

Students engaged in Drafting for Design and/or Technical Drawing modules will meet these standards in their project work:

Pictorial Drawings	Introductory Level	Intermediate Level	Advanced Level
Freehand Pictorial Drawings and Renderings	<ul style="list-style-type: none"> discriminates between different pictorial drawing styles (e.g., isometric, oblique, one- and two-point perspective) produces recognizable pictorial line drawings of specified subjects with guidance uses drawing grids and other freehand drawing tools with guidance 	<ul style="list-style-type: none"> discriminates between different pictorial drawing and rendering techniques and styles describes appropriate applications for different pictorial drawing and rendering techniques and styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with guidance uses drawing grids and other freehand drawing tools with minimal guidance 	<ul style="list-style-type: none"> selects and uses appropriate pictorial drawing and rendering techniques and styles selects and uses appropriate materials, tools and techniques for different rendering styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with minimal guidance selects and uses drawing grids and other freehand drawing tools with minimal guidance
Mechanically Produced Pictorial Drawings and Renderings	<ul style="list-style-type: none"> discriminates between different pictorial drawing styles (e.g., isometric, oblique, one- and two-point perspective) produces recognizable pictorial line drawings of specified subjects with guidance uses manual technical drawing tools (e.g., T-square, set-square, parallel rule, drafting machine) with guidance 	<ul style="list-style-type: none"> discriminates between different pictorial drawing and rendering techniques and styles describes appropriate applications for different pictorial drawing and rendering techniques and styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with guidance uses manual technical drawing tools (e.g., T-square, set-square, parallel rule, drafting machine) with minimal guidance 	<ul style="list-style-type: none"> selects and uses appropriate pictorial drawing and rendering techniques and styles selects and uses appropriate materials, tools and techniques for different pictorial and rendering styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with minimal guidance selects and uses manual technical drawing tools (e.g., T-square, set-square, parallel rule, drafting machine) with minimal guidance
CAD Produced Pictorial Drawings and Renderings	<ul style="list-style-type: none"> discriminates between different pictorial drawing styles (e.g., isometric, oblique, one- and two-point perspective) produces recognizable pictorial drawings of specified subjects with guidance uses personal computer and CAD software with specific guidance 	<ul style="list-style-type: none"> discriminates between different pictorial drawing and rendering techniques and styles describes appropriate applications for different pictorial drawing and rendering techniques and styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with guidance uses personal computer and CAD software with guidance 	<ul style="list-style-type: none"> selects and uses appropriate pictorial drawing and rendering techniques and styles selects and uses appropriate CAD, tools and techniques for different pictorial drawing and rendering styles renders pictorial line drawings using tone, texture and/or colour rendering techniques with minimal guidance selects and uses appropriate CAD applications for different rendering techniques and styles

Students engaged in Drafting for Design and/or Technical Drawing modules will meet these standards in their project work:

Multiview Drawings	Introductory Level	Intermediate Level	Advanced Level
Mechanically Produced Multiview Drawings	<ul style="list-style-type: none"> • produces accurate single view and multiview drawings of simple three-dimensional objects displaying front, top and side view, and title block • accurately dimensions single view and multiview drawings • discriminates between first angle and third angle projections • uses manual technical drawing tools (e.g., T-square, set-square) with guidance 	<ul style="list-style-type: none"> • discriminates between different multiview drawing styles • produces accurate multiview drawings of simple three-dimensional objects displaying front, top and side view, and title block (assembly, section, auxiliary) • produces accurately dimensions and notations for a multiview drawing in accordance with standards and conventions • identifies codes and specifications pertaining to project work • uses manual technical drawing tools (e.g., T-square, set-square, parallel rule, drafting machine) with guidance • describes appropriate applications of different multiview drawing styles 	<ul style="list-style-type: none"> • produces accurate multiview drawings of complex three-dimensional objects displaying front, top and side view, and title block (assembly, section, auxiliary) • produces accurate dimensions and notations for multiview drawings as required in accordance with standards and conventions • identifies and applies codes and specifications project work • uses manual technical drawing tools (e.g., T-square, set-square, parallel rule, drafting machine) with minimal guidance • chooses appropriate drawing styles for projects
CAD Produced Multiview Drawings	<ul style="list-style-type: none"> • produces accurate single view and multiview drawings of simple three-dimensional objects displaying front, top and side view, and title block • accurately dimensions single view and multiview drawings • discriminates between first angle and third angle projections • uses software with guidance 	<ul style="list-style-type: none"> • discriminates between different multiview drawing styles • produces accurate multiview drawings of simple three-dimensional objects displaying front, top and side view, and title block (assembly, section, auxiliary) • produces accurately dimensions and notations for a multiview drawing in accordance with standards and conventions • identifies codes and specifications pertaining to project work • uses a personal computer and CAD software with assistance 	<ul style="list-style-type: none"> • produces accurate multiview drawings of complex three-dimensional objects displaying front, top and side view, and title block (assembly, section, auxiliary) • produces accurate dimensions and notations for multiview drawings as required in accordance with standards and conventions • identifies and applies codes and specifications to project work • uses a personal computer and CAD software with minimal guidance • chooses appropriate drawing styles for projects

