MODULE CURRICULUM AND ASSESSMENT STANDARDS:

SECTION E: INTERMEDIATE LEVEL

The following pages define the curriculum and assessment standards for the intermediate level of Design Studies.

Intermediate level modules help students build on the competencies developed at the introductory level and focus on developing more complex competencies. They provide a broader perspective, helping students recognize the wide range of related career opportunities available within the strand.

MODULE DES2010: 2-D DESIGN APPLICATIONS

Level: Intermediate

Theme: Design Skills, Processes and Applications

Prerequisite: None

Module Description: Students apply the design process and other knowledge, skills and processes learned at the introductory level to two-dimensional design projects. Projects in this module typically deal with communication problems and issues. Students take greater responsibility for managing their learning and learn to work cooperatively with others.

Module Parameters: Basic sketching, drawing and graphic layout tools and equipment and/or a computer with graphic design software.

Note: It is recommended that students have access to instruction from an individual with formal, specialized training in graphic design.

Supporting Modules: DES1020 The Design Process

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• plan and produce solutions to intermediate level two-dimensional design briefs	• resolution of a teacher- and/or student-specified intermediate level two-dimensional design brief. *Assessment Tool* *Project Assessment: Design Skills, Processes and Applications (Intermediate) (DESPRJ–2A)* *Standard* *Performance rating of 1 for each criteria*	60
• use, effectively, the elements and principles of design	• selection and effective use of elements and principles of design in project work. *Assessment Tools* *Authorized resources for explanation and examples of elements and principles of design* *Project Assessment: Design Skills, Processes and Applications (Intermediate) (DESPRJ–2A)* *Standard* *Performance rating of 1 for each criteria*	20

MODULE DES2010: 2-D DESIGN APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • select, organize and present design projects	*Assessment of student achievement should be based on:* • maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on the degree of resolution of the design brief, and the student's discourse regarding: – the aesthetic quality of the product – the process(es), tools, materials and techniques used in resolving the design brief – why these were chosen – to what effect they were used. *Assessment Tools* *Presentations/Reports: Design Skills, Processes and Applications (Intermediate) (DESPRE–2A)* *Standard* *Performance rating of 2 for each criteria*	20
• demonstrate basic competencies.	• observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • demonstrate proficiency with skills and techniques learned at the introductory level; e.g., practising sketching and drawing • identify additional techniques, tools, materials and other resources (e.g., tones, texture and colour; markers and paints; photographs and illustrations; computer generated or captured images; type faces) and use them in design projects • write a design brief and/or structure a plan for resolving a two-dimensional design project(s) • demonstrate organization and management of personal learning with limited external direction	Students can expand their knowledge of two-dimensional design in part through exposure to a wider selection of materials, tools and techniques. They must, however, solidify and increase their abilities with previously learned/ used materials, tools and techniques. It may be best to reinforce existing practices and add new learning where appropriate.

Concept	Specific Learner Expectations	Notes
Skills Development (continued)	*The student should:* • identify mathematical and/or scientific principles as they apply to design projects assigned; e.g., organization of visual space, measurement of internal space, borders, columns, use of scale.	Students should learn to write design briefs and structure plans for resolving the brief. Briefs and plans may be based on teacher- or student-identified needs. Students will learn to prepare briefs and plans, and manage their own learning at this level, and to do so independently at the advanced level. Many design solutions will not be completed full size but will be "scale" models. For example, a student might prepare a scale module of a mural that could be painted on a building. Students can learn the concept of scale in this context then apply it repeatedly in other design tasks.
Elements and Principles of Design	• use elements and principles of design in design projects • experiment with one or more elements (e.g., colour, line, shape) and/or principles (e.g., rhythm, balance) to achieve desired affects.	
Applied Problem Solving	• follow through a design process to solve two-dimensional design problems; e.g., CD covers, sports graphics, newspaper or magazine advertisements, billboards or wall murals, corporate logos or neon graphics • select and use appropriate tools and materials as outlined in the design brief.	Intermediate level Design Studies students must take a problem as given, generate ideas for a solution and work them through. Teachers will need to teach more advanced techniques, or direct their students to appropriate resources, but the responsibility for problem solving should rest with the student.

