Housing and Design

LEVEL 3	15 TCE CREDIT POINTS
COURSE CODE	HDS315113
COURSE SPAN	2013 — 2017
READING AND WRITING STANDARD	NO
MATHEMATICS STANDARD	NO
COMPUTERS AND INTERNET STANDARD	YES

This course was delivered in 2017. Use A-Z Courses to find the current version (if available).

Housing and Design develops architectural skills to respond to design briefs for indoor and outdoor spaces

A design process is used to develop appropriate responses by researching design precedents and the needs of users and analysing the context and site. Design development and final drawings are communicated using freehand sketching and scale drawing skills. Aesthetic, functional, social and ergonomic factors as well as passive solar design principles are addressed in a range of housing and design challenges which develop the knowledge and skills to complete an externally assessed folio.

Course Description

Housing and Design emphasises development of design capabilities through the use of imagination and creativity in making proposals and choices in the development of innovative and enterprising solutions to problems. Students learn a variety of strategies for meeting identified needs, and address considerations of a design brief.

Students learn to draw on a wide spectrum of thinking and creativity to plan, generate, synthesise and realise ideas. They use a diverse range of techniques to communicate this thinking, and their design proposals (e.g. graphical, oral, notational, textual, mathematical, digital, virtual or three-dimensional presentations). Learners engage with complexity, being adaptive, creative and enterprising in their work. Their outcomes reflect qualities of appropriateness of designs and sensitivity, having learned to critically challenge housing values to improve the social and environmental impacts of the built environment.

Learning Statement

Housing and Design develops learners' knowledge, skills and capabilities to respond to design problems relating to indoor and outdoor living spaces. Emphasis is placed on developing the architectural design skills of imagining, representing and testing design ideas, and application of research strategies to support this progress. Learners will consider environmental, aesthetic, functional, social, technological and ergonomic influences and impacts within a range of housing and design projects.

Rationale

Housing and Design is of significance to the Tasmanian senior secondary curriculum as it addresses local and global community concerns about the impacts of domestic energy consumption on the environment.

Learning Outcomes

Through this course, learners will develop knowledge, skills and capabilities in:

1. accessing, acquiring, analysing, synthesising, and evaluating information from a variety of sources
2. a range of verbal and visual communication strategies, and conventions to convey design ideas and proposals
3. self-management techniques, including creating and pursuing goals, planning and organising, monitoring progress, and acting on reflections and revisions to complete projects within agreed timeframes
4. providing active and positive contributions to collaborative design problems to produce appropriate design proposals and solutions
5. applying an understanding of architectural principles relating to use of space, aesthetics and structure in design proposals
6. investigating, analysing and integrating information about site, precedents, client needs and other relevant influences into the design response
7. generating and communicating ideas, concepts and design options using a range of techniques to develop a viable solution to problems
8. identifying and applying features which contribute to environmentally sustainable design and social cohesion within buildings, and their positioning in relation to services and resources
9. critically analysing the range of design and construction techniques and materials to make informed choices to support environmental sustainability and human comfort
10. testing the appropriateness of solutions through a range of analytical and evaluative techniques
11. developing numeracy related to planning, including use of measurement, area, scale, proportion, ratio, gradients, solar geometry and graphically represented data
12. gaining an awareness of pathways related to the built environment including roles involving design and construction, social structures and support, environmental and ecological sustainability, economics and governance, to provide insights for career and life pathways.

Access

This course requires space and resources to allow scale drawing and model making. Access to computers, scanners, a CD burner and the internet is also required.

Pathways

Vocational learning and insights into Personal Pathways are gained by working in design teams and by simulating the roles played by practitioners in the area, site visits and guest speakers. Opportunities to gain insights into the needs and values of a range of clients within the community are developed through rich design briefs which take learners beyond their current experience.

This course is a pathway for learners intending to proceed to further studies in Environmental Design and Architecture, Interior Design, Building Design or Urban Planning. It is also relevant for learners pursuing pathways in Design Teaching, Landscape Design, Furniture Design or Social Work.

Housing and Design has strong links with the Science, Technologies and Arts learning areas. It complements senior secondary courses in art, graphics (including computer graphics) and environmental science, depending on learners' pathways.

Course Size And Complexity

This course has a complexity level of 3.

At Level 3, the learner is expected to acquire a combination of theoretical and/or technical and factual knowledge and skills and use judgement when varying procedures to deal with unusual or unexpected aspects that may arise. Some skills in organising self and others are expected. Level 3 is a standard suitable to prepare learners for further study at tertiary level. VET competencies at this level are often those characteristic of an AQF Certificate III.