Students following a *process of design* will meet these standards in their project work:

Process Components	Introductory Level	Intermediate Level	Advanced Level
Identify Need or Problem through Design Brief	<ul style="list-style-type: none"> reads and accurately interprets an introductory level design brief 	<ul style="list-style-type: none"> reads and accurately interprets an intermediate level design brief involving a more complex set of possibilities 	<ul style="list-style-type: none"> accurately identifies design problem or issues and writes a project statement with project objectives and deliverables
Conduct Research	<ul style="list-style-type: none"> conducts research from sources provided or identified by the teacher 	<ul style="list-style-type: none"> identifies pertinent research sources with guidance and conducts research pertaining to the project brief 	<ul style="list-style-type: none"> identifies pertinent research sources in school and community (e.g., interview with manufacturers, user groups) and conducts research pertaining to the project brief
Generate Ideas	<ul style="list-style-type: none"> generates a number of innovative ideas with teacher guidance which address a simple design problem 	<ul style="list-style-type: none"> generates a number of innovative ideas, with a moderate level of teacher guidance, which address a more complex design problem 	<ul style="list-style-type: none"> generates a number of innovative ideas, with minimal teacher guidance, which address a complex design problem demonstrates challenge of assumptions, conventions and conventional boundaries
Select Most Promising Idea	<ul style="list-style-type: none"> selects most promising idea for resolving the project brief with guidance demonstrates aesthetic awareness through selection 	<ul style="list-style-type: none"> selects most promising idea for resolving the design brief and provides reasons for selection demonstrates increased aesthetic awareness by providing a reasoned rationale for selection 	<ul style="list-style-type: none"> selects most promising idea for resolving the design brief and supports selection with reasoned arguments demonstrates increased aesthetic awareness through reasoned arguments supported by theory and research
Make or Model Design	<ul style="list-style-type: none"> makes project with direct guidance makes appropriate decisions about materials, tools and their applications with direct guidance 	<ul style="list-style-type: none"> makes project with minimal guidance makes appropriate decisions about materials, tools and their application with minimal guidance 	<ul style="list-style-type: none"> makes project with guidance as requested makes appropriate decisions about materials, tools and their applications with guidance as requested
Present Design to Others	<ul style="list-style-type: none"> presents project to teacher in a portfolio in a neat and appropriate manner 	<ul style="list-style-type: none"> presents project to teacher in a portfolio in a neat and appropriate manner presents work to teacher and peers for critique 	<ul style="list-style-type: none"> presents project to teacher in a portfolio in a neat and appropriate manner presents and discusses work with teacher, peers and/or others in critique suggests revisions to improve solution
Evaluate Design	<ul style="list-style-type: none"> with guidance, evaluate project as to its success in satisfying the project brief and suggests why it was successful or unsuccessful 	<ul style="list-style-type: none"> evaluates project as to its success in satisfying the project brief identifies why it was successful or unsuccessful with guidance, suggests and supports revisions to improve solution 	<ul style="list-style-type: none"> evaluates project as to its success in satisfying the project brief analyzes why it was successful or unsuccessful suggests revisions to improve solution

