



Heybrook Ridge bearings on a fine winter day.

Pre Trip Plan: Wilderness Navigation Fieldtrip

Most backcountry trips are safer and more enjoyable with thorough pre-trip work, including navigation. Your instructors expect you to complete some tasks before the Wilderness Navigation Fieldtrip (FT).

Bring this hard copy sheet to help satisfy the navigation planning portion of your FT grade.

Navigation Tools Checklist: Ten Essentials +

"1.) *Navigation system: This contains, at a minimum, a topographic map of the area and a compass. It might also include an altimeter, a GPS receiver, a whistle, and route-marking materials.*" (Burns & Burns, *Survival notes*, p.91)

- Baseplate, declination adjustable compass from recommended list. Tape on name. Attach lanyard.
- USGS Index & Baring 1:24000 maps w/ your name in upper corner & folded to fit in Ziploc bags
- Optional Altimeter or Smart Phone Altmtr app
- Optional GPS tool or Smart Phone GPS app
- Whistle
- Watch or other Time Piece
- One gallon Ziploc bags (for maps& problem set)
- Headlamp w fresh & spare batteries
- 2 sharpened #2 pencils or mechanical pencil
- Reading glasses and Optional small magnifier

Find and Do

- If needed, set your declination to 16 degrees East. Will deal with further corrections on site.
- Review Chap 1-5, Burns & Burns
- Read B&B pp. 96-101, UTM Coordinate System
- Read B&B pp. 106-103, Distance & Slope
- Read B&B Chap 8, The Altimeter
- Read B&B pp. 144-146, The GPS System
- Weather forecast, Index WA
- Sunrise _____ a.m. Sunset _____ p.m.
- Car Pool? See Opt-In- Your Profile/Preferences

Work Burns & Burns exercises, pp. 180-183 (pp. 130-133, 2nd Edition, 2004)

11. Road distance point K to W:
 _____Miles _____Feet _____Meters

12. Elev: P____ L____ Y ____ X ____ M____

16. Slope bearing pt T: _____

20. Where are you? _____

21. Where are you? _____

Work these problems using topos and handouts.

FT1. What are the elevations just off HWY 2 at:
 Parking area _____ (Just up N spur road E of TH)
 Trail Head (TH) _____ Tower (Radio Facility) _____

FT2. What is the elevation gain from the final tight switchback to the tower? _____

FT3. Describe the slope just south of the tower.
 Fall line bearing _____ Slope Angle _____

FT4. What are UTM coordinates at the tower?
 Datum _____ Zone _____ E _____ N _____

FT5. Altitude under power line heading east from the tower on the forest road? _____

Print Your Name: _____

Year Joined The Mountaineers: _____

Also Enrolled in:

Basic Climb Alpine Scramble Snowshoe _____

This is the evaluation criteria for the Field Trip, as well as a quick reference for the items that will be covered.

Wilderness Navigation Fieldtrip Grade Card

Student Name _____

Email _____

E for excellent (should teach now), G for good (most students)

M for marginal (needs work) or NS for not satisfactory

- Completes Pre Trip Plan tasks
- Carries 10 Essentials

- Determines ~point position on topo map
- Takes bearings on targets (at least 9 good bearings)
- Uses altitude and GPS UTM position to navigate
- Determines and uses slope to navigate

- Landfall navigation problem (G +/-2°, OK +/- 4°)
- Lunch break—uses multiple data sources to locate
- Final problem (E within 1°, G within 2°, OK within 4°)
- Copes with field trip conditions

- Safety—displays situational awareness in party
- Cooperation/Effort as member of larger party
- Physical conditioning, copes with any limitations
- Overall assessment of Wilderness Navigation skills

Comments _____

Instructor(s) _____ Date _____

(Rev 17Oct2015)