

# GEOG 226

## Traversing & Plotting Lab

### OBJECTIVE

To develop proficiency

- using a compass, clinometers and chain to traverse between marked stations in the field
- calculating horizontal distance and elevation change based on measures of slope distance and slope gradient
- plotting from fields notes to create a map

### OVERVIEW

Working in pairs, traverse between your assigned stations, carefully record your field measurements. Plot a map depicting your traverse route.

### MATERIALS

**Field:**

- VIU campus map
- 30m chain, Silva Compass, Clinometer (Suunto)
- Note paper

**Office:**

- Douglas protractor, ruler, calculator, graph paper (provided)

### PROCEDURE

**Preparation**

1. Work in groups of two. Each group needs to sign out the required equipment from Tim.
2. Confirm your ability to use the Silva compass, Suunto clinometer and Esilon chain.

**Field**

1. Traverse between the assigned stations.
2. Record: Station (Stn.), Bearing (Brg), Slope Distance (SD), Slope % & degrees. Be sure to use the appropriate format.

**Office**

1. Calculate Horizontal Distance (HD) & Elevation Change (Elev.  $\Delta$ ).
2. Determine appropriate scale of your map. Your plot should “fill most of the space” on the page.
3. Plot the map. Be sure to include an appropriate title, date, names, north arrow, scale, legend, station ID with elevation (nearest  $1/10^{\text{th}}$  metre).

### DELIVERABLES

Each pair to submit field notes and the map.