PROJECT ASSESSMENT: TECHNIQUES, TOOLS, MATERIALS AND APPLICATIONS CHECKLIST

DESPRJ-1A

Student: _____

Teacher: _____

Module: _____

Date: _____

The following is a partial list of the techniques and materials students might use in their design work. Teachers may select techniques and materials relevant to stated module criteria and conditions appropriate to the needs of their students

	Type	Styles/Techniques	Tools/Materials	Subject Matter
Sketching and Drawing	<i>Drawing/Sketching Type</i>	<i>Drawing/Sketching Style</i>	<i>Tools</i>	<i>Materials</i>
	<input type="checkbox"/> thumbnail <input type="checkbox"/> observational <input type="checkbox"/> planning <input type="checkbox"/> detail <input type="checkbox"/> other _____ _____	<input type="checkbox"/> line <input type="checkbox"/> gesture <input type="checkbox"/> scribble <input type="checkbox"/> tonal <input type="checkbox"/> hatching <input type="checkbox"/> other _____ _____	<input type="checkbox"/> pencil <input type="checkbox"/> colour pencil <input type="checkbox"/> marker <input type="checkbox"/> pen <input type="checkbox"/> brush <input type="checkbox"/> computer <input type="checkbox"/> other _____ _____	<input type="checkbox"/> drawing paper <input type="checkbox"/> cardboard <input type="checkbox"/> paint <input type="checkbox"/> ink <input type="checkbox"/> software <input type="checkbox"/> other _____ _____
Modelling	<i>Modelling Type</i>	<i>Modelling Technique</i>	<i>Tools</i>	<i>Materials</i>
	<input type="checkbox"/> thumbnail <input type="checkbox"/> observational <input type="checkbox"/> detail <input type="checkbox"/> other _____ _____	<input type="checkbox"/> molding or shaping <input type="checkbox"/> adding to or removing <input type="checkbox"/> measuring <input type="checkbox"/> cutting <input type="checkbox"/> joining/fastening <input type="checkbox"/> other _____ _____	<input type="checkbox"/> knife <input type="checkbox"/> foam cutter <input type="checkbox"/> scissors <input type="checkbox"/> screwdriver <input type="checkbox"/> hammer <input type="checkbox"/> saw <input type="checkbox"/> tools for modeling clay <input type="checkbox"/> other _____ _____	<input type="checkbox"/> tape <input type="checkbox"/> wire <input type="checkbox"/> cloth <input type="checkbox"/> metal <input type="checkbox"/> cardboard <input type="checkbox"/> modelling clay <input type="checkbox"/> foam <input type="checkbox"/> glue <input type="checkbox"/> plaster <input type="checkbox"/> plastic <input type="checkbox"/> other _____ _____
Standard Achieved:	_____			

Process Related Standard

- | | | | | |
|--|--|---|--|--|
| 0 has difficulty following a guided course of action; requires constant direction and supervision | 1 follows guided course of action; works independently or with others with direct supervision | 2 follows semi-guided course of action; works independently or with others with limited direct supervision | 3 sets own course of action with limited teacher supervision; works independently or with others without direct supervision | 4 sets and follows course of action without assistance; works independently or with others without supervision; supports and assists the work of others |
|--|--|---|--|--|

Acceptable Standard

Unless otherwise stated in the Criteria and Conditions for Assessment of the module being assessed, the Process Related Standard will be:

Introductory Level = 1 Intermediate Level = 2 Advanced Level = 3

Assessment Tools

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CTS, Design Studies /G.19

(1997)

PROJECT ASSESSMENT: DESIGN SKILLS, PROCESSES AND APPLICATIONS (Introductory)

DESPRJ-1B

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Management	4	3	2	1	0	1
Teamwork	4	3	2	1	0 N/A	1
Content	4	3	2	1	0	1
Equipment and Materials	4	3	2	1	0	1

