



Navigation Core Seminar [NCS]

This course covers **Wilderness Navigation** using Topographical Maps, Compass, GPS Receivers and Cellular Phones. It is an opportunity to learn and practice a variety of navigational techniques. Course participants will gain lifesaving compass, map reading, and GPS navigation skills.

The course is an excellent way of developing a high level of wilderness navigation skills and navigational confidence quickly. The course is a *Classroom Session* conducted in the classroom and outside in a nearby park or open area. It will cover the following points:

Topographical Map Reading

Learning to Understand Your Map

1. Basic Points About Maps
2. Topographical Maps
3. Map Margin Information
4. Map Features
5. Measuring Distance
6. Understanding Contour & Slope
7. Latitude & Longitude
8. Grid Reference System (UTM & MGRS)
9. Alberta Township Survey (ATS)

Compass Navigation

Intro to Compass Use

1. Basic Compass Use
2. Intro to Declination
3. Using a Compass on the Map
4. Using a Compass in the Field
5. Compass use on a Phone

Wilderness Navigation

Using your 'Navigators Toolbelt'

1. Wilderness Navigation Hints
2. Map Care & Types
3. Routes Preparation
4. Route Cards
5. What to do if Lost?

GPS Introduction

A Tool in your 'Navigators Toolbelt'

1. The Global Positioning System
2. How GPS Works?
3. GPS Fixes
4. GPS Signal Processing
5. GPS Accuracy
6. WAAS (Wide Area Augmentation System)
7. Handheld GPS Receivers

GPS Programming

Garbage-In Garbage-Out

1. GPS Menu Systems
2. Setting Map Datum
3. Setting Position or Coordinate System
4. Setting Units of Measure
5. Setting Headings
6. Setting Time

GPS Position Finding

Using your GPS Receiver

1. Waypoints or Landmarks
2. Marking Waypoints
3. Acquiring your Position

GPS Navigation

Don't Follow the Magic Box

1. GPS Navigation
2. Travelling with a GPS
3. GPS Tracking
4. Routes on a GPS
5. GPS & Computer Interface
6. Cell Phones in the Wilderness

Operating a GPS

Making your GPS Receiver Work

1. Battery Life
2. Cold Weather Operation
3. Wet Weather Operation
4. Hints & Reminders
5. Buying a Handheld GPS Receiver

Conclusion

Carry your 'Navigators Toolbelt'

1. Tools in Your Toolbelt
2. **Bruce's Secret Rules of Navigation**
3. Further Reading
4. Earning your Navigation Certificate
5. Web Resources



This hands-on Wilderness Navigation course provides the knowledge needed for anyone Hiking, Backpacking, Snowshoeing, Cross-Country Skiing, Mountain Biking, Quading, Sledding or Paddling who wishes to travel into the wilderness with an added degree of confidence and safety. This course covers using Cellular Phones and Phone Map Apps in the wilderness. This course is also the first course required to complete the BWI's Navigation Certificate and the first day of the Complete Wilderness Navigation Course.

Location: Classroom at #202 7205 Roper Road, Edmonton, AB or as Contracted.

Dates: As per the Web Site Calendar or as Contracted.

Course Time Frame: 1 Day or 8 hours

Group Size: Groups up to 12.

Cost: \$175 per person or \$650 per day plus \$25 per person for a Contracted Classroom course [Groups of 5 or more].