

Basic Map and Compass Safety Operating Procedure (SOP)



1. Purpose

This SOP outlines the safe planning and delivery of Basic Map and Compass activities at Aongatete Outdoor Education Centre (AOEC).

The activity is designed to teach participants foundational navigation and bushcraft skills, including reading topographic maps, using a compass, setting and following bearings, using natural landmarks and determining back bearings.

The activity encourages teamwork, communication and problem-solving through practical navigation challenges while maintaining a safe and well-supervised learning environment.

2. Scope

This SOP applies to all AOEC instructors, supervising adults, group leaders and participants involved in Basic Map and Compass activities conducted in the field around Aongatete Outdoor Education Centre.

3. Description of Activity

Basic Map and Compass is a low-risk, land-based outdoor activity conducted in controlled areas around the Centre.

Participants learn and practise:

- Reading and interpreting topographic maps.
- Understanding map symbols and features.
- Orientating a map.
- Using a compass accurately.
- Finding and setting bearings.
- Following bearings.
- Using natural landmarks and terrain features for navigation.
- Determining back bearings.
- Working collaboratively to complete navigation challenges.

All sessions are led by competent AOEC instructors with appropriate outdoor leadership, navigation and risk-management skills.

AOEC instructors are responsible for managing the activity and providing instruction, guidance and supervision throughout the session.

4. Roles & Responsibilities

AOEC Instructors : Lead and manage the activity safely - Conduct risk assessments and make go/no-go decisions - Deliver safety briefings - Coordinate emergency response if required - Ensure the activity is delivered in accordance with AOEC procedures.

Supervising Adults (Teachers/Parents) - Retain duty of care for students at all times - Follow all safety procedures and instructor directions - Monitor participant behaviour and wellbeing - Assist with emergency response if required

Participants - Follow all instructions - Wear appropriate clothing and footwear - Remain inside the boundaries of the course - Disclose relevant medical or behavioural conditions - Respect the environment and other participants.

5. Instructor or Designated Group Leader Requirements

- The activity must be supervised by a competent AOEC instructor or designated Group Leader familiar with the course and emergency procedures.
 - A Risk Assessment and Management System (RAMS) supports this activity.
 - Risk Management Workshops are held on a regular basis for all instructors.
 - Group leaders should:
 - Understand the objectives of the activity.
 - Carry a first aid kit.
 - Ensure supervising adults understand their responsibilities.
 - Maintain participant numbers throughout the activity.
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6. Ratios

- Sessions are generally planned in 1.5-hour blocks, although the duration may be adjusted to suit the group.
 - Any adjustment to session duration should be discussed during the Camp Planning Process and/or Pre-Session Safety Talk.
 - A minimum of 1 AOEC Instructor is required to lead the activity.
 - The preferred instructor-to-student ratio is 1:20. Schools and youth groups are expected to provide sufficient supervising adults, with a preferred ratio of 2 adults to 20 students.
 - The ratio may be adjusted depending on group size, age, experience, behavioural needs or additional support requirements.
 - Any required adjustment should be determined during the Camp Planning Process and Pre-Activity Safety Talk.
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7. Pre-Activity Requirements

7.1 Risk Disclosure & Medical Information

- Medical conditions, injuries, behavioural needs, and mobility considerations must be identified.
- A responsible adult must be assigned for participants requiring medication

7.2 Equipment Checks

The instructor must ensure the group carries - First aid kit - Compasses- Maps - Radio

7.3 Clothing Requirements & Checks

Participants must wear: Closed-toe footwear - Clothing appropriate for weather conditions - Hair should be tied back where appropriate.

Participants should use the bathroom before the activity.

ENSURE participants bring their personal medication with them, and that there is someone present (adult supervisor) who knows how to administer it.

8. Environmental & Weather Assessment (Go/No-Go Criteria)

The activity must not proceed if:

- Severe weather increases risk.
- Strong winds create hazards from falling branches.
- Heavy rain makes the course unsafe.

Guiding principle: If in doubt, stop the activity.

Instructors must:

- Inspect the course before each session.
 - Continuously monitor conditions.
 - Modify or cancel the activity if conditions deteriorate.
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9. Safety Briefing (Mandatory for all participants)

Must include:

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| • Objectives of the activity. | • Behaviour expectations and environmental care. |
| • How to read and use the map. How the map relates to the surrounding terrain. | • Staying as a team |
| • Activity boundaries and any out-of-bounds areas. | • Emergency procedures. |

Supervising adults must be present and engaged during the briefing.