STANDARD IS 1 IN EACH APPLICABLE CRITERIA UNLESS OTHERWISE STATED.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

<p>CRITERIA</p> <p><i>The student:</i></p> <p>Management</p> <ul style="list-style-type: none"> <input type="checkbox"/> prepares self for task <input type="checkbox"/> organizes and works in an orderly manner <input type="checkbox"/> carries out instructions accurately <input type="checkbox"/> uses time effectively <p>Teamwork</p> <ul style="list-style-type: none"> <input type="checkbox"/> cooperates with group members <input type="checkbox"/> shares work appropriately among group members <input type="checkbox"/> exhibits basic teamwork skills (e.g., cooperation, appropriate conduct, leadership, commitment, negotiation, sharing) 	<p>Content</p> <ul style="list-style-type: none"> <input type="checkbox"/> identifies and lists components of a design process <input type="checkbox"/> reads a design brief and identifies: <ul style="list-style-type: none"> <input type="checkbox"/> task/problem to be resolved <input type="checkbox"/> constraints associated with the task/problem <input type="checkbox"/> other pertinent information <input type="checkbox"/> recognizes and identifies elements and principles of design as they apply to composition and form <input type="checkbox"/> uses elements and principles of design in design work <input type="checkbox"/> applies identified design process when resolving design brief <p>Equipment and Materials</p> <ul style="list-style-type: none"> <input type="checkbox"/> selects and use appropriate equipment/materials <input type="checkbox"/> follows safe procedures/techniques <input type="checkbox"/> returns clean equipment/materials to storage area
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<p>COMMENTS</p>

PROJECT ASSESSMENT: DESIGN SKILLS, PROCESSES AND APPLICATIONS (Intermediate)

DESPRJ-2A

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Management	4	3	2	1	0	2
Teamwork	4	3	2	1	0 N/A	2
Content	4	3	2	1	0	1
Equipment and Materials	4	3	2	1	0	2

STANDARD IS 2 IN EACH APPLICABLE CRITERIA UNLESS OTHERWISE STATED.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

<p>CRITERIA</p> <p><i>The student:</i></p> <p>Management</p> <ul style="list-style-type: none"> <input type="checkbox"/> prepares self for task <input type="checkbox"/> organizes and works in an orderly manner <input type="checkbox"/> interprets and carries out instructions accurately <input type="checkbox"/> plans and uses time effectively <input type="checkbox"/> adheres to routine procedures <input type="checkbox"/> accesses a range of in-school/community resources <p>Teamwork</p> <ul style="list-style-type: none"> <input type="checkbox"/> cooperates with group members <input type="checkbox"/> shares work appropriately among group members <input type="checkbox"/> negotiates solutions to problems <input type="checkbox"/> exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing) 	<p>Content</p> <ul style="list-style-type: none"> <input type="checkbox"/> writes a design brief or structures a plan for resolving a brief <input type="checkbox"/> follows a design process when resolving design brief <input type="checkbox"/> selects and uses elements and principles of design in project <input type="checkbox"/> selects and uses appropriate techniques to produce a designed solution <input type="checkbox"/> increases proficiency with skills and techniques learned at the introductory level <input type="checkbox"/> recognizes and identifies mathematical and scientific principles as they apply in the context of design work <p>Equipment and Materials</p> <ul style="list-style-type: none"> <input type="checkbox"/> selects and uses appropriate equipment/materials <input type="checkbox"/> models safe procedures/techniques <input type="checkbox"/> minimizes waste of materials <input type="checkbox"/> advises of potential hazards and necessary repairs
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<p>COMMENTS</p>

PROJECT ASSESSMENT: FORM, COMPOSITION AND AESTHETICS

DESPRJ-3A

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Management	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	2
Equipment and Materials	4	3	2	1	0	3

STANDARD IS 3 IN EACH APPLICABLE CRITERIA UNLESS OTHERWISE STATED.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Management

- prepares self for task
- organizes and works in an orderly manner
- interprets and carries out instructions accurately
- plans and uses time effectively in a logical sequence
- displays leadership in adhering to routine procedures
- attempts to solve problems prior to requesting help