MODULE DES2010: 2-D DESIGN APPLICATIONS (continued)

Concept	Specific Learner Expectations	Notes
Presentation, Design Journal and Portfolio	*The student should:* • participate in interim critiques that include peer review and input • prepare for and actively participate in a final presentation and critique of design work. Effectively communicate intentions and decision making related to the design project • maintain a design journal/sketchbook of the project, which would include research notes, ideas, writings, sketches, photographs, cuttings, etc., related to the project • maintain a portfolio of ongoing design activity, which might include sketches, freehand drawings, rendered drawings, technical drawings, photographs of models (physical and/or CAD), reports, etc., plus work from previously completed modules.	Students working at this level should be able to present their work to their classmates in informal critique sessions. Critiques of completed projects provide a venue for students to present their work and to celebrate their success with their peers. Participation guidelines should be established and clearly understood by students before a critique occurs. Students who have taken several modules and have maintained a portfolio will have a sizable collection of design projects. They may begin culling some less successful projects in favour of newer projects showing more advanced learning. An alternative would be to start a second portfolio of presentation quality pieces while maintaining a working portfolio.

MODULE DES2020: 3-D DESIGN APPLICATIONS

Level: Intermediate

Theme: Design Skills, Processes and Applications

Prerequisite: None

Module Description: Students apply the design process and other knowledge, skills and processes learned at the introductory level to three-dimensional design projects. Projects in this module typically deal with problems and issues related to product design. Students take greater responsibility for managing their learning and learn to work cooperatively with others.

Module Parameters: Basic sketching, drawing and modelling tools and equipment and/or a computer. Specialized facilities or equipment depend on the approach taken to 3-D model development.

Note: It is recommended that students have access to instruction from an individual with formal, specialized training in product or industrial design.

Supporting Module: DES1020 The Design Process

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• plan and produce solutions to intermediate level three-dimensional design briefs	• resolution of a teacher- and/or student-specified intermediate level three-dimensional project brief(s). *Assessment Tool* *Project Assessment: Design Skills, Processes and Applications (Intermediate) (DESPRJ–2A)* *Standard* *Performance rating of 1 for each criteria*	60
• use, effectively, the elements and principles of design	• selection and effective use of elements and principles of design in project work. *Assessment Tool* *Project Assessment: Design Skills, Processes and Applications (Intermediate) (DESPRJ–2A)* *Standard* *Performance rating of 1 for each criteria*	20

MODULE DES2020: 3-D DESIGN APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • select, organize and present design projects	*Assessment of student achievement should be based on:* • maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on the degree of resolution of the design brief, and the student's discourse regarding: – the aesthetic quality of the product – the process(es), tools, materials and techniques used in resolving the design brief – why these were chosen – to what effect they were used. *Assessment Tool* *Presentations/Reports: Design Skills, Processes and Applications (Intermediate) (DESPRE–2A)* *Standard* *Performance rating of 2 for each criteria*	20
• demonstrate basic competencies.	• observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • demonstrate increased proficiency with skills and techniques learned at the introductory level; e.g., cutting, joining, bending, measuring • identify additional techniques, tools, materials and other resources (e.g., materials such as woods, metals, plastics, fibres, techniques specific to cutting, joining or bending materials not used before, tools specific to these activities) and use them in design projects • write a design brief and/or structure a plan for resolving a three-dimensional design project(s) • demonstrate organization and management of personal learning with limited external direction	See the notes from 2-D Design Applications as they apply equally to this module. Scientific principles are applied continually in three-dimensional design. Recognizing these principles and how they may be applied will advance students' knowledge and ability in design and provide practical uses for theoretical constructs learned in other programs.

MODULE DES2020: 3-D DESIGN APPLICATIONS (continued)

Concept	Specific Learner Expectations	Notes
Skills Development (continued)	*The student should:* • identify mathematical and/or scientific principles as they apply to design projects assigned; e.g., structural principles applied to strength and stability, principles of mass and buoyancy applied to flotation; principles of energy and control as applied to movement and power.	
Elements and Principles of Design	• use elements and principles of design in design projects.	It is important for students to experiment with form; the form of objects and the space they occupy.
Applied Problem Solving	• follow through a design process to solve three-dimensional design problems(s); e.g., a toy made of wood or fabric for a preschool child, a sustained motion machine, a "boat" made of wood, paper, glue and shellac or a seat for a patio or garden • select and use appropriate tools and materials as outlined in the design brief.	Students should examine various types of structures and the principles they are based on. They will learn why some structures are successful while others fail. This knowledge can then be applied to their design tasks. Scale models may be produced in this module. For example, a student may produce a scale model of a chair, a catapult or a bridge. The model could be tested for strength and durability, then if appropriate, a final prototype could be produced.
Presentation, Design Journal and Portfolio	• see Specific Learner Expectations from 2-D Design Applications.	See notes from 2-D Design Applications.

MODULE DES2030: CAD APPLICATIONS (COMPUTER-AIDED DESIGN)

Level: Intermediate

Theme: Drafting for Design and Technical Drawing Skills

Prerequisite: None

Module Description: Students apply their previous learnings, and add knowledge, skills and techniques associated with computer-aided design (CAD) to the context of new design-related tasks.

