



Australian Government

CUACER505 Develop and apply ceramic glazes

Release: 2

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Modification History

Release	Comments
Release 2	This version was released with CUA Creative Arts and Culture Training Package Version 4.1. Minor edits to knowledge evidence.
Release 1	This version first released with CUA Creative Arts and Culture Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to make and apply a range of glazes to create different aesthetic effects for ceramic items. It requires the ability to make and test different types of glazes and to develop original glaze recipes.

It applies to those visual artists who are highly skilled in the specific techniques for glazed ceramic work and who realise a coherent body of creative work. They work with a high level of independence seeking mentoring and guidance as required.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – ceramics

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop ideas for glazing ceramic items	1.1 Evaluate potential for new and original approaches to own glazed ceramic work, including use of original glazes 1.2 Research glazing ideas from historical and contemporary references 1.3 Research, adapt and use relevant ideas and approaches from other practitioners and comply with intellectual property

ELEMENT	PERFORMANCE CRITERIA
	requirements 1.4 Refine and confirm ideas through research, experimentation and testing
2. Modify and test existing glaze recipes	2.1 Investigate and respond to specific safety and sustainability issues for glaze work 2.2 Modify and test existing glaze recipes on various clay bodies and in various kiln firing conditions 2.3 Achieve different effects through exploration and experimentation with a broad range of advanced glazing techniques, equipment and tools 2.4 Label and store glazes safely
3. Formulate original glaze recipes	3.1 Analyse glaze science and chemistry to inform ideas for original glaze recipes 3.2 Research how raw ingredients and formulas achieve different effects 3.3 Formulate own glaze recipes that aim to achieve predictable fired results 3.4 Test original glazes on various clay bodies and in various kiln firing conditions, and record data
4. Create a body of glazed work	4.1 Select and use recipes and glaze application techniques according to required effect and modify application as required 4.2 Decorate surfaces with glaze using techniques and tools selected from own experimentation 4.3 Evaluate and respond to potential for changes in application methods 4.4 Fire the glazed form at the appropriate temperature and kiln atmosphere 4.5 Modify glazes to correct faults and technical problems 4.6 Maintain accurate records and data for glazing and firing processes
5. Evaluate glaze work	5.1 Evaluate glaze work from an aesthetic and functional perspective 5.2 Evaluate development of own technique for glazed ceramic work with others and seek feedback 5.3 Evaluate particular ways that experimentation with different techniques has informed own artwork 5.4 Identify ways to further develop glazing techniques as part of

ELEMENT	PERFORMANCE CRITERIA
	professional ceramics practice and build ideas into future work

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3	Interprets and evaluates complex and unfamiliar information to support design ideas
Writing	2.4, 4.6	- Records basic details of glazes on labels - Develops precise records of glazing and firing processes using relevant technical terminology
Oral Communication	5.2	Uses questioning and active listening techniques to elicit feedback and confirm understanding
Numeracy	2.2, 3.3, 3.4, 4.1, 4.5, 4.6	- Interprets complex chemical formulas for ceramic glazes - Completes complex calculations to measure ratios of ingredients for known and self-developed glazing recipes - Records complex numerical data for own glazing recipes, test outcomes and firing processes
Navigate the world of work	1.3, 2.1, 2.4	Takes responsibility for compliance with legal, safety and sustainability practices associated with creative work
Interact with others	5.2	Encourages contribution of creative, innovative and technical ideas from other artists
Get the work done	1.2-1.4, 2.2, 3.4, 4.1-4.5	- Takes responsibility for completing own research and creative works from design inception to realisation, managing own time and productivity to sequence stages - Manages own decisions about use of recipes and techniques through research and selection according to interest - Resolves problems with glaze recipes and application technique through testing, experimentation, analysis and modification

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUACER505 Develop and apply ceramic glazes (Release 2)	CUACER505 Develop and apply ceramic glazes (Release 1)	Minor edits to knowledge evidence.	Equivalent unit

Links

Companion Volumes are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUACER505 Develop and apply ceramic glazes

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Performance Evidence

Evidence of the ability to:

- research an extensive range of historical and contemporary glazed ceramic work and techniques to inform own designs
- refine glazing technique through a process of thorough experimentation and problem solving to create a coherent body of glazed ceramic work which:
 - shows a command of chosen advanced glazing methodologies, techniques and tools
 - demonstrates the development and testing of both existing glaze recipes and own formulated recipes
 - supports own ideas for work.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe copyright, trademarks, design licences and permissions relevant to producing ceramic works
- summarise the main aspects of historical and contemporary glazed ceramics practice and how they can inform own design ideas
- summarise chemical principles relevant to the glaze-making process
- describe ways to make and test a glaze using chemical formulas
- explain glaze analysis techniques, including molecular formulas and percentage analysis
- describe the characteristics, basic composition and function of:

- colouring oxides
- glazes
- slips and engobes
- describe the effects of heat on glaze
- describe ways to identify and correct glaze faults
- explain the properties, characteristics and the effects on glazes of:
 - commercial clay
 - naturally occurring clay
 - materials used in clay bodies
- describe the characteristics of:
 - clay bodies as they dry
 - fired samples at various firing stages
- explain the features of a range of advanced glazing techniques and how they work to achieve different decorative effects in glazed ceramic work
- summarise techniques used to decorate green ware and fired ware surfaces
- outline the benefits and disadvantages of in-glaze, on-glaze and under-glaze decoration
- explain key safety requirements for ceramic work.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- equipment, tools and materials used to produce glazed ceramic work
- relevant information sources.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

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