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- writes a design brief to address a specific design problem
- structures a plan for resolving the brief and follows a design process when resolving design brief
- selects and uses elements and principles of design in project and describes how their use has contributed to the aesthetics and function of the solution
- rationalizes decisions made during designing and indicates how these decisions affected the aesthetic quality of the solution
- identifies, selects and uses appropriate techniques to produce a designed solution
- increases proficiency with skills and techniques learned at the introductory and intermediate levels

Equipment and Materials

- independently selects and uses equipment/materials
- demonstrates concern for safe procedures/techniques
- weighs and measures accurately and efficiently
- minimizes waste of materials
- anticipates potential hazards and emergency response

COMMENTS

PROJECT ASSESSMENT: COMMUNICATION AND HUMAN FACTORS

DESPRJ-3B

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Management	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	2
Equipment and Materials	4	3	2	1	0	3

STANDARD IS 3 IN EACH APPLICABLE CRITERIA UNLESS OTHERWISE STATED.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Management

- prepares self for task
- organizes and works in an orderly manner
- interprets and carries out instructions accurately
- plans and uses time effectively in a logical sequence
- displays leadership in adhering to routine procedures
- attempts to solve problems prior to requesting help

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- collects samples of commercially “designed” communication or products and make judgements as to their effectiveness
- describes the impact of commercially produced two- or three-dimensional designs on himself or herself
- describes three ways human factors can affect two- or three-dimensional design

Content (continued)

- writes a design brief to address a specific design problem
- structures a plan for resolving the brief and follows a design process when resolving design brief
- selects and uses elements and principles of design in project and describes how their use has contributed to the aesthetics and function of the solution
- rationalizes decisions made during designing and indicates how these decisions affected the aesthetic quality of the solution
- identifies, selects and uses appropriate techniques to produce a designed solution
- increases proficiency with skills and techniques learned at the introductory and intermediate levels

Equipment and Materials

- independently select and use equipment/materials
- demonstrates concern for safe procedures/techniques
- weighs and measures accurately and efficiently
- minimizes waste of materials
- anticipates potential hazards and emergency response

COMMENTS

PROJECT ASSESSMENT: MATERIALS AND PRODUCTION PROCESSES

DESPRJ-3C

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Management	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	2
Equipment and Materials	4	3	2	1	0	3

STANDARD IS 3 IN EACH APPLICABLE CRITERIA UNLESS OTHERWISE STATED.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Management

- prepares self for task
- organizes and works in an orderly manner
- interprets and carries out instructions accurately
- plans and uses time effectively in a logical sequence
- displays leadership in adhering to routine procedures
- attempts to solve problems prior to requesting help

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- identifies various roles in a production team and performs necessary roles
- identifies various production processes available for reproducing two-dimensional or three-dimensional design work

Content (continued)

- selects an appropriate production method for reproducing two-dimensional or three-dimensional design work
- prepares a written submission describing this process, indicating key elements of the process and how it can be managed during production
- writes a design brief to address a specific design production problem(s)
- structures a plan for resolving the brief and follows a design process when resolving design brief
- rationalizes the selection of materials based on their physical properties
- identifies, selects and uses appropriate techniques to produce a designed solution
- produces multiple copies of a two-dimensional or three-dimensional design using the selected process

Equipment and Materials

- independently selects and uses equipment/materials
- demonstrates concern for safe procedures/techniques
- weighs and measures accurately and efficiently
- minimizes waste of materials
- anticipates potential hazards and emergency response

COMMENTS

PRESENTATIONS/REPORTS: DESIGN SKILLS, PROCESSES AND APPLICATIONS (Introductory)

DESPRE-1A

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	1
Teamwork	4	3	2	1	0 N/A	1
Content	4	3	2	1	0	1
Presenting/ Reporting	4	3	2	1	0	1

STANDARD IS 1 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- follows instructions accurately
- responds to directed questions
- interprets and organizes information into a logical sequence
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- exhibits basic teamwork skills (e.g., cooperation, appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- discusses project work (e.g., sketches, drawings and models) with their teacher describing project work, the materials, tools, processes and techniques used and providing reasons for their selection and use (as requested)

Content (continued)

