282/3
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TECHNICAL GRAPHICS

(Year 12 E282)

Common Assessment Tasks

Index of Common Assessment Tasks Booklet

Technical Graphics (Year 12) – E282

Guidelines for the Common Assessment Tasks

Technical Graphics (Year 12) – E282

This package contains the requirements for the five Common Assessment Tasks in Year 12 Technical Graphics. The specific content of each task is to be determined by the school provider dependent upon the mode of delivery by the teacher.

Each task description is presented with the following headings:

1. Outcomes

The teacher has the flexibility to select from the Technical Graphics outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

2. Task

The task to be completed.

3. Task Description

The task description outlines what requirements are necessary for the students to complete the task. In most cases, it provides guidelines for the teacher to ensure that the major focus of the task has been understood.

4. Task Parameters

The task parameters determine the context and conditions in which the task is to be carried out.

5. Authentication

This section relates to the requirements of the student and the teacher in ensuring the task has been completed by the student. It is important that the teacher is able to authenticate all work completed for assessment by the student.

6. Performance Criteria

Each outcome is assessed against the performance criteria to determine the level of student achievement.

Record of Performance

Technical Graphics (Year 12) – E282

Student: *.....*

OUTCOME	Task 1	Task 2	Task 3	Task 4	FINAL
Outcome 1 Applies an identified process to produce a graphic solution to a design problem.					
Outcome 2 Applies orthogonal drawing skills and applications.					
Outcome 3 Applies pictorial drawing skills and applications.					
Outcome 4 Applies freehand drawing skills and applications.					
Outcome 5 Applies graphic illustration techniques and applications.					
Outcome 6 Examines and responds to drawing information in relation to its suitability for the intended purpose.					
Outcome 7 Applies solid geometry drawing skills and applications.					
			Final Grade		

Task 1: Architectural

Curriculum Council requirements for this task are outlined below. Evidence must be provided to demonstrate student achievement of each of the selected outcomes.

Outcomes

The teacher has the flexibility to select from the Technical Graphics outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

Task

Produce a series of drawings to demonstrate understanding and application of graphic information and presentation relevant to architectural communication.

Task Description

The task requires that the student provide the following:

- presentation of Architectural information by a combination of drawing systems such as orthogonal, pictorial, freehand, plane geometry;
- demonstration of rendering techniques relevant to architectural drawings;
- demonstration of parts or all of a design process in the production of a graphic solution.

Task Parameters

This task can be presented in the following manner:

- The students undertaking a subject of work that will adequately achieve the unit requirements in this area.
- The teacher prescribing an architectural design problem of suitable stature.
- The teacher of student negotiating an architectural design problem to be solved by the student.

Authentication

The following authentication procedures will apply:

- The teacher must guarantee that all student work submitted for assessment is their own.
- The teacher must monitor the development of the student work to ensure that an adequate standard is attempted.
- Any work which is not the students original work must be identified and its source cited.

Performance Criteria

Each outcome is assessed against the performance criteria to determine the level of student achievement.

Task 2: Sketching

Curriculum Council requirements for this task are outlined below. Evidence must be provided to demonstrate student achievement of each of the selected outcomes.

Outcomes

The teacher has the flexibility to select from the Technical Graphics outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

Task

Produce a series of drawings demonstrating application of freehand drawing techniques and sketching using various systems and three dimensional modelling techniques.

Task Description

The task requires that the student provide the following:

- a series of drawings demonstrating sketching techniques;
- a series of drawings demonstrating drawing systems appropriate to freehand sketching;
- demonstrating of rendering techniques appropriate to the information being presented.

Task Parameters

This task can be presented in the following manner:

- The teacher presenting an appropriate subject of work to achieve the task requirements.
- The teacher and student negotiating a topic to adequately demonstrate the task requirements.

Authentication

The following authentication procedures will apply:

- The teacher must guarantee that all student work submitted for assessment is their own.
- The teacher must monitor the development of the student work to ensure that an adequate standard is attempted.
- Any work which is not the students original work must be identified and its source cited.