Module Parameters: Access to a computer with a computer-aided design (CAD) software package, a printer and/or plotter, and basic sketching and drawing tools and equipment.

Note: It is recommended that students have access to instruction from an individual with formal specialized training in a design discipline, drafting and CAD.

Supporting Modules: DES1050 CAD Fundamentals

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• use CAD software to produce and print/plot intermediate level multiview and/or pictorial drawings and/or surface developments	• production of a multiview and/or pictorial drawing and/or surface development using teacher-specified CAD software. *Assessment Tool* *Project Assessment: CAD Applications (DES2030–1)* *Standard* *Performance rating of 1 for each criteria*	80
• select, organize and present design projects	• maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on the accuracy of application of the CAD software to the drawing assignment, and the student's discourse regarding the process(es), tools and functions used in producing his or her drawing. *Assessment Tool* *Presentations/Reports: Drafting for Design and Technical Drawing Skills (Intermediate) (DESPRE–2B)* *Standard* *Performance rating of 2 for each criteria*	20

MODULE DES2030: CAD APPLICATIONS (COMPUTER-AIDED DESIGN) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • demonstrate basic competencies.	*Assessment of student achievement should be based on:* • observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • identify and demonstrate commonly used tools, methods and functions (see CAD Fundamentals) without teacher direction and assistance • read and interpret pictorial and other types of sketches for pertinent information • use CAD skills to produce layered fully dimensioned multiview drawings and pictorial drawings and/or surface developments • print or plot drawings.	Students completing this module should be fully versed in basic CAD use. Teachers may provide students with experience on other computer software that links to and/or supports CAD.
Applied Problem Solving	• select and use CAD tools, methods and functions to produce layered multiview drawings and pictorial drawings and/or surface developments based on pictorial sketches or real three-dimensional objects • demonstrate the use of layers on at least one drawing.	As with CAD Fundamentals, applied problem solving in this module centres on the student's ability to select appropriate tools, methods and functions for achieving specific tasks.
Presentation, Design Journal and Portfolio	• print/plot drawings and include them in a portfolio • explain drawings as required (e.g., technique/ application used, purpose of element in the drawing, terminology).	A critique in this module may emphasize sharing information about CAD rather than solutions to design problems. Specific project activities should concentrate on skill development with a specific CAD package.

MODULE DES2040: DRAFTING/DESIGN APPLICATIONS

Level: Intermediate

Theme: Drafting for Design and Technical Drawing Skills

Prerequisite: None

Module Description: Students learn skills in assembly, section and/or auxiliary drawing. They further develop the knowledge, skills and techniques; e.g., pictorial drawings, multiview drawings, surface developments (flat patterns), and by applying them in the context of more complex design projects.

Module Parameters: Basic sketching and drawing tools and equipment, drafting tables, equipment and materials and/or computer with a computer-aided design (CAD) software package, a printer and/or plotter.

Note: It is recommended that students have access to instruction from an individual with formal, specialized training in a design discipline, drafting and where applicable in CAD.

Supporting Module: DES1060 Drafting/Design Fundamentals

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • produce pictorial drawings; e.g., isometric, oblique, one- and two-point perspective using rendering styles and techniques; e.g., pencil, ink, colour, computer generated within the context of design projects	*Assessment of student achievement should be based on:* • production of pictorial drawings and renderings within the context of a teacher- and/or student-specified design assignments. *Assessment Tool* *Project Assessment: Drafting/Design Applications (DES2040–1)* *Standard* *Performance rating of 1 for each criteria*	40

MODULE DES2040: DRAFTING/DESIGN APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• produce at least two types of drawings chosen from assembly, section or auxiliary, either manually or with the aid of a computer • produce dimensioned multiview drawings, either manually or with the aid of a computer OR	• production of two of the following based on teacher- and/or student-specified three-dimensional references and/or sketches and aided by mechanical drafting equipment or CAD software and describing their purpose and application: – assembly drawing – section drawing – auxiliary drawing	30
• produce surface developments for items; e.g., garments, sheet metal, packaging, manually or with the aid of a computer	• production of the following based on teacher- and/or student-specified three-dimensional references and/or sketches and aided by mechanical drafting equipment or CAD software: – dimensioned multiview drawing(s) or – surface development(s) for construction. *Assessment Tool* *Project Assessment: Drafting/Design Applications (DES2040–1)* *Standard* *Performance rating of 1 for each criteria*	10
• select, organize and present design projects	• maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on the student's discourse, emphasizing: – his or her understanding of pictorial drawing and rendering styles and techniques – how these can be used – how these were applied in the drawings produced – and understanding of multiview drawings, their preparation and use. *Assessment Tool* *Presentations/Reports: Drafting for Design and Technical Drawing Skills (Intermediate) (DESPRE–2B)* *Standard* *Performance rating of 2 for each criteria*	20

