



Australian Government

Department of Education, Employment and Workplace Relations

WRHHS301A Apply the principles of hairdressing science

Revision Number: 1

WRHHS301A Apply the principles of hairdressing science

Modification History

Not applicable.

Unit Descriptor

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This unit describes the skills and knowledge required to apply the principles of skin and hair biology and cosmetic chemistry to hairdressing services. This unit of competency will apply to a range of hairdressing services and roles in the workplace.

Application of the Unit

Application of the Unit

This unit requires operators to demonstrate in their practice an understanding of skin and hair biology and cosmetic chemistry as they apply to the performance of hairdressing services. Knowledge of the physical and chemical action of hairdressing products on the skin and hair is required to inform the selection and safe application of a range of services.

In the context of an assessment-only and/or a training delivery and assessment pathway, units of competency that relate to this unit are identified in the evidence guide of this unit.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the level of performance required to demonstrate achievement of the element. The variables for the ***bold italicised*** text are outlined in the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | | |
|---|--|--|
| 1 | Apply knowledge of skin structure and function. | 1.1 The <i>main structure, functions and role of the skin</i> are identified and applied to the provision of hairdressing services.

1.2 The <i>structure and function of the glands of the skin</i> are identified and applied to the provision of hairdressing services.

1.3 The <i>physical effects of scalp treatments</i> on the skin are identified and related to the performance of hairdressing treatments. |
| 2 | Apply knowledge of the structure and function of hair. | 2.1 The <i>main functions and role of hair</i> are identified and applied to the provision of hairdressing services.

2.2 The <i>glands and muscles associated with the hair and hair follicles</i> are identified and applied to the provision of hairdressing services.

2.3 The <i>structural and cellular features of hair and hair follicles</i> are identified and applied to the provision of hairdressing services.

2.4 The <i>process of hair growth and the hair growth cycle</i> are identified and applied to the provision of hairdressing services. |

ELEMENT	PERFORMANCE CRITERIA
	<p>2.5 The <i>characteristics of normal and damaged hair</i> are identified and applied to the provision of hairdressing services.</p> <p>2.6 Factors affecting <i>hair colour and chemical reformation</i> are identified and applied to the provision of hairdressing services.</p> <p>2.7 The <i>physical effects of hairdressing services</i> on the hair are identified and applied to the provision of hairdressing services.</p>
3 Apply knowledge of cosmetic chemistry.	<p>3.1 The relevant <i>concepts of cosmetic chemistry</i> are identified and related to the safe performance of hairdressing services, according to <i>relevant legislation</i> and <i>workplace policies and procedures</i>.</p> <p>3.2 The range of chemicals used in hairdressing treatments is assessed and related to the performance of hairdressing services.</p> <p>3.3 Suitability of the hair for chemical services is based on analysis of the effect of previous chemical services or environmental factors on the condition of the hair.</p>
4 Apply knowledge of hairdressing products.	<p>4.1 The formulation of a <i>range of hairdressing products</i> is assessed in relation to the products' purpose and action on the hair.</p> <p>4.2 <i>Contraindications</i> are identified where they relate to client health and safety, hair condition and/or service outcomes.</p>
5 Promote hair and scalp care.	<p>5.1 Knowledge of the physical and chemical actions of a range of hairdressing products is applied during services to maximise the promotion of hair and scalp care, and client and operator safety.</p> <p>5.2 Knowledge of <i>potential environmental damage</i> to hair is applied in the provision of after care service and advice.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Skills may include:

- preventing possible skin and hair damage situations
- identifying client characteristics and recommending and performing a service, including:
 - preparing the service area
 - preparing products and equipment
 - preparing the client
- communication skills that take into account the culture, background and physical abilities of the client while demonstrating knowledge of the following communication techniques:
 - using open and closed questions
 - speaking clearly and concisely
 - using appropriate language
 - non-verbal and written communication
- language, literacy and numeracy skills relevant to the role and workplace requirements.

REQUIRED SKILLS AND KNOWLEDGE

Knowledge may include:

- the provisions of relevant health and hygiene legislation and regulations
- the provisions of relevant skin penetration legislation and regulations
- the provisions of relevant occupational health and safety legislation and regulations
- knowledge of the principles of hairdressing science as they relate to hairdressing treatments
- workplace policies and procedures in regard to the performance of hairdressing services
- knowledge of skin biology in relation to scalp treatments and procedures
- knowledge of hair biology in relation to common hairdressing treatments
- the workplace product, treatment and equipment range and manufacturer's instructions and product safety data sheets.

Evidence Guide

EVIDENCE GUIDE

The evidence guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It is essential for assessment and must be read in conjunction with the performance criteria, the range statement and the assessment guidelines of the relevant Training Package.

Overview of assessment

A person who demonstrates competency in this unit of competency must be able to identify and describe skin and hair science, including the anatomy of human skin and hair, and apply knowledge of the action of common tools and chemicals to the performance of hair and scalp treatments. Knowledge and understanding of the principles of skin and hair biology as they relate to hair and scalp treatments must be demonstrated.

EVIDENCE GUIDE

Specific evidence requirements

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

- knowledge and consistent application of relevant workplace policies and procedures
- knowledge and consistent application of federal, state and local health and hygiene legislation and regulations
- knowledge and consistent application of safe work practices and the safe use of products and equipment (including the use of preventative measures) according to manufacturer safety manuals and occupational health and safety legislation and regulations
- knowledge and consistent application of the principles of skin and hair science as they apply to hairdressing services including:
 - main functions and roles of the skin
 - structural and cellular features of hair and hair follicles
 - process of hair growth and the hair growth cycle
 - physical and chemical effects of hairdressing services on the skin and hair
 - characteristics of normal and damaged hair
 - contraindications to particular services.

