



Australian Government

Department of Education, Employment and Workplace Relations

SISOOPS306A Interpret weather conditions in the field

Release: 2

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Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to collect information from a weather map, make forecasts, and record and interpret weather and environmental information in the field in order to assess the impact of weather on outdoor recreation activities.

Application of the Unit

This unit applies to those working autonomously, or under minimal supervision in various outdoor environments who are responsible for collecting and interpreting weather and environmental information before and during outdoor activities.

This unit may also apply to outdoor recreation leaders working for outdoor education or adventure providers, volunteer groups, not for profit organisations or government agencies.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.
1. Interpret information from a weather map.	1.1. Identify characteristics of <i>map types</i> and their different uses. 1.2. Identify weather map <i>symbols</i> and associated weather and environmental conditions. 1.3. Outline and justify a weather prediction for a 48 hour period for a specific region using <i>information</i> gained from weather maps and forecasts.
2. Collect and record weather and environmental information in a specific region.	2.1. Identify sources of relevant <i>weather and environmental information</i> 2.2. Identify major <i>cloud types</i> and altitude level. 2.3. Collect weather and environmental information at regular intervals for a specific area over five days. 2.4. Record weather <i>data</i> and identify <i>patterns</i> . 2.5. Compare and identify the differences between current weather <i>conditions</i> and a current weather forecast. 2.6. Identify the possible effects of <i>landforms</i> on weather conditions. 2.7. Identify and explain season variations in weather patterns for a specific area. 2.8. Outline differences between large scale and localised weather conditions for a specific area.
3. Interpret weather and environmental information for outdoor activities at a specific location.	3.1. Determine the suitability and <i>limitations</i> of the activity in relation to the current local weather conditions and forecast. 3.2. Identify strategies to ensure the safety and well being of individuals and or group in weather conditions according to <i>relevant legislation and organisational policies and procedures</i> . 3.3. Identify weather conditions commonly associated with the onset of <i>life threatening weather hazards</i> . 3.4. Identify characteristics of life threatening weather

ELEMENT**PERFORMANCE CRITERIA**

hazards and their possible impact on recreational activities.

3.5. Respond appropriately to life threatening weather hazards to ensure safety of participants

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- planning and organising skills to:
 - collect weather and environmental information at regular intervals
 - record and interpret weather and environmental information
 - justify suitability and safety of an activity area
- problem-solving skills to:
 - determine the impact of meteorological data on planned activities
 - predict and anticipate weather for a specific outdoor environment
 - compare the differences between various weather attributes
 - respond to changes in weather including life threatening weather hazards
- literacy skills to:
 - interpret and analyse weather and environmental information
 - record weather data patterns.

Required knowledge

- legislation and organisational policies and procedures to enable safe conduct of weather interpretation activities
- map types and symbols to predict weather for a specific outdoor area
- methods of predicting and forecasting weather to determine its impact on recreational activities
- influence of cloud types, local air masses, seasons, topography and landforms on the weather and the implications of these on outdoor activities
- methods of recording weather data to identify patterns and apply this information to plan safe outdoor activities
- life threatening weather hazards and their possible impact on recreational activities
- factors affecting global, regional and local climatic conditions and the impact of these on outdoor activities.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- makes weather predictions for a outdoor area using weather maps and forecasts
- assesses the short and long term implications of meteorological data on a specific outdoor activity.

Context of and specific resources for assessment

Assessment must ensure interpretation of weather signs in a variety of weather conditions in outdoor locations to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- meteorological data to read and interpret weather and environmental information
- meteorological instruments to collect weather and environmental information
- an outdoor activity environment in which to conduct weather interpretation activities.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of the impact of meteorological data on planned activities
- observation of interpreting weather for a specific outdoor environment using information gained from weather maps, predictions and forecasts
- portfolio of weather predictions covering five day periods
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- Activity-specific units relevant to participation in outdoor recreation activities.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- Map types*** may include:
- prognosis maps
 - analysis maps.
- Symbols*** may include:
- cyclones
 - anti-cyclones
 - depressions
 - highs or lows
 - troughs
 - ridges
 - frontal bands
 - isobars.
- Information*** may include:
- cloud cover
 - wind direction, speed and strength
 - barometric pressure
 - precipitation type and intensity
 - sunshine trends and duration
 - temperature range and intensity
 - humidity trends.
- Weather and environmental information*** may include:
- satellite images
 - daily and weekly forecasts
 - maximum and minimum temperatures
 - weather warnings
 - event warnings
 - river levels
 - synoptic charts
 - high and low tide predictions.
- Cloud types*** may include:
- cirrus
 - stratus
 - cumulus.
- Data*** may include:
- cloud cover
 - wind direction, speed and strength
 - barometric pressure
 - precipitation type and intensity
 - sunshine trends and duration
 - temperature range and intensity

- Patterns*** may include:
- humidity trends.
 - wind direction and speed
 - precipitation form and distribution
 - sunshine trends and duration
 - temperature range and intensity
 - humidity trends
 - anticyclones
 - depressions
 - movement of pressure systems.
- Conditions*** may include:
- cloud cover
 - wind direction, speed and strength
 - barometric pressure
 - precipitation type and intensity
 - sunshine trends and duration
 - temperature range and intensity
 - humidity trends.
- Landforms*** may include:
- mountain ranges
 - large bodies of water
 - valleys
- Limitations*** may include:
- duration of the activity
 - intensity of activity
 - exposure to prevailing conditions
 - ability of individual and or group
 - technical difficulty of activity.
- Relevant legislation*** may include:
- occupational health and safety
 - permits or permission for access
 - environmental regulations.
- Organisational policies and procedures*** may include:
- operating procedures and company or enterprise policies
 - occupational health and safety
 - use and maintenance of equipment
 - emergency procedures
 - code of ethics.
- Life threatening weather hazards*** may include:
- floods
 - cyclones
 - electrical storms
 - snow storms
 - limited visibility
 - hail
 - extremes in temperature
 - strong winds.

Unit Sector(s)

Outdoor Recreation

Competency Field

Field Operations