This course has a size value of 15.

Course Content

ALL THE COURSE CONTENT LISTED HERE IS COMPULSORY

The course will develop design and generic capabilities through housing and interior design briefs. These will contain challenges and constraints through the application of design principles and information, including:

- Architectural design principles
- Environmentally sustainable practices
- Information about needs, precedents and influences.

Learners will develop knowledge and skills by undertaking a range of briefs which provide a foundation for completing an externally assessed individual design folio on a topic of their choice.

DESIGN PRACTICE

Design Process

- Brief Development (going beyond "client" immediate stated needs)
- Identification of relevant design principles and information (see previous three sections)
- Formulation of aims
- Generation of ideas to address problems and integrate design information using 2D or 3D testing and analysis
- Ideation (visual brainstorming) indicating critical threads in process
- Ongoing reflection on problem, brief and aims.

Design Product

Respond to the brief and aims, which would usually include:

- Functional requirements
- Aesthetic qualities/expression
- Environmental considerations
- Discussion/analysis of areas of brief not able to be resolved.

GENERIC CAPABILITIES

Research, analysis and synthesis

- Critical information literacy skills
- Sourcing information from primary sources, e.g. client, expert, practitioner
- Locating local and Australian sources (and international sources where appropriate)
- Referencing of sources.

Communication

Verbal:

- Evidence of research
- Communicating to an audience (small and class group).

Visual:

- Documentation of research and design process
- Architectural conventions for developmental and final plans
- 2D and 3D modelling/perspective images.

Numerical:

- Measurement, area, scale (1:20, 1:50, 1:100, 1:200), proportion, ratio, gradients, solar geometry and graphically represented data.

ICT:

- Including photo imaging, scanning, word processing, layout and formatting, PowerPoint presentations, email, internet searches.

Self Management for individual and team projects

Individual

- Project management for larger (e.g. larger design projects and folio)
- Planning and organising tools (e.g. timelines)
- Goal setting and action planning
- Critical reflection.

Collaborative

- As above
- Roles, responsibility and leadership
- Problem solving, negotiation, conflict resolution.

DESIGN PRINCIPLES AND INFORMATION

Design and Architectural principles

Aesthetic

- Elements and principles of design
  (colour, texture, shape, line, direction, space, mass, balance, proportion).

Use of space

- Layout, flow, circulation and zoning
- Ergonomics.

Construction materials and techniques

- Functional, environmental and comfort factors of exterior, interior and related construction materials
- Basic construction methods.

Environmental Sustainability

- Sources of energy for housing
- Active and passive energy sources for housing
- Passive solar design for cool temperate and hot humid tropical climates
- Embodied energy of building materials
- Impact of choice of housing materials, services, construction and design techniques on sustainability of energy consumption levels and the environment.

Investigation of needs, precedents and influences

Analysis of site, user and community needs to integrate and respond to:

- Users current and projected needs
  - Practical, psychological and sociological needs during lifecycle
- Precedents
  - Historical, exemplary contemporary architectural responses
- Social and economic influences
  - Types of housing
  - Provision of housing for groups with specific needs (e.g. homeless, people with disability).

The *Teaching and Learning Guide* provides support for teachers and learners through:

- Suggested topics for folios
- Examination of briefs which provide foundation learning in the Design Principles and Information content area
- References and resources.

Assessment

Criterion-based assessment is a form of outcomes assessment that identifies the extent of learner achievement at an appropriate end-point of study. Although assessment – as part of the learning program – is continuous, much of it is formative, and is done to help learners identify what they need to do to attain the maximum benefit from their study of the course. Therefore, assessment for summative reporting to TASC will focus on what both teacher and learner understand to reflect end-point achievement.

The standard of achievement each learner attains on each criterion is recorded as a rating 'A', 'B', or 'C', according to the outcomes specified in the standards section of the course.

A 't' notation must be used where a learner demonstrates any achievement against a criterion less than the standard specified for the 'C' rating.

A 'z' notation is to be used where a learner provides no evidence of achievement at all.

Providers offering this course must participate in quality assurance processes specified by TASC to ensure provider validity and comparability of standards across all awards. To learn more, see TASC's quality

assurance processes and assessment information.

Internal assessment of all criteria will be made by the provider. Providers will report the learner's rating for each criterion to TASC.

