FORS 2240 – Wood Science
Course Syllabus

Instructor
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Office: 203D
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Office hours
Wednesday and Friday 9:30 a.m. to 12:00 p.m. or by appointment.
It is advised that you make an appointment. This will ensure that I can provide you with all the
time you need and that you have my full attention, free of interruptions.

Teaching Assistant
Gary R. White
Email: whitegr@jacks.sfasu.edu
TA Office: FORL 111
TA office hours: 9 a.m. to 12 p.m. Monday, Wednesday, and Friday or by appointment.

Class meeting and time
Lecture: Friday 8 a.m. to 8:50 a.m. in room FORS 222
Lab: Monday (Section 023), Wednesday (Section 021), and Friday (Section 022)
1 p.m. to 3:50 p.m. in room FORL 103

COURSE DESCRIPTION
This course will examine the physical and chemical properties of wood as related to its anatomy and
economic uses. Prerequisite: MTH 138 or 143, Bio 131, Che 133.

Program Learning Outcomes (This is not a General Education Course)
Forestry 2240 is one of the forestry core courses required of all forestry majors and thus competency is
required. A minimum grade of a “C” must be attained or the course will have to be repeated. The
course is designed to address the following Program Learning Outcomes, as given in the BSF Program
Matrix:
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.
The above PLOs are also recognized as vital components by the Society of American Foresters, the program’s accrediting agency.

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**B** – Basic – FOR 2240 supports Program Learning Outcome by providing students with fundamental information, definitions, concepts, and lab activities relative to the expected outcomes.

**I** – Intermediate – FOR 2240 supports Program Learning Outcome by providing students with topic-specific information, concepts, applications, and lab activities that increase the students’ skills in making tactical implementation decisions relative to the expected outcomes.

## Student Learning Outcomes

Upon successful completion of this course, the student will:

- Understand macroscopic and microscopic character and structure of wood, as well as differences between hardwood and softwood structure (PLO #1 and 3);
- Understand and be able to quantify wood measurements like density, strength, and mechanical properties. (PLO #2 and 4);
- Understand how wood is utilized, how forest products are manufactured, marketed, and valuated. (PLO #3 and 4)
- Have demonstrated competency in oral and written communication skills (PLO #5).

## Required Textbooks:


## Supplemental References:


## Required Material:

10x hand lens for laboratory sessions

## Useful Material:

SHARP knife or razor blade holder for surfacing wood blocks.

## Necessary Web Resource:

**Tentative Lecture Schedule**

Introduction
Tree Growth and Structure
Composition and Structure of Wood
Hardwood and Softwood Anatomy
Juvenile Wood, Reaction Wood, Branches & Roots
Exam 1
Wood and Water/Drying wood
Wood Decay Wood Protection & Treatment
Physical & Mechanical Properties
Exam 2
Silviculture & Wood Quality
Lumber
Structural & Non-structural Wood Panels
Engineered Wood Products
Pulp & Paper
Review
Comprehensive Final Exam

**Tentative Laboratory Schedule**

1. Macroscopic features of hardwoods and hardwood identification
2. Hardwood identification
3. Hardwood identification
4. Hardwood ID Test
5. Macroscopic features of softwoods and softwood identification
6. Softwood Identification
7. Softwood Identification
8. Softwood ID Test
9. Paper, Presentation, and Effective Communication
10. Physical and Mechanical Properties
11. Product Presentations
12. Product Presentations Continued, Wood Species Reports Due
13. Lab final - Hardwood and Softwood Identification Test
14. Lowes Field Trip

**Course Evaluation**

**Grade Items:**

Exams 1-3 (100 points for each in-class closed book exam)
Hardwood ID test (100 points)
Softwood ID test (100 points)
Final Wood ID test (100 points)
Mechanical Properties Lab Report (50 points)
Wood Species Report (100 points)
Product Presentation (100 points)

*Unexcused absences and Classroom misbehavior will result in negative points. Check attendance policy and acceptable Student Behavior sections.*

Student participation and input in class are encouraged and welcomed. Please feel free to contribute.
**Attendance Policy**

Course attendance is required. The student will be expected to accumulate a great deal of information during this course. New material builds on material from previous lectures so that absences will result in a student falling behind. Excused absences include participation in University-sponsored events, health problems, or family emergencies. Documentation for University excused absences must be provided. The Dean of Students Office can provide assistance with excused absence documentation.

Each unexcused absence from a laboratory section will result in a 5% reduction in the final course grade. Each unexcused absence from lecture following the first one will result in a 2.5% reduction in the final course grade.

Arriving late for class is unacceptable and will be equated with a 1/2 unexcused absence. If you arrive late twice, it will be the same as one unexcused absence.

Excused absence documentation and Make-up work will be accepted for a maximum of 1 week following an excused absence. It is the student’s responsibility to keep track of their attendance and grade items missed due to excused and unexcused absences.

Any missed quiz, exam, or assignment (if not excused) will result in a zero score. If a quiz or assignment is missed due to excused absence, a student can take a make-up quiz or assignment. If an exam is missed due to excused absence, a student will have to take a make-up exam, and the exam format can differ from the original exam. It is the student’s responsibility to communicate with the instructor about missed quizzes, assignments, or exams.

**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 D-34.1). 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 quizzes/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.

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

**Academic Integrity**

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not
authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities. Artificial Intelligence (AI) tools should not be used for any assignments.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

Withheld Grades Semester Grades Policy
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 coursework 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 to compute the grade point average. For additional information, go to https://www.sfasu.edu/policies/course-grades-5.5.pdf.

Students with Disabilities
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 promptly may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Student Wellness and Well-Being
SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, 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:**

**The Dean of Students Office** (Rusk Building, 3rd floor lobby)

- [www.sfasu.edu/deanofstudents](http://www.sfasu.edu/deanofstudents)
- 936.468.7249
- dos@sfasu.edu

**SFA Human Services Counseling Clinic** Human Services, Room 202

- [www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)
- 936.468.1041

**The Health and Wellness Hub** “The Hub”

Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

- [www.sfasu.edu/thehub](http://www.sfasu.edu/thehub)
- 936.468.4008
- thehub@sfasu.edu

**Crisis Resources:**

- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- johCrisis Text Line: Text HELLO to 741-741