basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

2023/24 ANNUAL TEACHING PLANS: WOODWORKING: GRADE 12 (TERM 1)

TERM 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	
CAPS TOPICS	**INTRODUCTION OCCUPATIONAL HEALTH AND SAFETY ACT 85 of 1993 (OHS) (GENERIC)**	**INTRODUCTION OCCUPATIONAL HEALTH AND SAFETY ACT 85 of 1993 (OHS) (GENERIC)**	**MATERIALS (GENERIC & SPECIFIC)**	**EQUIPMENT & TOOLS (GENERIC & SPECIFIC)**	**EQUIPMENT & TOOLS (GENERIC & SPECIFIC)**	**GRAPHICS AS MEANS OF COMMUNICATION (GENERIC & SPECIFIC)**	**GRAPHICS AS MEANS OF COMMUNICATION (SPECIFIC)**	**QUANTITIES (SPECIFIC)**	**QUANTITIES (SPECIFIC)**	**COMPLETION OF ASSIGNMENT/ FIRST PHASE OF PAT**	
TOPICS/CONCEPTS, SKILLS AND VALUES	Application of the Occupational Health and Safety Act (OHSA) with regard to general health and safety in the workshop: • Scaffolding • Handling of material • Floors and stairs with open sides • Builders' hoists • Ladders	Application of the Occupational Health and Safety Act (OHSA) with regard to general health and safety in the workshop: • Scaffolding • Handling of material • Floors and stairs with open sides • Builders' hoists • Ladders	Preservation and sustainability of materials using the following methods to discuss the features, purpose and benefits (as discussed in Grades 10 and 11): • Painting • Curing • Electroplating • Powder coating • Galvanising The procedure, properties tested and the advantages of grading timber using the following means: • Mechanical grading • Visual grading Methods of applying preservatives on timber using the following: • Sanding sealer • Lacquer • Varnish • Linseed oil • Wax Factors to be considered in the selection of timber for the following: • Roof truss • Skirting • Doors and windows • Built-in cupboards • Folding table fixed to wall • Staircase including balustrade **Introduction to PAT (Phase 1 and part 1 of Phase 2)**	Identification, appropriate use and care of the following: • Dumpy level • Laser level • Multi-detector Safe use and care of the following woodworking machines: • Table saw • Band saw • Thicknesser planer • Spindle moulder • Radial arm saw • Drill presser • Combination belt and disc sender • Lathe • Mortising machine Safe handling, care and storage of the following portable woodworking machines: • Jig saw • Belt sander • Orbital sander • Router • Electric plane	Identification, appropriate use and care of the following: • Dumpy level • Laser level • Multi-detector Safe use and care of the following woodworking machines: • Table saw • Band saw • Thicknesser planer • Spindle moulder • Radial arm saw • Drill presser • Combination belt and disc sender • Lathe • Mortising machine Safe handling, care and storage of the following portable woodworking machines: • Jig saw • Belt sander • Orbital sander • Router • Electric plane	Interpretation of advanced texts: Site plan, floor plan and elevation of multi-storey building Basic drawing symbols relating to the building environment in accordance with the SANS for building drawings Scale drawing of exploded and assembled isometric view of a long and short shouldered mortise and tenon joint Sketches of line diagram of the following roof trusses: • Lean-to roof • Couple roof • Close couple roof • Collar-tie roof • South African roof truss (Howe roof truss) • King post roof	Interpretation of advanced texts: Site plan, floor plan and elevation of multi-storey building Basic drawing symbols relating to the building environment in accordance with the SANS for building drawings Scale drawing of exploded and assembled isometric view of a long and short shouldered mortise and tenon joint Sketches of line diagram of the following roof trusses: • Lean-to roof • Couple roof • Close couple roof • Collar-tie roof • South African roof truss (Howe roof truss) • King post roof	Calculation of the quantity of materials: Calculation of the following material required for a building measuring 8 metres long and 5 metres wide with a gable roof, covered with roof sheeting and tiles The roof is constructed with a South African roof truss: • Length of the wall plate • Number of roof trusses • Number of king posts • Number of rafters • Number of tie beams • Number of queen posts • Number of struts • Length of purlins/battens as required • Calculation of area of roof truss underlay • The area of roof sheeting/tiles required • The length of fascia board required • The length of the badge board required • The number of ridge caping required for the roof Development of cutting list of material for a bedroom cupboard from floor to ceiling with a built-in dressing table and mirror in the centre. The built-in has two doors on either side of the dressing table	Calculation of the quantity of materials: Calculation of the following material required for a building measuring 8 metres long and 5 metres wide with a gable roof, covered with roof sheeting and tiles The roof is constructed with a South African roof truss: • Length of the wall plate • Number of roof trusses • Number of king posts • Number of rafters • Number of tie beams • Number of queen posts • Number of struts • Length of purlins/battens as required • Calculation of area of roof truss underlay • The area of roof sheeting/tiles required • The length of fascia board required • The length of the badge board required • The number of ridge caping required for the roof Development of cutting list of material for a bedroom cupboard from floor to ceiling with a built-in dressing table and mirror in the centre. The built-in has two doors on either side of the dressing table		***School holiday***

