

## NATRS 215 FOREST MEASUREMENTS

**Instructor:** Tom Rieger **e-mail:** trieger@scc.spokane.edu

**Phone:** 533-7267

**Office Hours:** See schedule posted on office door.

**BOOKS:** Forest Measurements Workbook - Furnished  
 Transit Notebook #301 or #303. #5.00 - \$8.00  
 \* These can be purchased at GENDRON & COMPANY 326-4490  
 1327 N. Washington  
 Spokane, WA 99201

**Grading:**

|                        |                |                  |
|------------------------|----------------|------------------|
| 10 weekly problem sets | 10 points each | 100 points       |
| 8 field exercises *    | 15 points each | 120 points       |
| 1 field exam **        | 60 points      | 60 points        |
| 4 quizzes              | 25 points each | 100 points       |
| Final                  | 60 points      | <u>60 points</u> |
|                        | TOTAL:         | 440 points       |

\* Field work is required, 5points for attendance +10 points for work assignment. **Miss more than two labs and you will be asked to withdraw from the class. No exceptions.** You can only attend the labs you are signed up for; we have limited space & equipment. Attending labs on days you are not signed up for will be considered a missed lab, and you may be withdrawn from the class. **NO EXCEPTIONS.** Homework is due at the beginning of class, or it is considered late.

\*\* Mandatory attendance to pass class. **NO MAKE UP FIELD EXAM GIVEN!**

95% or higher is a 4.0, 0.1 grade will point will be deducted for each 1 % below 95%  
 308 POINTS or 70% = 1.5 **ANY GRADE BELOW 70% OR 1.5 IS NOT ELIGIBLE**

**TO TAKE FOREST INVENTORY OR TIMBER  
 HARVESTING NEXT FALL QUARTER. (forestry option only)**

All late work is 10% off per day. This includes quizzes. **NO MAKE UP** for Lecture Final given.

| <u>LA B:</u>              | <u>WEEK OF:</u>       |   |
|---------------------------|-----------------------|---|
| # 0 & #1                  | Week #1               | Environmental Hazards AND<br>Diameters & Bark Thickness |
| # 2                       | Week #2               | Tree Heights / Clinometer                               |
| # 3                       | Week #3               | Relaskop & laser hypsometer                             |
| # 4                       | Week #4               | Age, Growth, Site Index                                 |
| # 5                       | Week #5               | Volume  |
| # 6                       | Week #6               | Form Class / Relaskop                                   |
| # 7                       | Week #7               | 1/10 Acre Cruise  |
| # 8                       | Week #8               | Stand Exam  |
| <b><u>LAB FINAL**</u></b> | <b><u>Week #9</u></b> | <b>Tuesday or Wednesday (sign up for only one day)</b>  |

Tentative Quiz Schedule:

|              |           |   |
|--------------|-----------|---|
| #1           | Week #4   | DBH, DIB, % bark Tree Height, Crown Ratio |
| #2           | Week #6   | Age, Growth, Site class, Crown Class      |
| #3           | Week #8   | Volumes, Form Class, dob w/ Relaskop      |
| #4           | Week #9   | Fixed & Variable plots, BAF               |
| <b>FINAL</b> | Week # 10 | <b><u>Comprehensive Final</u></b>         |

GOALS AND OBJECTIVES: At the end of the quarter the student will have demonstrated the following abilities:

1. The proper uses and maintenance of basic forestry tools (Relaskop, clinometer, increment bore, diameter tapes, etc.)
2. Accurately measure tree diameters, bark thickness, tree heights, & crown ratios.
3. Determine age, growth rate, Site Index, and crown classes of trees.
4. Determine volumes of standing trees (standard volume tables).
5. Determine Form Class and Form Class volumes.
6. Demonstrate the use of basic forestry tools while collecting data on a 1/10 acre cruise plot and calculate the volumes for the plot.
7. Demonstrate the use of all tools on a Variable Radius Inventory Plot (Stand Exam Preparation)
8. Estimate defect of standing trees.

Field Labs are from 12:30 – 3:30 p.m. every week. Expect to be out the full time, so plan accordingly. **WE** will go out into the field each week regardless of the weather. Dress for the weather (rain, snow, cold, etc.).

The college provides transportation for all field labs. It is strongly advised that you ride in the school vans. I will not wait for you and your personal vehicle, and if you get lost and do not make it to the lab, it is considered as a missed lab. Missed labs are your responsibility to make up on **your own time**. It will be your responsibility to find a classmate and have them show you the lab location and how to do the lab. You will have to sign out any equipment used, **AND** for any equipment not turned in **you will be charged full replacement cost**.