# **DVC Mātauranga Māori Level 1 Course Outline 3 SPATIAL DESIGN WAHAROA**

# Guide to aid teacher planning only - designed to be printed or viewed in A3, Landscape.

## Purpose

This example Course Outline has been produced to help teachers and schools understand the new NCEA Learning and Assessment matrices and could be used to create a year-long programme of learning. It will give teachers ideas of how the new standards might work to assess the curriculum at a particular level.

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| **Significant Learning** | **Learning activities and assessment opportunities****Design Contexts** for this course outline are either for spatial or product designs. Design contexts may include: * Spatial - waharoa, pātaka, whare, wharenui, defence redoubts, or maru.
* Product - taonga, raranga, kākahu, kete, waka huia, weaponry for kapa haka, heirloom, or artefacts of te ao Māori origin.
 | **Duration** Total of 32 weeks  |
| Explore and consider design tikanga, practices, principles from Māori and other cultures within design and communication.Begin to value and respect that there are other perspectives.Understand the purpose of design is to enhance lives and environments using aspects of kaitiakitanga, whakapapa, and manaaki.Understand the whakapapa of a design heritage.Learn how to generate ideas and design innovative outcomes.Identify and use design principles, aesthetics, and functional qualities to inform design ideas and outcomes.Know about and use appropriate visual communication techniques for the communication of design ideas and outcomes.Develop skills in visual techniques to generate design ideas, such as quick sketches, sketch models, fast computer models.Play with ideas that explore possibilities, which can lead to the generation of more interesting ideas.Understand how to use appropriate visual communication techniques to generate and explore ideas beyond first thoughts.Be encouraged to use both divergent and convergent thinking to achieve successful outcomes.Explore and consider design tikanga, practices, principles and techniques from Māori, and indigenous cultures within design and communication.Begin to value and respect that there are other perspectives.Understand the purpose of design is to enhance lives and environments using aspects of kaitiakitanga and hauora.Engage with people, places, and cultures to develop design ideas and outcomes.Know about and use appropriate visual communication techniques for the communication of design ideas and outcomes.Develop skills in visual techniques to generate design ideas, such as quick sketches, sketch models, fast computer models.Develop visual communication skills to explore design ideas and thinking in a context. | **Objective: *Learn to use visual techniques to generate product or spatial design ideas in response to a specific design heritage from te ao Māori and another design heritage*** **Unit 1 Learn about whakapapa, kaitiakitanga, me manaakitanga** **Manaakitanga** - Teacher to develop a culture of collaboration within the classroom. **Whakapapa & Kaitiakitanga -** Learning about the history of the school, the area, and the regional identity in a design sense. Māori influences to support knowledge and imagery gathering about the school and its history, as well as maps of geographic features. Where possible, teachers can collaborate with Iwi / Kaumatua / Kuia / Hapū. External learning opportunities include visits to art galleries or mana whenua sites of significance. **Students will:** Build knowledge and cultural understanding of their chosen design context and present these in a visual form through sketching, painting, drawing, video, oral presentation, photos etc. Knowledge and understating may include written notes, but visual modes are preferred. **Unit 2 Learners understand pepeha concepts to understand own identity and place within classroom and design heritage ‘Who am I’** * Learn stages of the pōwhiri process. Where possible; take part in a pōwhiri and unpack the stages and the meanings that underpin each stage.
* Learning will include understanding of their design context origins (anthropologic and spiritual), purpose, development over time and regional differences.

**Unit 3 Design Principles of Form (Aesthetics) and Function: What are their functions? How do people interact with the design context?*** Where can I find examples? What are some examples?
* Are there items of significance? Why are they significant?
* Learning visual communication skills for spatial or product design contexts (including appropriate 2D & 3D drawing skills for Design).
* Creative play, Rapid Vis, Ideation etc.

