



Course Syllabus - Backcountry Nav

www.backcountrynav.com

Instructor Information

- Instructor: David Mathes
- Location: Online Zoom Classroom
- Phone: 208-881-1182
- Email: david@backcountrynav.com (Response to emails between Monday-Friday within 24-48 hours)

Course Information

- Course Name: Backcountry Nav
- Course Type: Backcountry Route Planning in Avalanche Terrain
- Class Meeting Date / Time: As scheduled
- Class Location: Zoom

Course Description

- The purpose of this course is to teach individuals a workflow and a process to plan routes and perform a detailed terrain evaluation & analysis of an alpine environment with avalanche terrain. During the course, students will be enabled to create their own routes and evaluate the terrain with the given checklist. The goal of the class is to get the students hands on training and doing it themselves. The course shall also include moments where the students will be in the trip leader roll and shall brief the rest of the class their route plan. By the end of the course, students should be able to perform a simple route plan and communicate that plan to others.

Course Requirements

- Requirement(s):
 - Good working computer (mac or windows) with stable, consistent internet connection.
 - A tablet is NOT recommended
 - A tablet can be used but can limit your learning experience and must be coordinated with the instructor before the beginning of class.
 - Familiarity with zoom and the ability to share your desktop screen.
 - Working video camera with microphone & speaker (headphones preferred)
 - Minimum Avalanche Awareness Training/Experience/Workshop
 - FATMAP Explore & GAIA GPS Premium Accounts - free 30-day trials for each shall be provided upon payment of class
 - Familiarity with local avalanche forecast website or desired travel destinations forecasts website

All students are expected to contact Backcountry Nav 24 hours prior to the beginning of their scheduled class with any questions, concerns or in the need of help setting up anything.

Course Materials and Resources

Course Resources are NOT required but highly recommended before and/or after the course.

- Staying Alive in Avalanche Terrain, 3rd Edition by Bruce Tremper. ISBN: 978-1-68051-138-3
- The Avalanche Handbook, 3rd Edition by Peter Schaerer and David McClung. ISBN 978-09886-809-8
- Backcountry Skiing: Skills for ski touring and ski mountaineering by Margaret Wheeler, Martin Volken and Scott Schell. ISBN: 978-1-59485-038-7
- Mountaineering: The freedom of the hills, 9th Edition by The Mountaineers. ISBN: 978-1-68051-004-1
- [Getting Started with FATMAP](#)
- [GAIA GPS YouTube Playlist - Getting Started](#)

Technology statement

Technology can be overwhelming, but it is an amazing resource that should not be underutilized. It also has its limitations. Everything taught in the course does not replace additional mentorship and field instruction by other qualified professionals. Even with years of route planning experience, things do not always match up 100% when you are out there. Technology breaks, accuracy of the overlays and features can differ, and GPS satellite strengths can be blocked or weakened by the environment you are in. It is not a good habit to solely rely on technology. Proper training with a map and compass is imperative and should always be carried. Proper avalanche and mountaineering training should be sought out and constantly refreshed. Just because a map layer, forecast, or terrain model shows you one thing, you should always use your own judgement, intuition, and perform your own evaluation and assessment while out in the field. Please refer to the [following accident report](#) as an example of how technology can be misleading during route planning.

Zoom Sessions

This course is remote and will use Zoom for the class meetings. Meeting dates and times will be scheduled through www.backcountrynav.com and/or directly with the instructor. Please take the time to familiarize yourself with Zoom by visiting the [Zoom Help Center](#).

Things to Know About Zoom:

The Zoom sessions are recorded.

Improper classroom behavior is not tolerated within Zoom sessions and may result in the removal of class and/or loss of payment for the course.

If you are having individual technical or computer difficulties, it is your responsibility to resolve such issues a minimum of 24 hours before the day of the course.

Pre-Course Activities

The required pre-course activities are as followed:

- Register and Login to your GAIA GPS and FATMAP accounts.
- Ensure that you have a Premium and Explore account established.
 - Reminder – you will be offered free 30 day vouchers for both GAIA GPS and FATMAP of their Premium and Explore accounts.
- Test your video camera and microphone.

Course Learning Outcomes, Competencies and Skills

- Plan a route in an alpine environment using both FATMAP and GAIA.
- Recognize the pros and cons to each platform.
- Identify your planned routes general headings of directions.
- Have the ability to communicate future outdoor partners, using the checklist, the route plan and terrain evaluation.
- Identify Slope aspects.
- Identify terrain hazards with each platform.
- Identify landmarks & key terrain with each platform.
- Transfer .gpx, .kml and/or .kmz files between platforms.
- Show an understanding of Naismith's Rule (or similar) to calculate distance and times.
- Download and save maps, tracks, routes, and waypoints to your mobile device for offline use.
- Identify the avalanche problem using a public avalanche forecast and with FATMAP's custom layer.
- Show an ability to mention items that can be considered Go / No Go's during the route brief and when out in the field.

Course Schedule

As scheduled on the website www.backcountrynav.com and/or directly with the instructor.