- discusses project work (e.g., sketches, drawings and models) with a peer and/or another person
- uses design journal to make notes, collect ideas and represent these ideas through sketches and/or drawings as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- provides an introduction that describes the purpose of the project
- uses correct grammatical convention and technical terms
- communicates information a logical sequence
- responds to questions effectively and in a courteous manner

COMMENTS

PRESENTATIONS/REPORTS: DRAFTING FOR DESIGN AND TECHNICAL DRAWING SKILLS (Introductory)

DESPRE-1B

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	1
Teamwork	4	3	2	1	0 N/A	1
Content	4	3	2	1	0	1
Presenting/ Reporting	4	3	2	1	0	1

STANDARD IS 1 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- follows instructions accurately
- responds to directed questions
- interprets and organizes information into a logical sequence
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- exhibits basic teamwork skills (e.g., cooperation, appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- discusses project work (e.g., drafting exercises, pictorial and multiview drawings) with the teacher describing:
 - project work including accurate identification of types of drawings and drawing components
 - tools used (e.g., parallel rule, computer, plotter, CAD software)
 - techniques used
 - functions used (CAD)

Content (continued)

- provides reasons for the selection and use (as requested)
- discusses project work (e.g., sketches, drawings and models) with a peer and/or another person
- uses design journal to make notes, collect ideas and represent these ideas through sketches and/or drawings as required
- provides design journal to teacher as required
- selects drawings and includes them in a design portfolio

Presenting/Reporting

- provides an introduction that describes the purpose of the project
- uses correct grammatical convention and technical terms
- communicates information a logical sequence
- responds to questions effectively and in a courteous manner

COMMENTS

PRESENTATIONS/REPORTS: DESIGN SKILLS, PROCESSES AND APPLICATIONS (Intermediate)

DESPRE-2A

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	2
Teamwork	4	3	2	1	0 N/A	2
Content	4	3	2	1	0	2
Presenting/ Reporting	4	3	2	1	0	2

STANDARD IS 2 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- sets goals for presentation
- interprets, organizes and combines information into a logical sequence for presentation
- gathers and responds to feedback regarding approach to task and project status
- plans and uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates solutions to problems
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intention of solution
 - elements and principles of design used in project
 - aesthetic quality of project solution
 - materials, tools, processes and techniques used during project and providing reasons for their selection and use
 - decisions made during project and reasons for decisions made

Content (continued)

- collects ideas and represents these ideas in their design journal/sketchbook through sketches and/or drawing and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of at least two communication media (e.g., voice, visual)
- maintains acceptable grammatical and technical standards
- provides an introduction that describes the purpose and scope of the project
- communicates ideas into a logical sequence with sufficient supporting detail
- responds to questions effectively and in a courteous manner

PRESENTATIONS/REPORTS: DRAFTING FOR DESIGN AND TECHNICAL DRAWING SKILLS (Intermediate)

DESPRE-2B

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	2
Teamwork	4	3	2	1	0 N/A	2
Content	4	3	2	1	0	2
Presenting/ Reporting	4	3	2	1	0	2

