

Title	Demonstrate knowledge of properties of cosmetics, oils, and electricity and physics relating to beauty therapy services		
Level	5	Credits	8

Purpose	People credited with this unit standard are able to: demonstrate knowledge of properties of cosmetic products; demonstrate knowledge of essential oils and carrier oils used in facial and body therapy services; explain the electricity used in beauty therapy services; explain the waves and laws of physics used in beauty therapy services; explain the use of the electromagnetic spectrum in beauty therapy services; explain the direct currents used in the application of beauty therapy services; explain the alternating currents used in the application of beauty therapy services; and explain the currents used in the electrical muscular stimulation for beauty therapy services.
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Classification	Beauty Services > Beauty Therapy
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Available grade	Achieved
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Guidance Information

- 1 Evidence generated during assessment against this unit standard must be consistent with industry practice and the currently accepted body of knowledge relating to conditions and beauty therapy. Such knowledge is available in reference texts, models, and other information-bearing media. No one textbook or other source of information is envisaged, as new approaches to the study of beauty therapy are published regularly.
- 2 Evidence generated during assessment against this unit standard must be consistent with the current edition of The New Zealand Association of Registered Beauty Therapists, *Code of Ethics for Members of The New Zealand Association of Registered Beauty Therapists Inc.* (Auckland, NZ), and The New Zealand Association of Registered Beauty Therapists, *Health and Hygiene Guidelines* (Auckland, NZ), both available from <http://www.beautynz.org.nz>.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of properties of cosmetic products.

Performance criteria

1.1 Explain the major ingredients of cosmetic mixtures in relation to the action on the skin.

Range includes but is not limited to – emulsions (simple, complex, micro), humectants (glycerol, sorbitol, urea, proteins, natural moisturising factors (NMF), glycosaminoglycans (GAGs).

1.2 Explain the additive ingredients in a cosmetic product in terms of their purpose, use and effect on the face and body.

Range includes but is not limited to – liposomes (uni-laminate, multi-laminate), nanotechnologies, enzymes, peptides, enzymatic, vitamins, hyaluronic acid, proteins.

Outcome 2

Demonstrate knowledge of essential oils and carrier oils used in facial and body therapy services.

Performance criteria

2.1 Explain the chemical composition of selected essential plant oils.

2.2 Explain the processes affecting chemistry of essential plant oils.

2.3 Explain the commonly used carrier oils and their characteristics.

2.4 Explain the effects and benefits of essential plant oils, carrier oils and additives.

Range essential plant oils include but are not limited to – basil, bergamot, cajeput, chamomile, cypress, eucalyptus, geranium, grapefruit, juniper, lavender, lemon, mandarin, niaouli, orange, rose, rosemary, sandalwood, tea tree;
carrier oils include but are not limited to – almond, apricot, grapeseed, safflower, coconut oil;
additives include but are not limited to – arnica, calendula, evening primrose, jojoba, rosehip, wheatgerm.

2.5 Describe the adverse and beneficial interactions of essential plant oils.

Outcome 3

Explain the electricity used in beauty therapy services.

Performance criteria

3.1 Explain the units of measurements of electricity.

Range volts, watts, amps, milliamps, nanoampere, nanometre, ohms, hertz.

3.2 Explain electrical flow.

Range electric force, electron flow, resistance, overload, static

3.3 Explain the electrical components that influence how an electrical current is produced.

Range rheostat, conductor, insulator, oscillator, filter, rectifier, potentiometer, transformer, anodes, cathodes, milliampere meter, fuse.

3.4 Explain the electrical resistance of skin.

Outcome 4

Explain the waves and laws of physics used in beauty therapy services.

Performance criteria

4.1 Explain the application of laws of physics in beauty therapy services.

Range cosine, Inverse Square, Ohm's law.

4.2 Explain the types and parts of a wave model used in beauty therapy services.

Range wavelength, cycle, hertz, trough, peak, amplitude; low-frequency, high-frequency.

4.3 Explain the principles of sonophoresis (sound waves) used in beauty therapy services.

Outcome 5

Explain the use of the electromagnetic spectrum in beauty therapy services.

Performance criteria

5.1 Explain the physiological effects and characteristics of ultraviolet and infra-red on the skin and body tissues.

5.2 Explain the physiological effects of Light Emitting Diodes on the skin and body tissue.

Range blue, red, yellow.

5.3 Explain the wavelengths of the electromagnetic spectrum.

Range infrared, ultraviolet (A, B & C), light spectrum.

5.4 Identify precautions to be observed when administering ultraviolet light and infra-red radiation treatments.

Outcome 6

Explain the direct currents used in the application of beauty therapy services.

Range galvanic (iontophoresis, desincrustation).

Performance criteria

6.1 Explain the principles of galvanic currents.

6.2 Explain the chemical effects of electrodes when involved in face and body galvanic electrical treatments.

Range anodes, cathodes, acid, alkaline.

6.3 Explain the physiological effects of electrical currents on the body.

Outcome 7

Explain the alternating currents used in the application of beauty therapy services.

Range high frequency (direct, indirect).

Performance criteria

7.1 Explain the types and principles of electrical currents.

7.2 Explain the electrical generation of ozone from high frequency treatments.

7.3 Explain the physiological effects of the electrical current on the skin and body.

Outcome 8

Explain the currents used in the electrical muscular stimulation for beauty therapy services.

Range modified direct current, low frequency.

Performance criteria

8.1 Explain the types and principles of electrical currents.

8.2 Explain the effects of electrodes when involved in electrical muscular stimulation electrical treatments.

Range passive, active.

8.3 Explain the physiological effects of electrical currents on the body.

Replacement information	This unit standard replaced unit standard 10390.
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Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	31 May 2018	N/A

Consent and Moderation Requirements (CMR) reference	0035
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the NZ Hairdressing Industry Training Organisation Inc
support@hito.org.nz if you wish to suggest changes to the content of this unit standard.