

CEE 454: Design of Timber Structures

Winter Quarter 2012

MWF 12:30 – 1:20PM, More 234

<http://courses.washington.edu/cee454>

Course Description:

The design and construction of timber structures, using elements made of sawn wood, glued-laminated wood and plywood. Prerequisite: CEE380.

Instructor:

Professor Dorothy Reed, reed@u.washington.edu, 263 Wilcox, (206)543-0351
Office Hours: Tuesday 3-5 PM.

Required Text:

Design of Wood Structures, Breyer et al., 6th Edition (Green Cover) McGraw-Hill.

Recommended:

The 2005 Wood Design Standards: see <http://www.awc.org/>

According to the website:

Student hard copies of all publications can be ordered at info@forestprod.org.

Electronic (PDF) versions of AWC publications are also available at a discount for students. Students receive at least a 50% discount off the list price of publications.

Please see the course website for NDS supplements that need to be downloaded for use in class.

Knowledge of ASCE7-05 or -10 at the level of CEE380 is required for the loading formulation portions in this course.

<u>Grading:</u>	Quizzes [includes final exam]	75%
	Homework [typically, weekly]	25%

Tentative Course Outline:

Week	Topics	Background Reading in Breyer
1-2	Properties of timber; use of the design specifications; overview of gluelam and manufactured wood products; review of loading formulation	Properties: Chaps. 4-6; Loading: Chaps 1-3 and Appendix C
3-4	Gluelam provisions; Beam Design	“
5	Beam Design; Axial Forces with Bending	6-7; 8
6	Horizontal diaphragms; Shearwalls	8-10
7-end of quarter	Connections	11-13

Typically, design professionals make presentations in our class during the quarter. I will provide details of these visits as they are finalized.

Unfortunately, cheating has become a problem in undergraduate courses. **Talking during the quizzes, even while the test sheets are being handed out, is considered cheating. If you talk, you will be reported for cheating.**

For the homework: For design calculations, you must provide a free body diagram and label all forces. Box or underline answers. Sloppy homeworks will not be graded.