STANDARD IS 2 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

<p>CRITERIA</p> <p><i>The student:</i></p> <p>Preparation and Planning</p> <ul style="list-style-type: none"> <input type="checkbox"/> sets goals for presentation <input type="checkbox"/> interprets, organizes and combines information into a logical sequence for presentation <input type="checkbox"/> gathers and responds to feedback regarding approach to task and project status <input type="checkbox"/> plans and uses time effectively <p>Teamwork</p> <ul style="list-style-type: none"> <input type="checkbox"/> cooperates with group members <input type="checkbox"/> shares work appropriately among group members <input type="checkbox"/> negotiates solutions to problems <input type="checkbox"/> exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing) <p>Content</p> <ul style="list-style-type: none"> <input type="checkbox"/> produces accurate drawings as per specifications (e.g., dimensioning, title block information) <input type="checkbox"/> identifies and describes functions used in drawing production (as required) <input type="checkbox"/> actively participates in interim and final critiques 	<p>Content (continued)</p> <ul style="list-style-type: none"> <input type="checkbox"/> presents and discusses project work including: <ul style="list-style-type: none"> <input type="checkbox"/> outline of project and intention of drawings produced <input type="checkbox"/> accurate identification of types of drawings produced and rationale for their selection <input type="checkbox"/> identification of functions (CAD) and/or techniques used to produce drawings (as required) <input type="checkbox"/> identify decisions made during project and reasons for these decisions <input type="checkbox"/> collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required <input type="checkbox"/> provides design journal to teacher as required <input type="checkbox"/> selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio <p>Presenting/Reporting</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstrates effective use of at least two communication media (e.g., voice, visual) <input type="checkbox"/> maintains acceptable grammatical and technical standards <input type="checkbox"/> provides an introduction that describes the purpose and scope of the project <input type="checkbox"/> communicates ideas into a logical sequence with sufficient supporting detail <input type="checkbox"/> responds to questions effectively and in a courteous manner
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PRESENTATIONS/REPORTS: FORM, COMPOSITION AND AESTHETICS (Advanced)

DESPRE-3A

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	3
Presenting/ Reporting	4	3	2	1	0	3

STANDARD IS 3 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- sets goals for presentation
- accesses a range of relevant information sources and recognizes when additional information is required
- interprets, organizes and combines information in creative and thoughtful ways for effective presentation
- assesses and refines approach to task and project status based on feedback and reflection from presentation
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intention of solution
 - form, composition and aesthetic quality of the product
 - judgements made during the designing process
 - why these judgements were made
 - the effect they had in shaping the final result

Content (continued)

- collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of a variety of communication media (e.g., voice, media, real objects)
- maintains acceptable grammatical and technical standards
- uses appropriate technical terms and supporting detail
- provides an introduction that describes the purpose and scope of the project
- communicates thoughts/feelings/ideas clearly to justify or challenge a position
- gives evidence of adequate research through a reference list or through discussion
- responds to questions effectively and in a courteous manner
- considers possible revisions and next steps

PRESENTATIONS/REPORTS: COMMUNICATION AND HUMAN FACTORS (Advanced)

DESPRE-3B

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING	STANDARD
Preparation and Planning	4 3 2 1 0	3
Teamwork	4 3 2 1 0 N/A	3
Content	4 3 2 1 0	3
Presenting/ Reporting	4 3 2 1 0	3

STANDARD IS 3 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- sets goals for presentation
- accesses a range of relevant information sources and recognizes when additional information is required
- interprets, organizes and combines information in creative and thoughtful ways for effective presentation
- assesses and refines approach to task and project status based on feedback and reflection from presentation
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intention of solution
 - effectiveness of the designed solution in communicating its message
 - how well the designed solution addresses identified human factors
 - judgements made during the designing process
 - why these judgements were made
 - the effect they had in shaping the final result

Content (continued)

- collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of a variety of communication media (e.g., voice, media, real objects)
- maintains acceptable grammatical and technical standards
- uses appropriate technical terms and supporting detail
- provides an introduction that describes the purpose and scope of the project
- communicates thoughts/feelings/ideas clearly to justify or challenge a position
- gives evidence of adequate research through a reference list or through discussion
- responds to questions effectively and in a courteous manner
- considers possible revisions and next steps

PRESENTATIONS/REPORTS: MATERIALS AND PRODUCTION PROCESSES (Advanced)

DESPRE-3C

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	3
Presenting/ Reporting	4	3	2	1	0	3

STANDARD IS 3 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- sets goals for presentation
- accesses a range of relevant information sources and recognizes when additional information is required
- interprets, organizes and combines information in creative and thoughtful ways for effective presentation
- assesses and refines approach to task and project status based on feedback and reflection from presentation
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intention solution
 - strengths and weaknesses of the designed solution
 - justification for the selection and use of materials
 - recommendations for production process(es) and quantities to be produced

Content (continued)

- collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of a variety of communication media (e.g., voice, media, real objects)
- maintains acceptable grammatical and technical standards
- uses appropriate technical terms and supporting detail
- provides an introduction that describes the purpose and scope of the project
- communicates thoughts/feelings/ideas clearly to justify or challenge a position
- gives evidence of adequate research through a reference list or through discussion
- responds to questions effectively and in a courteous manner
- considers possible revisions and next steps

PRESENTATIONS/REPORTS: LIVING ENVIRONMENT STUDIO (Advanced)

DESPRE-3D

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	3
Presenting/ Reporting	4	3	2	1	0	3

STANDARD IS 3 UNDER EACH APPLICABLE CRITERIA.

