

# FOR 230B : FOREST SURVEYING

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## Transcript title

Forest Surveying

## Credits

3

## Grade mode

Standard letter grades

## Contact hours total

50

## Lecture hours

20

## Lab hours

30

## Recommended preparation

FOR 230A or instructor approval.

## Description

Studies basic surveying techniques and equipment emphasizing traversing, differential leveling, profiling, GPS mapping and basic coordinate geometry.

## Learning outcomes

1. Use an automatic level for both differential and profile leveling.
2. Produce a stream profile using an automatic level.
3. Use GPS to navigate between points.
4. Collect and differentially correct GPS point, line, and area data using post-processing software.
5. Convert differential corrected GPS files to other types of files.
6. Perform a closed traverse using a total station, close within 15", and calculate area from coordinates using an Excel spreadsheet.
7. Perform a closed traverse using differential GPS and calculate land area from coordinates.
8. Locate land records using web based and hardcopy county resources.
9. Use trigonometry to determine slope distance, horizontal distance, differences in elevations, latitudes, departures, and lengths of lines.