



Australian Government

CUACER515 Develop and apply ceramic glazes

Release: 1

CUACER515 Develop and apply ceramic glazes

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package Version 5.0.

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 personal glaze recipes. It involves research to develop designs and refinement of glazing recipes and techniques through experimentation and dedicated practice.

The unit applies to 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 Identify and 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 applicable ideas and approaches from other practitioners 1.4 Refine and confirm ideas through research, experimentation and testing
2. Modify and test	2.1 Investigate and respond to specific safety and sustainability

ELEMENT	PERFORMANCE CRITERIA
existing glaze recipes	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 different advanced glazing techniques, equipment and tools 2.4 Label and store glazes according to safety requirements
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 meet 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 required temperature and kiln atmosphere 4.5 Modify glazes to correct faults and technical problems as required 4.6 Maintain records and data for glazing and firing processes according to requirements
5. Evaluate glaze work	5.1 Evaluate glaze work in line with work idea and functionality 5.2 Evaluate development of own technique for glazed ceramic work with others and seek feedback 5.3 Evaluate different ways that experimentation with different techniques has informed own artwork 5.4 Identify ways to further develop glazing techniques as part of professional ceramics practice and build ideas into future work

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	Interprets and evaluates complex and unfamiliar information to support design ideas
Writing	- Records basic details of glazes on labels - Develops records of glazing and firing processes according to requirements using applicable technical terminology
Oral Communication	Elicits feedback and confirms understanding using questioning and active listening techniques
Numeracy	- 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
Self-management	- Takes responsibility for compliance with legal, safety and sustainability practices associated with creative work - 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
Teamwork	Encourages contribution of creative, innovative and technical ideas from other artists
Problem-solving	Resolves problems with glaze recipes and application technique through testing, experimentation, analysis and modification

Unit Mapping Information

Supersedes and is equivalent to CUACER505 Develop and apply ceramic glazes.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for CUACER515 Develop and apply ceramic glazes

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package Version 5.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- create a body of glazed ceramic works using at least two different glazing techniques.

In the course of the above, the candidate must:

- comply with intellectual property requirements in the development of ideas
- establish, follow and monitor safe work practices during production of work
- refine glazing technique through a process of thorough experimentation and problem solving which:
 - shows a command of chosen advanced glazing methodologies, techniques and tools
 - demonstrates the development and testing of both existing glaze recipes and personalised recipes
 - supports own ideas for work.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

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

- slips and engobes
- effects of heat on glaze
- ways to identify and correct glaze faults
- properties, characteristics and the effects on glazes for:
 - commercial clay
 - naturally occurring clay
 - materials used in clay bodies
- drying characteristics of clay body and dried sample at various firing stages
- features of advanced glazing techniques and how they work to achieve different decorative effects in glazed ceramic work
- techniques used to decorate green ware and fired ware surfaces
- benefits and disadvantages of in-glaze, on-glaze and under-glaze decoration
- key safety requirements for ceramic work.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

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

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

Links

Companion Volume Implementation Guide is found on VETNet -

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