TASC will supervise the external assessment of designated criteria which will be indicated by an asterisk (*). The ratings obtained from the external assessments will be used in addition to internal ratings from the provider to determine the final award.

Quality Assurance Process

The following processes will be facilitated by TASC to ensure there is:

- a match between the standards for achievement specified in the course and the standards demonstrated by learners

- community confidence in the integrity and meaning of the qualifications.

Process – TASC gives course providers feedback about any systematic differences in the relationship of their internal and external assessments and, where appropriate, seeks further evidence through audit and requires corrective action in the future.

External Assessment Requirements

The following criteria will be externally assessed: 3, 4, 6, 7 and 8.

For further information see the current external assessment specifications and guidelines for this course available in the Supporting Documents below.

Criteria

The assessment for Housing and Design Level 3 will be based on the degree to which the learner can:

1. communicate ideas and information using a range of techniques
2. demonstrate self-management strategies to complete individual and team activities
3. apply features and principles which will contribute to environmental sustainability within design decisions*
4. understands and applies architectural design principles relating to the functional use of space*
5. understands and applies architectural design principles relating to aesthetics
6. locate and analyse information about user needs and influences in design projects*
7. use and document the design process*
8. generate design solutions which respond positively to the brief and identified aims*

* = denotes criteria that are both internally and externally assessed

Criterion 1: communicate ideas and information using a range of techniques

The learner:

Rating A	Rating B	Rating C
communicates ideas and information using an appropriate and diverse range of techniques which are clear and structured to reveal comprehensive understanding and synthesis	communicates ideas and information using an appropriate range of techniques which are clear and structured to reveal understanding and synthesis	communicates ideas and information using a range of techniques which are structured to reveal understanding and some synthesis
competently selects and combines appropriate forms, styles and conventions which are appropriate in relation to the context and purpose	selects and combines forms, styles and conventions which are appropriate in relation to the context and purpose	selects and combines forms, styles and conventions which are appropriate in relation to the context and purpose
revises and reflects upon communication to check for clarity, detail, accuracy and effectiveness, and makes adjustments.	revises and reflects upon communication to check for clarity, detail, accuracy and effectiveness, and makes adjustments.	checks communication for clarity, detail and accuracy, and makes adjustments based on feedback.

Criterion 2: demonstrate self-management strategies to complete individual and team activities

The learner:

Rating A	Rating B	Rating C
uses a wide range of planning and self management strategies which consistently enables the effective completion of tasks within agreed time frames	uses a range of planning and self management strategies which usually enables the effective completion of tasks within agreed time frames	uses planning and self management strategies which facilitate the successful completion of most tasks within agreed time frames
consistently reflects upon planning timelines and makes modifications, utilises appropriate resources and effectively addresses barriers to achieve individual or team goals	reflects upon planning timelines and makes modifications, utilises appropriate resources and seeks to address barriers to achieve individual or team goals	reflects upon planning timelines and attempts to make modifications, utilises appropriate resources and seeks to address most barriers to achieve individual or team goals
demonstrates a sense of individual and collective responsibility when working in teams through ongoing monitoring and reviewing of progress and effective communication in relation to team goals	demonstrates a sense of individual and collective responsibility when working in teams by monitoring and reviewing progress and effective communication in relation to team goals	demonstrates a sense of individual and collective responsibility when working in teams by monitoring and reviewing progress and through communication in relation to team goals
effectively employs a range of collaborative strategies, identifies and addresses issues which affect achievement of team goals, and effectively adopts appropriate leadership roles when required.	effectively employs a range of collaborative strategies, addresses issues which affect achievement of team goals, and adopts appropriate leadership roles when required.	employs collaborative strategies, addresses issues which affect achievement of team goals, and can lead when required.

Criterion 3: apply features and principles which will contribute to environmental sustainability within design decisions

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
develops design decisions that successfully contribute to environmental sustainability and applies, describes and justifies appropriate features and principles in a detailed and informed manner	develops design decisions that successfully contribute to environmental sustainability and applies, describes and justifies most of the appropriate features and principles in a detailed and informed manner	develops design decisions which includes most of the key features and principles that contribute to environmental sustainability and applies, describes and justifies these
demonstrates an accurate and broad knowledge of environmental impacts of housing and design decisions	demonstrates knowledge of environmental impacts of most housing and design decisions	demonstrates knowledge of the main environmental impacts of some housing and design decisions
identifies, analyses and seeks to resolve competing factors which impact on the environment when designing.	identifies and analyses competing factors which impact on the environment and addresses most of these factors when designing.	identifies competing factors which impact on the environment and address some of these factors when designing.

