

Module 1 Self Directed On-Trail Navigation Tools Background

Students view selected videos and read informative text to prepare for on-trail navigation using a suite of tools.

Baseplate, declination adjustable compass

Students use a baseplate, declination adjustable compass to measure and follow bearings on trail. View Columbia River Orienteering YouTubes:

- **#1** Parts of a Suunto M3 Compass (5:07)
<https://www.youtube.com/watch?v=dI617p5vqu4&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=1>
- **#9** Adjusting Declination on your Compass (4:33)
<https://www.youtube.com/watch?v=h2I8drPfwvU&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=9>
- **#2** Red in the Shed (2:50)
<https://www.youtube.com/watch?v=oc50IFZ60fY&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=2>
- **#3** Taking a Bearing (1:21)
<https://www.youtube.com/watch?v=BVAnEaZmm2I&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=3>
- **#4** Following a Bearing (2:02)
<https://www.youtube.com/watch?v=aTeHPKNDfik&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=4>
- **#5** Measuring a Bearing from a Map (4:49)
<https://www.youtube.com/watch?v=yXYckBuKn1Q&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=5>
- **#6** Plotting a Bearing onto a Map (4:31)
<https://www.youtube.com/watch?v=td79PLh5OzY&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=6>

Topographic Maps (Purchase GreenTrails Mt Si NCRA 206S rev 2021)

Students use topographic maps to plan and follow an on trail route in the field. View further videos.

- **#7** Orienting your Map (1:10)
<https://www.youtube.com/watch?v=krkNQ1VIEgI&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=7>
- **#8** Measuring Distance with a Finger (2:36)
<https://www.youtube.com/watch?v=MJFIcM5EwQU&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=8>
- **#12** Contours and Elevation (7:14)
https://www.youtube.com/watch?v=4Pq3T_dz9vs&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=12
- **#13** Contours and Terrain (9:14)
<https://www.youtube.com/watch?v=j1smJbkTIBM&list=PLkYHuimd2BspoT35iDNVnvK6xBsRyhRGA&index=13>

Thanks to John Godino, Columbia River Orienteering Club and Mountaineers Freedom of Hills (2024) navigation author. Link to all 18 of the 2017 videos:

<https://www.youtube.com/channel/UCoaYxGKAtMnSnVVEGDWs-6g>

GaiaGPS Navigation App

Students use the GaiaGPS app to plan and follow an on trail route. You should 1) set up your free Gaiagps.com account (see Mountaineers Member Benefits); 2) Mess around with the map; and 3) Build one route before the workshop. Further topics will be explored in the workshop and field trip. View/read:

- GaiaGPS overview (10:42) <https://www.youtube.com/watch?v=RVfIhDx7ZA&t=310s>
- Using the GaiaGPS Main Map (phone, 1:43) <https://help.gaiagps.com/hc/en-us/articles/115011926448-Videos-and-Tutorials>
- Create GaiaGPS Routes, Waypoints (web, webinar, 39:24 but view 11:50 to 23min) <https://help.gaiagps.com/hc/en-us/articles/115011926448-Videos-and-Tutorials>

Alchemer How am I doing? Quiz

Complete this Mountaineers Alchemer survey/quiz for a check-up on your understanding of several key elements of On-Trail Navigation. You will need the GreenTrails Mt Si NCRA 206S (rev 2021) map and your compass to complete the quiz. Please complete the quiz at least 24 hours before the Module 2 Workshop. The 20 questions will yield a Correct/Not Correct score and you are free to repeat any items you missed.

Link: <https://survey.alchemer.com/s3/6880829/On-Trail-Navigation-Mod1-Quiz-Rev1>

Compass Declination Adjusted Photo

Students are required to adjust their compass declination to 15 degrees east (Summer 2022) and send a SmartPhone photo displaying the adjustment to the instructor prior to the workshop.