**Unit 4 Whakapapa of design through storytelling or waiata (creation story of Ranginui and Papatūānuku and the roles people).**Mātauranga Māori concepts of [Kaitiakitanga](http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te_aranga_principles) and Whakapapa will underpin the learning by showing developing design thinking and to bring connection to designing an outcome. Narrative origins could include research about the origins of design contexts within their own school context. Learners explore the cultural relevance of their chosen topic and its purpose. Spatial designs discuss the marae ātea and geographical significance in iwi history.Learners choose examples from the 4 stages of Māori Art and Design development according to Hirini Moko Mead: * Nga Kākano – the seeds (900–1200 AD).
* Te Tipunga – the growth (1200–1500 AD).
* Te Puawaitanga – the flowering (1500–1800 AD).
* Te Huringa – the turning (1800–present).

**Unit 5 Research into Māori Designers: one traditional and one contemporary - Whakapapa of Design Context*** Traditional practice: Wikukī Kā, Rangi Kipa, Pine Taiapa and the Whakarewarewa Carving school etc.
* Contemporary Practice: Selwyn Muru, Derek Lardelli, Robert Janke, John Scott, Richard Shortland-Cooper, Diggeress Te Kanawa, Rangimārie Hetet etc.
* Research into 1 Non-Māori Designer (list supplied by teacher, eg, David Truebridge’s waka and waka huia inspired design or Tadao Ando’s treatment of light and spatial considerations connects well with the concept of Te Ao Marama.
* Present regional design (carving) styles and the reasons for similarities and differences.

**Unit 6 Using skills and knowledge, Mahi Tuatahi - The Brief****Objective: Learn to u*se visual techniques to develop product or spatial design ideas that consider people.*** **Connecting Mātauranga Māori with Design Context and development phase.** **Learning how to take original ideas to further develop and refine these while reinforcing te ao Māori concepts.** * Write a starting brief to the “situation” according to a co-constructed Design Context
* Integrate concepts from whakapapa and tikanga for learners to begin ideating and generating design ideas (revisit Ideation from earlier in the term).
* Generate ideas that integrate Māori influences, design expectations (from mana whenua representatives, from the school or context), and parameters of the design brief
* If design context is spatial, consider the site from the perspective of the mana whenua, linking history or stories of the peoples who have resided there (mana whenua histories), past and present.
* The brief should be appropriate to the level, that enables individual outcomes.
* Drawing ideas in DVC drawing modes to present ideas.

**Teachers may wish to arrange a visit to an art gallery, local marae or invite artists, architects, or designers to share design thinking and considerations in their work.** **AS 1.1 (5cr Internal) *Generate product or spatial design ideas in response to a specific design heritage from te ao Māori and another design heritage.*****Unit 6 Learners gain experience in a range of techniques (Ngā Tikanga ō DVC): Revisit Development of Visual Communication Skills - Revisit Initial Brief*** Rapid vis, sketching exercises
* 2D & 3D drawing modes
* Elevations, isometric, working drawings
* 1pt, 2pt & 3pt perspective
* SketchUp, TinkerCAD, OnShape etc (online tutorials are available)
* 3d model making examples may include clay, flax, paper, card, foam board, wood etc
* 3D printing
* simple SketchUp models
* Rendering and presentation skills
* Functional representation
* Scaled representations.

**Unit 7 Learners will:*** explain exploration principles and possibilities within their own work, refining ideation, reflection, and critique to build ideas, and to make explicit links to te ao Māori connections (eg, drawings show Māori design principles) and are responsive to the design brief context
* demonstrate how to critique own and peer work safely, learning the tikanga of collaborating and sharing their design through conversations to improve design ideas (the culture within the classroom is safe with positive group dynamics)
* explain divergent and convergent thinking
* produce refinement drawings
* produce functional drawings
* collate a portfolio of designs that show exploration and refining and improvement.

**Unit 8 Learners will:*** understand inter-relationships between learnt classwork tasks and design through constant feedback (Peer, Self, and Group)
* integrate understanding of chosen designer’s form, function, and aesthetic throughout design while considering mana whenua world view and expectations on design contexts.