Criterion 4: understands and applies architectural design principles relating to the functional use of space

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
develops design solutions that effectively contributes to functional use of space and relates directly to the identified needs of the users in a wide range of housing and design contexts	develops design solutions that effectively contributes to functional use of space and relates to the majority of the identified needs of the users in a range of housing and design contexts	develops design solutions that usually contributes to functional use of space and relates to most of the identified needs of the users in a range of housing and design contexts
considers and refines a wide range of designs to appropriately respond to ergonomic, circulation and spatial relationships, including zoning	considers and refines a range of designs to appropriately respond to ergonomic, circulation and spatial relationships, including zoning	considers and refines designs to respond to the main ergonomic, circulation and spatial relationships, including zoning
provides clear annotations relating to critical design decisions which reflects relevant and broad knowledge of the above two standard elements of this criterion.	provides annotations relating to critical design decisions which reflects relevant knowledge noted in the above two standard elements of this criterion.	provides annotations relating to critical design decisions which reflects relevant knowledge of most of the considerations noted in the above two standard elements of this criterion.

Criterion 5: understands and applies architectural design principles relating to aesthetics

The learner:

Rating A	Rating B	Rating C
critically analyses aesthetics in a range of architectural settings to reflect an understanding of the interrelationships between elements and principles of design	analyses aesthetics in a range of architectural settings to reflect an understanding of the elements and principles of design	identifies aesthetic features in a range of architectural settings to develop an understanding of the elements and principles of design
develops design solutions that explore, analyse and selectively use an appropriate range of the aesthetic elements and principles of design to create the specified visual impact	develops design solutions that explore, analyse and use the aesthetic elements and principles of design to create a specific visual impact	develops design solutions that explore and use a range of the aesthetic elements and principles of design to create a specific visual impact

provides clear annotates which reflect a broad and accurate understanding of the elements and principles of design by providing sound justification of all aesthetic design decisions.	provides annotates which reflect a sound understanding of the elements and some principles of design by providing clear justification of key aesthetic design decisions.	provides annotates which reflect an understanding of the elements and some principles of design by justifying key aesthetic design decisions.

Criterion 6: locate and analyse information about user needs and influences in design projects

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
identifies, locates and selects relevant and current information about the brief from a broad range of sources and appropriately uses this to inform effective design decisions	identifies, locates and selects relevant and current information about the brief from a broad range of sources and uses this to inform design decisions	locates and selects relevant and current information about the brief from a range of sources and uses this to inform design decisions
critically analyses impact of • user needs • precedents • site analysis • context	analyses impact of • user needs • precedents • site analysis • context	considers impact of • user needs • precedents • site analysis • context
clearly and insightfully reveals the links between research and the design through appropriate and effective documentation and communication strategies	clearly reveals the links between research and the design through appropriate documentation and communication strategies	reveals the link between research and the design through documentation and communication strategies
clearly identifies the information, images, ideas and words of others used in the learner's work	clearly identifies the information, images, ideas and words of others used in the learner's work	differentiates the information, images, ideas and words of others from the learner's own
clearly identifies sources of the information, images, ideas and words that are not the learner's own. Referencing conventions and methodologies are followed with a high degree of accuracy.	clearly identifies sources of the information, images, ideas and words that are not the learner's own. Referencing conventions and methodologies are followed correctly.	identifies the sources of information, images, ideas and words that are not the learner's own. Referencing conventions and methodologies are generally followed correctly.
creates appropriate, well structured reference lists/bibliographies.	creates appropriate, structured reference lists/bibliographies.	creates appropriate reference lists/bibliographies.

Criterion 7: use and document the design process

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
explores a progression of ideas and critically analyses these by reflecting on the design brief, aims and related design considerations	explores a progression of ideas and analyses these by reflecting on the design brief, aims and related design considerations	explores a progression of ideas and assesses these by reflecting on the design brief, aims and most related design considerations
sequences and clearly presents graphics and	sequences and presents graphics and	sequences and presents graphics

annotations to reflect the problem solving process and the pivotal points in design decisions	annotations to reflect the problem solving process and some of the pivotal points in design decisions	and annotations to reflect the problem solving process
uses scale appropriately and effectively to test and refine design ideas for the design development process	uses scale appropriately to test and refine design ideas for the design development process	uses scale appropriately to test and improve design ideas in the majority of the design development process
provides clear evidence that the design process has been consistently and effectively refined to address issues identified via feedback and ongoing reflective thinking.	provides clear evidence that the design process has been refined to address issues identified via feedback and ongoing reflective thinking.	provides evidence that the design process has included refinements based on feedback and reflective thinking.