10. Activity Management

During the activity:

- The instructor maintains effective supervision.
 - Regular head counts are completed.
 - Supervising adults monitor assigned participants.
 - Participants remain within the designated activity area.
 - Participants work together and follow instructor directions.
 - The instructor monitors weather, terrain and participant wellbeing.
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- The activity is adjusted where required to suit the group.
 - The activity must be stopped, shortened or relocated if safety is compromised.
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11. Emergency Response (Summary)

In the event of an incident:

- Activity Leader takes control of situation
 - First aid is administered by trained person
 - Emergency services contacted via 111 if required and a designated person meets emergency services at access point.
 - AOEC Management contacted as soon as practical.
 - Group managed and kept safe by supervising adults
 - All participants are accounted for before leaving the activity area.
 - All incidents must be reported to AOEC management and recorded.
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12. Environmental Care (Reinforce this to the students)

- Remain on established tracks and paths.
- Avoid damaging vegetation, seedlings, and trees.
- Leave no Trace. Leave the area as it was found.
- Report any damage or missing markers to AOEC Management.
- Respect nature and its wildlife.

Basic Map & Compass - Risk Analysis & Management

	Reviewed: Karen Tobich & Emily Underwood Approved: Board of Trustee - Nisha Duncan		Date: 17/08/2026		Next Reviewed by: 17/08/2027	
	Risk Rating System: Likelihood (1–5) x Consequence (1–5): 1–5 Low - 6–10 Moderate - 11–15 High					
	What would cause someone to get hurt?	What could happen?	Risk Rating	Risk Management Control Measures		Risk Rating
	Hazards/Harm	Risk	Initial	What can be prevented? By Whom?	Post Control	
People	• Poor Instructor Training	• Loss of process • Loss of mana • Damage to environment	4	• Compass and Navigation Training • Lead Instructors must have a minimum of 4 sessions assisting a trained and competent Instructor. • Radios for communicating with others/staff	2	
	• Supervising Adults not familiar with activity instructions, responsibilities & risks i.e. not following instructions	• Loss of Process • Loss of Mana	4	• Activity Leaders / Adult Supervisors familiarise themselves with Activity Instructions, Responsibilities and RAMS prior to camp/activity commencement.	2	
	• Poor Instructions	• Loss of Process • Loss of Mana	4	• Go with group through instructions, environment care, safety guidelines & hazards	2	
	• Poor Navigation	• Loss of Process • Loss of Mana	4	• Be continuously aware of compass bearing and use back bearing technique for accuracy. • Stay together	2	
	• Not sufficient Supervision	• Loss of Process	3	• One supervising adult per team of 4-6.	1	
	• Not listening & Unruly behaviour	• Loss of Process • Damage to environment • Missing important instructions • Affecting others learning	4	• Students& Supervising adults must listen well • Good Leadership is essential • Adequate Supervision • Halt the activity if necessary	3	
	• Special Needs not identified	• Loss of Process • Loss of Mana • Minor/Major injury • Death	8	• Know medical conditions/behaviour issues of students & adults. Who is the nominated knowledgeable person to deal with known medical/behavioural issues	3	
	• Student/Group Leader/Supervising Adult becomes incapacitated (Injury, heart attack, asthma, etc)	• Minor Injury • Major injury • Death	10	• Other Adults in Group must know what to do in an emergency	5	
	• Failure to practice environment awareness	• Damage to environment	6	• Discuss minimum impact on the environment	3	
Equipment	• Poor Clothing & Footwear	• Major injury and Minor Injury • Physical well-being (hypothermia, hyperthermia • Loss of process	6	• Before leaving, check that everyone in group (students and adults) are wearing appropriate clothing, raincoat and foot ware. Must wear covered shoes, dress for the conditions.	2	
	• Lost or broken compass	• Loss of Process	3	• Use other group members compass to get through - We don't leave camp grounds	2	
	• No or insufficient first aid kit	• Minor injury • Major injury • Death	6	• Ensure supervising adults have knowledge and supplies for any health concerns including other adults • Carry a first aid kit • Groups and AOEC have a full kit at the lodge	2	
Environment	• Weather unsuitable for session	• Death • Major injury and Minor Injury • Damage to environment • Physical well-being (hypothermia, hyperthermia) • Loss of process	10	• Cancel if necessary, the instructor will make this call • Halt the activity if necessary • In case of lighting return indoors immediately	4	
	• Ground steep, slippery & wet	• Minor injury • Major Injury • Damage to the environment	6	• Wear close-toe shoes • Warn group that the field is slippy when wet	4	
	• Wasps	• Minor Injury • Major injury • Death	10	• Report any sightings of wasp, carry first aid kit and Wasp Spray - ensure epipen is carried if needed	5	

Emergency Plan	First Aid	Medical Treatment	Serious Injury
	Who is the trained and nominated First Aider	Follow Emergency Action Plan Discussed at Pre Activity Safety Talk and at Safety Stations	See Emergency Action Plan discussed at Safety Talks and at Safety Stations
	First Aid Kit - Instructors have this	- Katikati Medical Centre 07 549 0411 4 - Clive Road, Katikati	Call 111 or activate PLB
	Know medical conditions/behaviour issues of students & adults and knowledgeable person to deal with it	- Tauranga Hospital, Cameron Road, Tauranga 07 579 8000	Nominate someone to meet Emergency Services at Gate
	Incident & Accident Reporting	Report to AOEC Management - Incident & Accident Reporting on Safety Log at Kitchen Safety Station	Report to AOEC Management - Incident & Accident Reporting on Safety Log at Kitchen Safety Station