**AS 1.3 (5cr External) *Use visual techniques to develop product or spatial design ideas that consider people.*** **Students learn and apply te ao Māori Design Concepts by:*** showing a variety of forms, modes, and media
* showing how people interact with the product or spatial design
* extending ideas and opportunities
* refining outcomes
* formalising design ideas and likely measurements
* exploring function and aesthetics.
 | **TERM ONE****Unit 1** **Two Weeks** **Unit 2****Two Weeks** **Unit 3****Two Weeks** **Unit 4** **Two Weeks****Unit 5** **Two Weeks****Unit 6** **Two weeks****Unit 6****Three Weeks** **Unit 7****Three Weeks****Unit 8****Three Weeks** |
| Understand that all ideas have value, use critique to help make decisions.Understand how to use appropriate visual communication techniques to generate and explore ideas beyond first thoughts.Use both divergent and convergent thinking to achieve successful outcomes.Explore and consider design tikanga, practices, principles and techniques from Māori, and indigenous cultures within design and communication.Show understanding of aspects of function and use.Produce unique and individualised design ideas and outcomes.Develop skills and apply design knowledge to context.Know about the visual communication techniques of conceptual design ideas.Know about and use appropriate visual communication techniques for the communication of design ideas and outcomes.Develop skills in visual techniques to generate design ideas, such as quick sketches, sketch models, fast computer models.Develop visual communication skills to explore design ideas and thinking in a context.Use visual communication skills and presentation techniques to communicate a design idea or outcome. | **AS 1.3 (5cr External) *Use visual techniques to develop product or spatial design ideas that consider people.* Due Term 3, Week 5.****Unit 9 *Objective: Learn to use representation techniques to present a spatial or product design outcome*** **Consider if evidence is sufficient for assessment (summative at the end of this unit): AS 1.2 (5cr Internal) *Use representation techniques to communicate a conceptual product or spatial design outcome*.** **Students will:*** use 3D Pictorial systems (1pt, 2pt, and 3pt perspective drawings)
* apply rendering skills for presentations
* produce 2D Drawings
* create working drawings
* learn visual communication methods to communicate the design into functional outcome and scaled representation
* instrumental drawing or CAD drawing that communicates surface, material, and construction features of design context.

Learning from Unit 6 contributes to this unit of learning.**Unit 10 *Learn and use instrumental drawing techniques to communicate a product or spatial design outcome -* Assessment of 1.4 considered. Due Term 4.****Re-visit previous learning and produce instrumental drawing:**Learners will begin selecting and learning formal instrumental drawing techniques to communicate outcomes appropriate for selected design context. * Digital presentation and CAD drawing tools.
* Scaling final drawings.
* Draft Instrumental drawings.
* Construction details.
* Pictorial System.

**Students will:*** use Visual Communication methods to communicate the design
* respond to functional and aesthetic considerations
* produce outcome scaled in preparation for formal instrumental representations (including working drawings)
* reflect on and revise instrumental drawings where needed
* produce drawings in either isometric, paraline, orthographic, or as learners and teachers feel necessary
* produce drawings that show construction, surface, and material details (possibly exploded views)
* prepare final working drawings for external assessment
* complete final instrumental drawings
* prepare the selection of work for external assessments (with copies made)
* select final solutions for presentation (3D printing, photographed etc)
* complete internals for assessment.
 | **Unit 9****Four Weeks****Unit 10****Four Weeks** |
| Produce unique and individualised design ideas and outcomes.Know about and use appropriate visual communication techniques for the communication of design ideas and outcomes.Produce unique and individualised design ideas and outcomes. | **Unit 11 Final exhibition / presentation.****AS 1.4 (5cr External) *Use Instrumental drawing techniques to communicate a product or spatial design outcome.* Due Term 4.**Learners create an exhibition or display that shows their learning and progress throughout the project across the year. **Manaakitanga:** Invite parents and relevant contributors to class exhibitions. Have food prepared for celebration to acknowledge the learners’ progress. Celebrate learning and achievements of all students.During this stage it is customary for students not to speak about their work, but they are encouraged to talk about the learning of others. Teachers select which rendering and presentation techniques to produce illustrated final outcomes. | **Unit 11****Two Weeks** |