Criterion 8: generate design solutions which respond positively to the brief and identified aims

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
addresses all aspects of the brief and aims within the final design(s) in an effective manner and with a high degree of resolution	addresses all aspects of the brief and aims within the final design(s) in an effective manner	addresses most key aspects of the brief and aims within the final design(s) in a positive manner
thoroughly integrates all relevant design information into the final design	effectively integrates relevant design information into the final design	integrates relevant design information into the final design
fully and effectively annotates final design to justify all design decisions	annotates final design to justify all design decisions	annotates final design to justify most design decisions
selects and accurately uses a broad range of communication conventions and styles to present an effective final design.	selects and accurately uses an appropriate range of communication conventions and styles to present the final design.	selects and uses a range of communication conventions and styles to present the final design.

Qualifications Available

Housing and Design Level 3 (with the award of):

PRELIMINARY ACHIEVEMENT

SATISFACTORY ACHIEVEMENT

COMMENDABLE ACHIEVEMENT

HIGH ACHIEVEMENT

EXCEPTIONAL ACHIEVEMENT

Award Requirements

The final award will be determined by the Office of Tasmanian Assessment, Standards and Certification from 13 ratings (8 from the internal assessment, 5 from the external assessment).

The minimum requirements for an award in Housing and Design Level 3 are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)
10 'A', 3 'B' ratings (4 'A', 1 'B' from external assessment)

HIGH ACHIEVEMENT (HA)
5 'A', 5 'B', 3 'C' ratings (2 'A', 2 'B', 1 'C' from external assessment)

COMMENDABLE ACHIEVEMENT (CA)
7 'B', 5 'C' ratings (2 'B', 2 'C' from external assessment)

SATISFACTORY ACHIEVEMENT (SA)
11 'C' ratings (3 'C' from external assessment)

PRELIMINARY ACHIEVEMENT (PA)
6 'C' ratings

A learner who otherwise achieves the ratings for a CA (Commendable Achievement) or SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award.

Course Evaluation

The Department of Education's Curriculum Services will develop and regularly revise the curriculum. This evaluation will be informed by the experience of the course's implementation, delivery and assessment.

In addition, stakeholders may request Curriculum Services to review a particular aspect of an accredited course.

Requests for amendments to an accredited course will be forwarded by Curriculum Services to the Office of TASC for formal consideration.

Such requests for amendment will be considered in terms of the likely improvements to the outcomes for learners, possible consequences for delivery and assessment of the course, and alignment with Australian Curriculum materials.

A course is formally analysed prior to the expiry of its accreditation as part of the process to develop specifications to guide the development of any replacement course.

Course Developer

The Department of Education acknowledges the significant leadership of Melinda Williams in the development of this course.

Accreditation

The accreditation period for this course is from 1 January 2013 to 31 December 2017.

Version History

Version 1 – Accredited version (10 August 2012). This course replaces Housing and Design (HDS315108) that expired on 31 December 2012.

Supporting documents including external assessment material

- HDS315113 Assessment Report 2015.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Assessment Report 2016.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Exam Guidelines 2013-2017.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Exam Paper 2013.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Exam Paper 2014.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Exam Paper 2015.pdf (2017-07-21 01:05pm AEST)

- HDS315113 Exam Paper 2016.pdf (2017-07-21 01:05pm AEST)

- HDS315113 External Assessment Dates 2017-FINAL.pdf (2017-07-21 01:05pm AEST)

- HDS315108 Assessment Report 2012.pdf (2017-07-26 03:20pm AEST)

- HDS315113 Assessment Report 2013.pdf (2017-07-26 03:20pm AEST)

- HDS315113 Assessment Report 2014.pdf (2017-07-26 03:21pm AEST)

- HDS315108 Exam Paper 2012.pdf (2017-07-26 03:21pm AEST)

- HDS315113 Folio Guidelines 2017.pdf (2017-08-17 12:47pm AEST)

- HDS315113 Exam Paper 2017.pdf (2018-02-05 12:07pm AEDT)

- Housing and Design Folio Marking Guide.pdf (2018-01-02 03:11pm AEDT)

Tasmanian Government