Rating Scale

The student:

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA

The student:

Preparation and Planning

- sets goals for presentation
- accesses a range of relevant information sources and recognizes when additional information is required
- interprets, organizes and combines information in creative and thoughtful ways for effective presentation
- assesses and refines approach to task and project status based on feedback and reflection from presentation
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intended solution
 - effectiveness of the designed solution in addressing form and space
 - how well the designed solution addresses identified human factors and environmental needs
 - judgements made during the designing process
 - why these judgements were made
 - the effect they had in shaping the final result

Content (continued)

- collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of a variety of communication media (e.g., voice, media, real objects)
- maintains acceptable grammatical and technical standards
- uses appropriate technical terms and supporting detail
- provides an introduction that describes the purpose and scope of the project
- communicates thoughts/feelings/ideas clearly to justify or challenge a position
- gives evidence of adequate research through a reference list or through discussion
- responds to questions effectively and in a courteous manner
- considers possible revisions and next steps

Student: _____

Teacher: _____

Module: _____

Date: _____

CRITERIA	OBSERVATION/ RATING					STANDARD
Preparation and Planning	4	3	2	1	0	3
Teamwork	4	3	2	1	0 N/A	3
Content	4	3	2	1	0	3
Presenting/ Reporting	4	3	2	1	0	3

STANDARD IS 3 UNDER EACH APPLICABLE CRITERIA.**Rating Scale***The student:*

- 4 exceeds defined outcomes. Plans and solves problems effectively and creatively in a self-directed manner. Tools, materials and/or processes are selected and used efficiently, effectively and with confidence.
- 3 meets defined outcomes. Plans and solves problems in a self-directed manner. Tools, materials and/or processes are selected and used efficiently and effectively.
- 2 meets defined outcomes. Plans and solves problems with limited assistance. Tools, materials and/or processes are selected and used appropriately.
- 1 meets defined outcomes. Follows a guided plan of action. A limited range of tools, materials and/or processes are used appropriately.
- 0 has not completed defined outcomes. Tools, materials and/or processes are used inappropriately.

CRITERIA*The student:***Preparation and Planning**

- sets goals for presentation
- accesses a range of relevant information sources and recognizes when additional information is required
- interprets, organizes and combines information in creative and thoughtful ways for effective presentation
- assesses and refines approach to task and project status based on feedback and reflection from presentation
- uses time effectively

Teamwork

- cooperates with group members
- shares work appropriately among group members
- negotiates with sensitivity solutions to problems
- displays effective communication skills
- exhibits basic teamwork skills (e.g., appropriate conduct, leadership, commitment, negotiation, sharing)

Content

- actively participates in interim and final critiques
- presents and discusses project work including:
 - outline of project and intention of drawings or renderings produced
 - adequacy of drawings produced for illustrating the design solution
 - rationale for their selection
 - effect drawings of renderings had in shaping the final result

Content (continued)

- ensures accuracy of drawings or renderings as per any specifications
- collects ideas and represents these ideas in his or her design journal/sketchbook through sketches and/or drawings and/or notes as required
- provides design journal to teacher as required
- selects sketches, drawings and/or models (or photographs, video images of models) and includes them in a design portfolio

Presenting/Reporting

- demonstrates effective use of a variety of communication media (e.g., voice, media, real objects)
- maintains acceptable grammatical and technical standards
- uses appropriate technical terms and supporting detail
- provides an introduction that describes the purpose and scope of the project
- communicates thoughts/feelings/ideas clearly to justify or challenge a position
- gives evidence of adequate research through a reference list or through discussion
- responds to questions effectively and in a courteous manner
- considers possible revisions and next steps