March 31, 2016

This outline covers two three-hour lecture nights.

1. Introduction
   1. Objectives
   2. Schedule
   3. Requirements
2. General topics
   1. Awareness, practice, observation
   2. Cardinal directions
   3. GPS
   4. Altimeter
3. Maps
   1. Topographic map features
   2. Margin and legend
   3. Colors
   4. Contours
   5. Symbols
   6. Distance
   7. Direction
   8. (new exercises)
4. Declination
   1. Defined
   2. Importance
   3. Set declination
5. Compass
   1. Compass parts
   2. General procedure
   3. Bearing to an object
   4. Bearing onto the map
   5. Bearing from the map
   6. Triangulation
   7. Orient the map
   8. Following a bearing, distance and teamwork
6. Coordinate systems
   1. Overview
   2. Latitude and longitude
   3. Universal Transverse Mercator
7. Terrain association
   1. Basic landforms
   2. Ridge and drainage
   3. Peak and saddle
   4. Cliff
8. Route planning
   1. Gather information
   2. Specify assumptions
   3. Intentional offset
   4. Handrails
   5. Backup plans, retreat route
   6. Navigate around obstacles
9. Navigation in a group
   1. Disputes in a group
      1. Keep personally engaged on route and progress
      2. Bring data to disagreement
      3. Ask questions, raise issues
   2. Compass teamwork
      1. Communicate, consider hand signals
      2. Agree on direction before moving
      3. Use back bearings
      4. Double-check distances
      5. Communicate!
10. Closing