TERM 1		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	
REQUISITE PRE-KNOWLEDGE		Learners to visit a site where the following is used: Scaffolding, erecting of scaffolding, dismantling of scaffolding, ladders, hoist & chute	Learners to visit a site where the following is used: Scaffolding, erecting of scaffolding, dismantling of scaffolding, ladders, hoist & chute	The procedure, preservation and sustainability of the following materials: • Painting • Curing • Electroplating • Powder coating	Identification of parts, accessories and uses of the following woodworking machines: Table saw, band saw, thickness machine and spindle profile machine	Applying various scales: Freehand sketches relevant to the super structure of a building	Applying various scales: Freehand sketches relevant to the super structure of a building	Freehand sketches relevant to the super roofs of a building Interpretation of drawing scales	Calculate materials required for one truss – SA Howe truss Quantities of a small cupboard	Calculate materials required for one truss – SA Howe truss Quantities of a small cupboard		
RESOURCES (OTHER THAN TEXTBOOK) **TO ENHANCE LEARNING**		Practical work can be done to expose learners to the real-life situation YouTube, videos, etc. Materials as indicated in the content		Materials as indicated in the content	Machinery, especially special tools Ensure that the dumpy and laser level, as well as the multi detector are practically demonstrated	Drawing boards and drawing equipment: Pencils, erasers, etc. Data projector and/or document reader YouTube for videos on roofs			Calculators, tape measure, workbook with quantity layout, etc. Site visit can be arranged to explain practical work Basic materials, shown as sizes, are important			
ASSESSMENT	**INFORMAL ASSESSMENT:** REMEDIATION	TEST LEARNERS ON CONTENT DO PRACTICAL TO LINK CONTENT TO REAL- LIFE SITUATIONS	Test learners on content Do practical to link content to real-life situations Small informal test Worksheet with practical	Small informal test Worksheet with practical	Do practicals by showing and demonstrating how the equipment and machinery is working	Basic drawings of floor plans, site plans and elevations of a multi-storey building Learners can be tested on basic symbols related to drawings. SANS Test drawings – interpretations only Do drawings in class informally			Do informal testing by completing work sheets on quantities Prepare worksheets from given examples in the textbook			
	SBA **FORMAL ASSESSMENT**	**ASSIGNMENT** **PAT (PHASE 1 AND PART 1 OF PHASE 2)** Learners should be taught and be able to understand and apply principles and concepts of each topic and should not be limited to specific specifications in the CAPS										

2023/24 ANNUAL TEACHING PLANS: WOODWORKING: GRADE 12 (TERM 2)