Context of assessment

For valid and reliable assessment of this unit, competency should be consistently demonstrated over a period of time and observed by the assessor and/or the technical expert working in partnership with the assessor. The technical expert may include the hairdresser and/or trichologist and may be in a simulated environment.

Competency should be demonstrated in the workplace or a simulated workplace environment in a range of situations that may include client interruptions and involvement in other related activities normally expected in the workplace. For further guidance on the use of an appropriate simulated environment, refer to the Assessment Guidelines in this Training Package.

EVIDENCE GUIDE

Specific resources for assessment

Competency for this unit should be assessed through access to:

- relevant documentation, such as workplace policy and procedures manuals
- a range of clients with different requirements
- a range of equipment and products appropriate to the hairdressing/trichology workplace
- product labels, charts and sources of product information
- a qualified workplace assessor or assessment team.

Relationship to other units

This unit is a co-requisite to a range of hairdressing units. It requires an assessment outcome that includes the application of hairdressing science knowledge to the performance of one or more hairdressing treatments.

Prerequisite units:

- none.

Co-requisite units:

- WRHCL302B Colour and lighten hair
- WRHCL303B Design and perform full and partial highlighting techniques
- WRHCL304A Perform colour correction
- WRHCR302B Perform chemical curling and volumising services
- WRHCR303B Perform chemical straightening and relaxing services
- WRHHS302A Consult with clients and treat hair and scalp conditions.

EVIDENCE GUIDE

Method of assessment

The following assessment methods are suggested.

- Observation of the learner performing a range of tasks in an actual or simulated work environment, over sufficient time to demonstrate his/her handling of a range of contingencies. Tasks may include:
 - identifying the principles of hair science and developing and maintaining safe work practices
 - completing workplace documentation relevant to client analysis prior to hairdressing treatments
 - performing consultation, and hair and scalp analysis
 - safely performing a variety of treatment processes.
- Written and/or oral questioning to assess knowledge and understanding of:
 - structural and cellular features of the hair and hair follicles
 - hair growth cycle
 - hair colour
 - effects of chemical curling, volumising and straightening products on the structure of the hair
 - relationship between the pre-existing condition of the hair and scalp and the provision and/or contraindication of some services.
- Third-party reports from experienced hairdressers.
- Completion of self-paced learning materials, including personal reflection and feedback from the trainer, coach or supervisor.

Evidence required for demonstration of consistent performance

For valid and reliable assessment of this unit, evidence should be gathered through a range of methods to indicate consistent performance.

It can be gathered from assessment of the unit of competency alone, through an integrated assessment activity or through a combination of both.

Evidence should be gathered as part of the learning process.

EVIDENCE GUIDE

Assessing employability skills Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables 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. ***Bold italicised*** text from the performance criteria is detailed here.

The ***main structure, functions and role of the skin*** may include:

- structure and function of the glands of the skin
- relevant skin surface anatomy
- major epidermal appendages and dermal structures
- major cells of the epidermis
- role of vascular, connective and nervous tissue in the dermis.

The ***structure and function of the glands of the skin*** may include:

- structure, function, distribution and development of skin glands
- production, composition and functions of sebum
- production, composition and functions of eccrine and apocrine sweat fluids.

Physical effects of scalp treatments may include:

- conditioning
- removal of excess skin cells
- removal of excess sebum.

RANGE STATEMENT

The *main functions and role of hair* may include:

- thermo-regulation
- protecting the scalp from physical damage
- controlling micro-organisms on the skin.

The *glands and muscles associated with the hair and hair follicles* may include:

- structural and cellular features of a hair follicle
- sebaceous glands
- arrector pili muscle.

The *structural and cellular features of hair and hair follicles* may include:

- hair shaft
- layers of the hair
- hair root and follicle.

The *process of hair growth and the hair growth cycle* may include:

- hair growth cycle
 - anagen (growth phase)
 - catagen (transitional phase)
 - telogen (resting phase)
- influences on hair growth rate.

The *characteristics of normal and damaged hair* may include:

- hair type: coarse, medium and fine
- texture
- porosity.

Hair colour and chemical reformation may include:

- main factors contributing to hair colour
- origin, structure and location of melanin.

Physical effects of hairdressing services may include:

- effects on hair structure
- effects on hair texture
- degree of curl or wave in hair
- hair colour.

RANGE STATEMENT

Concepts of cosmetic chemistry may include:

- bonds
- molecules
- chemical compounds
- chemical change
- neutralisation and buffering
- organic chemistry
- chemical reactions
- acids and bases and their effect on skin and hair
- pH.

Relevant legislation may include:

- federal, state and local health and hygiene
- occupational health and safety.

Workplace policies and procedures may include:

- client comfort and safety
- operator safety
- health and hygiene.

Range of hairdressing products may include:

- colouring products
- lightening products
- chemical reformation products
- chemical relaxation products
- temporary setting aids
- topical products including sprays and waxes
- trichological treatments.

Contraindications may include:

- allergic reactions
- hair porosity.

Potential environmental damage may include:

- ultraviolet (sun) light
- excessive use of overheated thermal equipment.

Unit Sector(s)

Not applicable.

Competency field

Competency Field Hairdressing