates, refer to the Laboratory schedule below. Asynchronous minutes can be used to prepare the seminar.
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Attendance: Attendance is mandatory for lecture and laboratory. The student is responsible for making the instructor aware of an excused absence. Each unexcused absence will result in a final total point reduction of five percent. Refer to the SFASU Policy Manual on the SFASU web-site for more information.

Assignments and Grades: There are 1250 points available in the course outlined above with written, oral and quiz grades. A Power-point presentation of the applied forest insect and disease application, 100 points.

Other Policies:
Withheld Grades Semester Grades Policy (A-54)
A grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances and is done at the discretion of the instructor of record with the approval of the academic chair/director. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Student Academic Integrity Policy (4.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Part of the University of Texas policy. Please read the complete policy at http://www.sfasu.edu/policies/student_academic_dishonesty.pdf

Course Grades Policy (5.5)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated
course for the purpose of computing the grade point average. Please read the complete policy at http://www.sfasu.edu/policies/5.5_course-grades.pdf

Academic Accommodation for Students with Disabilities Policy (6.1)
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/

Responsible Use of Technology
It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Acceptable Student Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed. Please read the complete policy at http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf SFASU values students’ mental health and the role it plays in academic and overall student success. SFA provides a variety of resources to support students mental health and wellness. Many of these resources are free, and all of them are confidential. On-campus Resources: SFASU Counseling Services www.sfasu.edu/counselingservices, 3rd Floor Rusk Building, 936-468-2401
SFASU Human Services Counseling Clinic, www.sfasu.edu/humanservices/139.asp, Human Services Room 202, 936-468-1041
Crisis Resources: Burke 24-hour crisis line 1(800) 392-8343, Suicide Prevention Lifeline 1(800) 273-TALK (8255), Crisis Text Line: Text HELLO to 741-741

Miscellaneous Important Information:
Please come to each lab prepared to go to the field unless otherwise instructed. This means that you must have your hardhat, field clothes, and field boots. If you show up for lab wearing any type of athletic (tennis, basketball, running, whatever!) shoes or without your hardhat, then you will not be allowed to participate in the lab (can't get on the van!). You will be given a lot of handouts. Buy a 3-ring binder in which you should keep all
handouts. Bring this binder with the handouts to each lecture and lab. No cell phone calls or text messaging in class.

Preparation of Urban Forest Management Plan:
Interns will prepare an Urban Forestry management plan. A handout will be provided that describes the data provided and the expectations of the management plan.