TERM 2	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8-10	
CAPS TOPICS	**JOINING (GENERIC & SPECIFIC)**	**JOINING (SPECIFIC)**	**CASEMENT (SPECIFIC)**	**DOORS (SPECIFIC)**	**DOORS (SPECIFIC)**	**WALL PANELLING AND CUPBOARDS (SPECIFIC)**	**WALL PANELLING AND CUPBOARDS (SPECIFIC)**	**MID-YEAR EXAMINATION**	
TOPICS/CONCEPTS, SKILLS AND VALUES	Identify and explain the use of: • Bolts and nuts • Rawl bolts • Plastic plugs • Rawl plugs Methods of joining the following items: • Door to a frame • Ceiling boards to brandering • Brandering to tie beams • Adjacent roof members to each other • Wall plate to wall • Roof trusses to wall plate • Roof ties to battens • Roof sheeting to purlins Alternate methods of fixing windowpanes onto casement members and fixed frames Application, uses and drawings of the following woodworking joints (exploded and assembled views): • Haunched mortise and tenon joint • Twin mortice and tenon joint • Double bare face tenon	Identify and explain the use of: • Bolts and nuts • Rawl bolts • Plastic plugs • Rawl plugs Methods of joining the following items: • Door to a frame • Ceiling boards to brandering • Brandering to tie beams • Adjacent roof members to each other • Wall plate to wall • Roof trusses to wall plate • Roof ties to battens • Roof sheeting to purlins Alternate methods of fixing windowpanes onto casement members and fixed frames Application, uses and drawings of the following woodworking joints (exploded and assembled views): • Haunched mortise and tenon joint • Twin mortice and tenon joint • Double bare face tenon	Sketch of vertical section through the transom, bottom rail of fanlight and top rail of casement with glass and putty in position Identification of parts and the drawing of the external elevation of a double casement with fanlights and two horizontal glazing bars in the casement within a frame	External doors: Application, drawing of front elevations, horizontal and vertical sections and constructional details of the following doors: • Three-panel door with raised and fielded panels with high lock rail • Four-panel door with low lock rail, raised panels and diminishing stile • Framed ledge, brace batten doors with lock and bottom rails 22 mm thick Application, drawing of front elevations, horizontal and vertical sections and constructional details of an entrance door with a shaped top rail and fixed sidelights within a frame Sketches showing differentiation between a door frame and jamb lining	External doors: Application, drawing of front elevations, horizontal and vertical sections and constructional details of the following doors: • Three-panel door with raised and fielded panels with high lock rail • Four-panel door with low lock rail, raised panels and diminishing stile • Framed ledge, brace batten doors with lock and bottom rails 22 mm thick Application, drawing of front elevations, horizontal and vertical sections and constructional details of an entrance door with a shaped top rail and fixed sidelights within a frame Sketches showing differentiation between a door frame and jamb lining	Front elevation and vertical section showing methods of installing strip boards (tongue and groove boards) as wall panelling from floor to ceiling A horizontal section showing how the joint between two strip boards are joined A vertical section showing the rough grounds and the finish at the top of the panelling A vertical section showing the finish at the bottom of the panelling with a moulded skirting and quadrant Working drawings of a built-in and free-standing cupboard up to ceiling height to include: • Front view with doors • Front view without doors Vertical cross-section showing drawer construction, hanging rail and shelves	Front elevation and vertical section showing methods of installing strip boards (tongue and groove boards) as wall panelling from floor to ceiling A horizontal section showing how the joint between two strip boards are joined A vertical section showing the rough grounds and the finish at the top of the panelling A vertical section showing the finish at the bottom of the panelling with a moulded skirting and quadrant Working drawings of a built-in and free-standing cupboard up to ceiling height to include: • Front view with doors • Front view without doors • Vertical cross-section showing drawer construction, hanging rail and shelves		*School holiday*
REQUISITE PRE-KNOWLEDGE	Pre-knowledge of doors, different joining fixtures as listed	Pre-knowledge of doors, different joining fixtures as listed	Pre-knowledge of casements	Pre-knowledge of doors	Pre-knowledge of doors	Pre-knowledge of materials used for wall panelling and cupboards	Pre-knowledge of materials used for wall panelling and cupboards		
RESOURCES (OTHER THAN TEXTBOOK) **TO ENHANCE LEARNING**	YouTube, wall charts, worksheets, etc. Drawing equipment		YouTube, wall charts, work-sheets, etc. Drawing equipment	YouTube, wall charts, worksheets, etc. Drawing equipment		YouTube, wall charts, material used for wall panelling and cupboards Drawing equipment	Materials and tools		
ASSESSMENT **INFORMAL ASSESSMENT:** REMEDIATION	The start of the term – question and answers		Worksheets with identification of materials only	Drawings and sketches can be made Emphasis on sketching	Drawings of roofs	Identification of materials Drawings of roofs Labelling can be done as well	Short tests and peer marking		
SBA FORMAL ASSESSMENT	**Mid-year examination** **Completion of term facets for phase 2 of PAT and assessment of facets** Learners should be taught and be able to understand and apply principles and concepts of each topic and should not be limited to specific specifications in the CAPS								

2023/24 ANNUAL TEACHING PLANS: WOODWORKING: GRADE 12 (TERM 3)

