## Course Description -:- ESRM 368 -:- Natural Resource Measurements (a.k.a. FOREST RESOURCE ASSESSMENT: Products, Trees, Stands & Habitats) - WINTER 2016 -

**Course Goals:** Gain familiarity with vegetation and forest sampling techniques, with forest stand parameter analysis, with forest inventory methods, with tree content assessment, with tree and stand growth, and with log scaling practices. Be able to characterize and analyze data from common forest resource sampling protocols for making management decisions. Gain appreciation and understanding of the methodologies and utility of mathematical description of tree and forest characteristics.

Instructor:	Dr. Eric C. Turnblom ( <u>ect@uw.edu</u> )
<b>Office/TEL:</b>	BLD (Bloedel Hall) 232 / 206-543-2762
<b>Office Hours:</b>	Tu 10:30 – 11:20 AM, Fr 9:40 – 10:30 AM, or by appointment $^{\Phi}$

**Textbook** (required):

Husch, B.; Beers, T.W. and Kershaw, J.A., Jr. 2003. Forest Mensuration. John Wiley and Sons, Inc., New York. 408 p.

## Other (\* highly) recommended references:

- Bell, J.F. and Dilworth, J.R. 1988 (1997 update). Log Scaling and Timber Cruising. OSU Bookstores, Corvallis, OR. 396 p.
  - Freese, F. 1962. Elementary forest sampling. U.S. Dept. of Agriculture, Agriculture Handbook No. 232.
  - Freese, F. 1967. Elementary statistical methods for foresters. U.S. Dept. of Agriculture, Agriculture Handbook No. 317.

**Equipment required:** Sturdy waterproof or water resistant footwear, rain suit, Rite-in-Rain<sup>™</sup> surveying notebook [Optional: compass, hard-hat, DBH-tape, cruiser's vest].

**Field Exercises (Labs) and Problem Sets (Homework):** Use of Excel software (available on the SEFS "Gibson" virtual desktop cluster and student lab computers across campus) or other suitable software is expected when its use is indicated by the nature of the problem. All assignments must be completed to receive course credit. Assignments must meet the described standards for neatness and completeness for full credit. *ZERO credit will be given to LATE assignments w/o prior arrangements*.

**Class / Lab participation:** Each student is expected to attend and actively participate in all class sessions and discussions. Attendance and engaged participation in all lab activities is *REQUIRED*.

**Examinations:** There will be one cumulative exam during final exams week. <u>*Calculators are*</u> *required*!

**Grading:** Grades will be weighted thusly:

Problem Sets / Labs 70%; Final exam 20%; Class participation 10%

using the following scale to determine margrade points.		
Score	Grade (at least this well)	
93 – 100%	4.0	
83 - 92%	3.0 - 3.9	
73 - 82%	2.0 - 2.9	
63 – 72%	1.0 – 1.9	
60 - 62%	0.7 - 0.9	
0 – 59%	0.0	

using the following scale to determine final grade points:

<sup>Φ</sup> N.B. – Discussion with the instructor regarding any *particular* assignment **shall cease** at the close of the business day immediately preceding an assignment's due date.