

# NZAC Basic Navigation

## Who is this course for?

The NZAC Basic Navigation course is designed for **trampers and mountaineers** who are looking to gain additional skills in order safely navigate through untracked alpine terrain.

Prior to attending this course participants must have some experience in backcountry tramping and enthusiasm for enjoying New Zealand's Alpine Environment. Participants should not be unduly challenged by the terrain the course will be taking place in. If participating in a winter course they must have completed a NZAC Basic Snowcraft Course (or have the equivalent skill set).

## Course Overview

**Duration:** 1 / 2 Days

**Season:** Year Round

**Location:** Various locations across New Zealand

**Course Tutors:** NZAC Section Navigation Instructors

**Ratio:** Terrain dependant

**Cost:** Set by NZAC Section

**Progression:**

NZAC Avalanche Awareness Course and NZAC Intermediate Snowcraft Course

## Syllabus

### Route Planning

- Using resources to select appropriate objectives and routes.
- Using resources to predict terrain that is likely to be encountered on route
- Using the map to estimate a journey's duration as part of the planning process
- Identifying on the map contingency plans and key decision making locations

### Interpreting the map and travelling using the map as an aid.

- Types of maps
- Map Symbols
- Map Scales, measuring distance and predicting duration
- Grid References
- Identifying ridges, spot heights, valleys, cols and plateaus on the map.
- Identifying feature that can be used as a handline on the map
- Identifying catching features on a map

### Interpreting the land and traveling using the land as an aid

- Identifying ridges, spot heights, valleys, cols and plateaus on the land.
- Use of natural handline features for coarse navigation
- Orientating the map using the land
- Relocation strategy using features identifiable on the land
- Route timing in relation to the terrain being crossed
- Measuring distance when traveling on a variety of terrain
- Tracking location whilst on a journey using the map and land features
- Identifying catching features that have been identified on a map on the land

### The Compass

- The advantages and disadvantages of compass use
- Orientating the map using the compass
- Bearings

### The GPS

- The advantages and disadvantages of GPS use

### Holistic Navigation

- Creating a navigation strategy and implementing it using the most efficient techniques
- Creating a strategy for relocation using a variety of techniques

## Course Outcomes\*

### Route Planning

- An ability to know where to access appropriate resources
- The ability to plan a suitable route in navigationally simple terrain
- The knowledge to accurately calculate a journey's duration in simple terrain
- The ability to interpret the map to plan alternative / escape routes
- The ability to identify key decision making locations on the map and create contingency plans should you be behind schedule

### Interpreting the map and travelling using the map as an aid.

- An understanding of different types of maps and their uses.
- The ability to interpret basic map symbols
- An understanding of map scale
- The ability to measure distance on commonly used maps
- The basic understanding of how to convert distance into an estimate of time with consideration of the terrain identified on the map through interpretation of the map.
- The ability to relay a grid reference onto a map and give a grid reference from the map
- The ability to identify significant ridges, spot heights, valleys, cols and plateaus on a map
- The ability to identify a feature on the map that would be suitable to be used as a handline to aid navigation
- The ability to identify a significant catching feature on a map to avoid travelling too far.

### Interpreting the land and traveling using the land as an aid

- The ability to identify significant ridges, spot heights, valleys, cols and plateaus on the land
- The ability to identify a handline previously identified on the map, on the land and use this to aid navigation
- The ability to orientate the map using prominent land features
- The ability to relocate using prominent land features
- The knowledge to adjust estimated timing based upon terrain encountered
- An awareness of how to measure distance travelled
- The ability to track progress on a map using significant features on the land
- The ability to effectively use a catching feature

### The Compass

- An awareness of the advantages and disadvantages of a compass in a variety of settings
- The ability to accurately orientate a map using a compass

### The GPS

- An awareness of the advantages and disadvantages of a GPS in a variety of settings

### Holistic Navigation

- A basic ability to use a variety of techniques and tools to navigate simple terrain
- A basic ability to use a variety of techniques and tool to relocate when your position is unknown