Title	Demonstrate knowledge of sleep and sleep management in relation to work performance		
Level	3	Credits	2

Purpose	People credited with this unit standard are able to demonstrate knowledge of: sleep and sleep debt; the circadian rhythm and the body clock; and methods to improve quality of sleep.

Classification	Occupational Health and Safety > Occupational Health and Safety Practice
Available grade	Achieved

#### **Guidance Information**

1 Organisation refers to a specific entity which may be – in private, public, or community and volunteer sectors; a business, a discretely managed unit within a larger entity, a Māori organisation, or a special-purpose body.

Organisational requirements may include but are not limited to:

- organisation purpose and/or direction
- organisation policies and processes
- compliance: legislative/legal, health and safety
- risk management
- sustainability.

*Sleep* refers to a complex state in which the eyes are closed, the muscles relaxed and consciousness practically suspended.

*Sleep Debt (Sleep Deficit)* refers to the result of recurrent sleep deprivation which occurs over time when an individual does not experience a sufficient amount of the restorative daily sleep that is required to maintain a sense of feeling rested and refreshed.

- 2 Assessment and training activities and resources for this unit standard must take into consideration the Health and Safety at Work Act 2015, its regulations and any subsequent amendments and replacements. When assessment and training is contextualised for a specific industry, any industry specific legislation, codes of practice, guidelines and standards must be incorporated.
- 3 Guidelines relevant to this unit standard include but are not limited to Health and Safety at Work Act 2015 and general workplace regulations; *Shift-work, Reducing its effect on health and safety (Advice for employers and employees)* (1998); and *Stress and Fatigue, Their Impact on health and safety in the Workplace* (1998), Occupational Safety and Health Service of the Department of Labour (now WorkSafe New Zealand), available at <u>http://www.worksafe.govt.nz</u>.

# Outcomes and performance criteria

## Outcome 1

Demonstrate knowledge of sleep and sleep debt.

#### **Performance criteria**

1.1 Describe the features of rapid eye movement (REM) sleep.

- 1.2 Describe the features of four non rapid eye movement (NREM) sleep stages in terms of levels of physiological activity.
- 1.3 Describe the features of quality sleep.
  - Range uninterrupted sleep, duration, proportion of sleep stages.
- 1.4 Describe the factors affecting quality of sleep.

Range may include but is not limited to – lifestyle patterns, sleep disorders medication, temperature, noise, effects of alcohol, age, stress, travel, anxiety.

- 1.5 Describe the symptoms of sleep debt.
  - Range symptoms include but are not limited to day time sleepiness, low productivity, decreased concentration, daydreaming, slow reactions.
- 1.6 Explain the concept of sleep debt in relation to the physiological need for sleep and cumulative impact of sleep debt.

#### Outcome 2

Demonstrate knowledge of the circadian rhythm and the body clock.

#### Performance criteria

- 2.1 Explain the circadian rhythm in terms of a genetic cycle that programmes physical and cognitive behaviours.
  - Range cycle length, temperature rhythm, amplitude.
- 2.2 Describe the concept of the body clock in terms of brain functioning for keeping body rhythms harmonised with the environment.
  - Range being awake and asleep, periods of peak physical and mental performance.

Range brain active, rapid eye movement, body muscles paralysed, twitching, ability to recall dreams in detail.

- 2.3 Describe the factors that confuse or disrupt the body clock.
  - Range includes but is not limited to shift work, extended hours awake, sleep disruptions, international travel, medication, drugs.
- 2.4 Describe the factors that have an impact on circadian rhythms.
  - Range includes but is not limited to bright sunlight, temperature, lack of sleep, monotonous activities.
- 2.5 Describe ways of organising activities around circadian rhythms.

Range includes but is not limited to – avoiding driving during sleep periods, managing work and other activities around highs and lows of the temperature rhythm.

#### Outcome 3

Demonstrate knowledge of methods to improve quality of sleep.

#### Performance criteria

- 3.1 Identify lifestyle patterns which encourage quality of sleep.
- 3.2 Describe solutions for sleep disorders in relation to diet, exercise, and medical conditions.
  - Range sleep disorders include but are not limited to age related insomnia, depression, iron deficiency, thyroid imbalance, breathing difficulties.
- 3.3 Identify personal risk reduction strategies.

Range strategies may include but are not limited to – balanced diet, minimise intake of stimulants and alcohol, relaxation, sleep environment, pre-sleep routine.

Planned review date 3	31 December 2022
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 February 2007	31 December 2019
Rollover and Revision	2	22 May 2014	31 December 2021
Review	3	20 July 2017	N/A
Revision	4	22 August 2019	N/A

Consent and Moderation Requirements (CMR) reference	0121		
This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.			

### Comments on this unit standard

Please contact The Skills Organisation <u>reviewcomments@skills.org.nz</u> if you wish to suggest changes to the content of this unit standard.