Performance Criteria

Each outcome is assessed against the performance criteria to determine the level of student achievement.

Task 3: Manufacturing

Curriculum Council requirements for this task are outlined below. Evidence must be provided to demonstrate student achievement of each of the selected outcomes.

Outcomes

The teacher has the flexibility to select from the Technical Graphics outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

Task

Produce a series of drawings to demonstrate application of orthogonal drawing skills, techniques, standards and terminology.

Task Description

This task requires that the student provide the following:

- a series of drawings demonstrating competent use of appropriate drawing equipment;
- evidence that the student understands and uses appropriate technical terminology.

Task Parameters

This task can be presented in the following manner:

- The teacher presenting an appropriate subject of work to achieve the task objectives.
- The teacher and student negotiating a topic to adequately demonstrate the task requirements.
- The teacher setting a design problem to adequately cover the task objectives.

Authentication

The following authentication procedure will apply:

- The teacher must guarantee that all student work submitted for assessment is their own.
- The teacher must monitor the development of the student work to ensure that an adequate standard is attempted.

Performance Criteria

Each outcome is assessed against the performance criteria to determine the level of student achievement.

Task 4: Geometry

Curriculum Council requirements for this task are outlined below. Evidence must be provided to demonstrate student achievement of each of the selected outcomes.

Outcomes

The teacher has the flexibility to select from the Technical Graphics outcomes those to be assessed in each task. On completion of the subject the student must have been provided with at least two opportunities to demonstrate achievement of each outcome.

Task

Produce a series of graphic solutions that demonstrate application of solid geometry drawing skills and applications.

Task Description

The task requires that the student provide the following:

- evidence of an ability to construct commonly used regular geometrical shapes and solids;
- evidence of an ability to apply solid geometry construction techniques to real situations;
- demonstrate an understanding of the construction and application of regular-solid developments, and the relationship that true length plays in these developments;
- evidence that demonstrates the understanding of intersecting solids, including conics and cylinders;
- a series of drawings demonstration of helix construction techniques.

Task Parameters

This task can be presented in the following manner:

- The teacher presenting a series of design problems that demonstrate the graphic concepts contained in this task.
- The teacher presenting design problems that require the student to understand and apply plane geometry solutions in order to solve the problems.
- The student demonstrating an understanding of required plane geometry techniques in conjunction with other areas of graphic communication.

Authentication

The following authentication procedures will apply:

- The teacher must guarantee that all student work submitted for assessment is their own.
- The teacher must monitor the development of the student work to ensure that an adequate standard is attempted.
- The teacher must carefully assess plane geometry solutions that are part of other submitted graphic solutions.

Performance Criteria

Each outcome is assessed against the performance criteria to determine the level of student achievement.

GRADING COMBINATIONS

Technical Graphics (Year 12) – E282

V	H	S	ND	GRADE
7	0	0	0	A
6	1	0	0	A
6	0	1	0	A
5	2	0	0	A
5	1	1	0	A
5	0	2	0	A
4	3	0	0	A
4	2	1	0	A

5	0	2	0	B
4	1	2	0	B
4	0	3	0	B
3	4	0	0	B
3	3	1	0	B
3	2	1	0	B
3	1	3	0	B
2	5	0	0	B
2	4	1	0	B
2	3	2	0	B

V	H	S	ND	GRADE
2	2	3	0	B
1	6	0	0	B
1	5	1	0	B
1	4	2	0	B
1	3	3	0	B
0	7	0	0	B
0	6	1	0	B
0	5	2	0	B
0	4	3	0	B

2	1	4	0	C
2	0	5	0	C
1	2	4	0	C
1	1	5	0	C
1	0	6	0	C
0	3	4	0	C
0	2	5	0	C
0	1	6	0	C
0	0	7	0	C

A final rating of ND for any outcome will result in a grade of D being awarded. Where there are more than 50% of outcomes with a final rating of ND an E grade is awarded.