MODULE DES2040: DRAFTING/DESIGN APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • demonstrate basic competencies.	*Assessment of student achievement should be based on:* • observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • demonstrate increased skills in pictorial drawing and/or in producing surface development drawings (flat patterns) • produce at least two examples chosen from the following drawings types: assembly, sectional, or auxiliary; and be able to describe their purpose and application within a design project • use appropriate terminology within the context of each design project • produce one or more multiview drawing(s) (at least three views) of a product, structure or devise, etc. OR • produce at least two surface developments chosen from the following: – a package – a fold-up model – a garment – ventilation ducting – a container – a collapsible shelter – other teacher-specified project(s).	In this module, students should engage in a variety of activities that involve generating drawings based in a design problem. The specific skills should be taught within this context. Some teachers may take a single theme (e.g., lake cottage, all-terrain vehicle or garment) as the context for learning. Other teachers will want their students to engage in two or more smaller projects. Students need to be able to communicate in a common language. Learning specific terminology associated with this area will help the students communicate effectively to each other and to outside parties.

MODULE DES2040: DRAFTING/DESIGN APPLICATIONS (continued)

Concept	Specific Learner Expectations	Notes
Applied Problem Solving	*The student should:* • select appropriate drawing types and styles and use them to accurately illustrate potential design solutions as part of the resolution of a design brief • select and use appropriate tools and materials as outlined in each design brief.	Students may use this module in several contexts including architecture, landscape design, product design, and flat pattern design for fashion. Students may use traditional drafting equipment, CAD or other technology specified by the teacher to complete the module. Students may need guidance in choosing appropriate drawing types and approaches for the design project(s) they engage in.
Presentation, Design Journal and Portfolio	• print/plot drawings and include them in a design portfolio • explain drawings as required (e.g., pictorial/ multiview drawing styles and techniques, drawing preparation, drawing use).	See notes for 2-D Design Applications and CAD Applications.

MODULE DES2050: TECHNICAL DRAWING APPLICATIONS

Level: Intermediate

Theme: Drafting for Design and Technical Drawing Skills

Prerequisite: None

Module Description: Students develop accurate multiview drawings from previously produced sketches, and learn the common understandings, conventions and language associated with technical drawing.

Module Parameters: Basic sketching and drawing tools and equipment, drafting tables, equipment and materials and/or computer with a computer-aided design (CAD) software package, a printer and/or plotter. Specialized equipment facilities depend on the approach taken.

Note: It is recommended that students have access to instruction from an individual with formal, specialized training in a design discipline, drafting and where applicable in CAD.

Supporting Modules: DES1060 Drafting/Design Fundamentals

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• produce technical drawings for simple structures, products and/or components	• set of technical drawings for a simple structure and/or a product and/or a manufactured component. *Assessment Tool* *Project Assessment: Technical Drawing Applications (DES2050–1)* *Standard* *Performance rating of 1 for each criteria*	60
• dimension and notate drawings accurately	• accurate dimensioning and notation of all drawings in accordance with standards and conventions. *Assessment Tool* *Project Assessment: Technical Drawing Applications (DES2050–1)* *Standard* *Performance rating of 1 for each criteria*	10

MODULE DES2050: TECHNICAL DRAWING APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• identify and include to all pertinent codes and specifications as they apply to drawings produced	• identification and application of codes and specifications as they pertain to the project and as determined by the teacher and/or other qualified individual. *Assessment Tool* *Local, regional, provincial, national and international reference manuals for codes and standards* *Project Assessment: Technical Drawing Applications (DES2050–1)* *Standard* *Performance rating of 1 for each criteria*	10
• select, organize and present design projects	• maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on: – the quality and accuracy of the drawings produced, and the student's discourse, emphasizing: • his or her understanding of technical drawing techniques • how these were applied in the drawings produced • the codes and specifications addressed in the drawings. *Assessment Tool* *Presentations/Reports: Drafting for Design and Technical Drawing Skills (Intermediate) (DESPRE–2B)* *Standard* *Performance rating of 2 for each criteria*	20

MODULE DES2050: TECHNICAL DRAWING APPLICATIONS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • demonstrate basic competencies.	*Assessment of student achievement should be based on:* • observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • describe the need for specific types of drawings (e.g., detail, assembly, sectional, auxiliary, exploded view) and where and when they are used • produce at least one example of each of the following drawings based on sketches provided and accurately dimension and notate each drawing: – multiview drawing (showing a minimum of three views) – a detail and/or assembly drawing – a sectional and/or auxiliary drawing – exploded view and/or threaded fastener	The focus of this module is to teach students basic technical drawing skills so they may prepare working drawings for the purpose of manufacturing construction and fabrication structures, products and systems. Students may use traditional drafting equipment, CAD or other technologies specified by the teacher to complete this module.

