

Title of Lesson Plan	Wood in Building and Design Criteria
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City and State	Gainesville, Florida
Grade Level(s)	(College) Seniors
Keywords (subjects covered)	Sustainable use of wood, grading, design criteria
Brief Description	The lesson will explore the performance of wood as a construction material from a sustainability perspective. It will also show the students how structural analysis based on the allowable stress design method takes into account the inherent properties of timber based on properties such as the location from which the original tree was harvested, species, grading and prevailing moisture conditions.
Total Time Required	2 hours
Setting	Rinker Hall Room 140
Lesson Objectives/Goals	1) To demonstrate to the students that from a sustainability standpoint timber is a superior building material; 2) To explain the factors the result in variations in the structural strength for different lumber; 3) To explain the code requirements for grading and also identify what the components of grade marks mean.
Materials Needed	PowerPoint presentation prepared by the instructor
Standards Addressed	National Design Specification and the building code
Procedure	The lesson will be based on lecture presentations, which involve engaging students in discussions through carefully integrated questions throughout the two hours.
Assessment	Readiness Assessment Test at the beginning of the lecture and a written assignment to be turned in within a week.
Literature Cited/References	Design of wood structures by Donald Breyer, National Design Specification and Handouts from the Forestry Teachers Tour.
Forestry Tour Attended	2007 Northeastern Teach Forestry Tour

Lesson Plan Disclaimer

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