MODULE DES2050: TECHNICAL DRAWING APPLICATIONS (continued)

Concept	Specific Learner Expectations	Notes
Skills Development (continued)	*The student should:* • produce a pictorial drawing (isometric or oblique or perspective) of the object represented in the multiview drawing • demonstrate standard conventions of technical drawing (e.g., title blocks, labelling/lettering, dimensioning, scale and measuring, line types such as solid, hidden, projection, break, fold, phantom) as appropriate in drawings being completed • interpret standards and codes as they apply to the drawings being done • use appropriate terminology.	This is a skill development module that supports the Drafting/Design Fundamentals, 3-D Design and Living Environments foci in Design Studies. The Drafting/Design and Technical Drawing modules also support CAD skills modules and modules from strands involved in manufacturing, construction and fabrication (e.g., Construction Technologies, Fabrication Studies, Fashion Studies, Communication Technology). Teachers may wish to contextualize the work done in this module in one of these areas.
Presentation, Design Journal and Portfolio	• see Specific Learning Expectations for 2-D Design Applications and CAD Applications.	See notes for 2-D Design Applications and CAD Applications.

MODULE DES2060: THE EVOLUTION OF DESIGN

Level: Intermediate

Theme: Business/Issues/History

Prerequisite: None

Module Description: Students develop a historical framework for the importance and relevance of design within a cultural context, by examining past and contemporary examples of designed artifacts.

Module Parameters: No specialized equipment or facilities.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• demonstrate knowledge of historical and contemporary design resources	• demonstration of a general knowledge of the evolution of design through project work. *Assessment Tool* *Project Assessment: The Evolution of Design (DES2060–1)* *Standard* *Performance rating of 2 for each criteria*	40
• make a formal presentation of research findings	• formal presentation to teachers and peer(s) of research findings in one area of historical or contemporary design. *Assessment Tool* *Presentations/Reports: The Evolution of Design (DES2060–2)* *Standard* *Performance rating of 2 for each criteria*	40
• select, organize and present design projects	• maintenance and presentation of a module-based design portfolio and a design journal. Emphasis will be placed on the quality and accuracy of the research. *Assessment Tool* *Presentations/Reports: The Evolution of Design (DES2060–2)* *Standard* *Performance rating of 2 for each criteria*	20

MODULE DES2060: THE EVOLUTION OF DESIGN (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • demonstrate basic competencies.	*Assessment of student achievement should be based on:* • observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Skills Development	*The student should:* • describe historical influences in design • identify and explain the relationship between a design solution in the past and a current design solution (e.g., buildings, graphics, fashion and transportation) including the influence of cultural, global, ethical and environmental conditions on the solution.	This module helps students explore different avenues of design by examining the work of designers through history. Several different approaches may be taken. For example, students might study the work of a designer working today and compare it with the work of a designer from the 1930s; they might take an old artifact and try to reproduce it; they might follow the development of a particular product, process or system (e.g., brewing coffee or the development of plastic) through history to the present day. Students need to consider the influences of cultural, ethical, social and/or environmental conditions on design. The point of the module is to give students a larger sense of design.

MODULE DES2060: THE EVOLUTION OF DESIGN (continued)

Concept	Specific Learner Expectations	Notes
Applied Problem Solving	*The student should:* • prepare a presentation of research findings; e.g., a research paper, a media presentation • use tools, materials and other resources appropriate for the presentation; e.g., video equipment, computers, still cameras, projectors, display materials.	Students might design their presentation in several different ways including reproducing a scale model of an artifact designed and used in the past or sequential drawings, or photographs of an object that has evolved over time, presentation panels depicting "designed" artifacts from a particular culture, sets for a "period" drama or a term paper on a selected topic.
Presentation, Design Journal and Portfolio	• present in interim findings for teacher/peer review and input • prepare for and actively participate in a final presentation and critique describing the area of study and findings • maintain a design journal/sketchbook of the project including research notes, ideas, writings, sketches, photographs, cuttings, etc., related to the project • add notes, research documentation and presentation material to his or her portfolio of work from previously completed modules.	See notes from 2-D Design Applications.