TERM 3	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9-10	
CAPS TOPICS	**ROOFS (Specific) & CEILING**	**ROOFS (Specific) & CEILING**	**CENTRING (Specific)**	**FORMWORK: STAIRCASE (Specific)**	**FORMWORK (Specific)**	**SHORING (Specific)**	**IRONMONGERY (Specific)**	**SUSPENDED TIMBER FLOOR (Specific)**		
TOPICS/CONCEPTS, SKILLS AND VALUES	Scale drawings and constructional details of the following roof trusses: • Lean-to roof • Couple roof • Closed couple roof • Collar-tie roof • South African roof (Howe) • King post roof Regulations, purpose, methods of installation, spacing of roof trusses and spacing of purlins/battens for particular types of roof covering Properties, composition, methods of fixing, advantages and disadvantages of concrete roof tiles, thatch, IBR (inverted box rib) and corrugated iron sheeting Comparison of the structure and use of a batten and a purlin Detailed drawings of the following: • Open eaves • Closed eaves Layout of roof trusses for the following types of roof profiles: • A hipped roof with valley • Gable roof Types and purpose of roof underlay Modern methods of joining smaller trusses to full trusses Identification and uses of: • Hurricane clips • Storm clips • Truss hangers • Gang nails **CEILING** Constructional details around the trap door of a ceiling	Scale drawings and constructional details of the following roof trusses: • Lean-to roof • Couple roof • Closed couple roof • Collar-tie roof • South African roof (Howe) • King post roof Regulations, purpose, methods of installation, spacing of roof trusses and spacing of purlins/battens for particular types of roof covering Properties, composition, methods of fixing, advantages and disadvantages of concrete roof tiles, thatch, IBR (inverted box rib) and corrugated iron sheeting Comparison of the structure and use of a batten and a purlin Detailed drawings of the following: • Open eaves • Closed eaves Layout of roof trusses for the following types of roof profiles: • A hipped roof with valley • Gable roof Types and purpose of roof underlay Modern methods of joining smaller trusses to full trusses Identification and uses of: • Hurricane clips • Storm clips • Truss hangers • Gang nails **CEILING** Constructional details around the trap door of a ceiling	Sketches showing methods of construction and erection of centres for the following types of arches with spans not exceeding 1 200 mm: • Segmental arch • Semi-circular arch Sketches showing closed and open laggings	Properties of materials used for formwork Drawing of formwork and methods of erecting and supporting the following: • Beams • Floor slab • Beam with attached floor slab • Straight flight of stairs with a landing • Square, round and rectangular columns The use of wedges in formwork **STAIRCASE** Line diagram with details of a straight flight of stairs with a landing and a staircase well with a half landing. Handrail and balustrade to be included	Properties of materials used for formwork Drawing of formwork and methods of erecting and supporting the following: • Beams • Floor slab • Beam with attached floor slab • Straight flight of stairs with a landing • Square, round and rectangular columns The use of wedges in formwork	**SHORING** Single line diagrams showing the components of the following shores for a three-storey building: • Dead shore • Double flying shore	**IRONMONGERY** Identification and use of the following fittings: • Mortise lock • Rim lock • Night latch • Straight cupboard lock • Cut cupboard lock • Drawer or till lock	Detailed drawing of the vertical cross-section through a suspended timber floor showing all supports, floorboards, skirting and quadrant including brick pier showing the bearer, floor joist, ant guard and DPC Draw a plan of the layout of a room with a suspended timber floor showing all supports and part of the tongue and groove floorboards	***Preliminary examination***	***School holiday***

TERM 3		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9-10	
REQUISITE PRE-KNOWLEDGE		Pre-knowledge of different types of roofing material	Roof covering Characteristics of IBR and corrugated iron sheeting Characteristics of concrete roof tiles Roof underlay Material for erecting a roof		Pre-knowledge of formwork and staircase	Pre-knowledge of materials for formwork	Pre-knowledge of Shoring	Pre-knowledge of ironmongery			
RESOURCES (OTHER THAN TEXTBOOK) **TO ENHANCE LEARNING**		Materials, wall charts, YouTube, etc.	YouTube, wall charts, equipment, e.g., roof types Material for roof trusses		YouTube, wall charts, worksheets, etc. Material for arches Mock-up of an arch	YouTube, wall charts, material of roofs Drawings of formwork with – drawing equipment	Materials and tools	YouTube, wall charts, etc.			
ASSESSMENT	**INFORMAL ASSESSMENT:** REMEDIATION	Study and prepare for examination	Drawings and sketches can be made Emphasis on sketching	Drawings of roofs PAT TO BE COMPLETED AND ASSESSED	Identification of materials Drawings of roofs Labelling can be done as well PAT TO BE COMPLETED AND ASSESSED	Short tests and peer marking Preparation for trial examination	Preparation for trial examination	Open book test Peer marking			
	SBA FORMAL ASSESSMENT	**PRELIMINARY EXAMINATIONS** **COMPLETION OF PHASE 2 OF PAT AND PAT ASSESSMENT** Learners should be taught and be able to understand and apply principles and concepts of each topic and should not be limited to specific specifications in the CAPS									

2023/24 ANNUAL TEACHING PLANS: WOODWORKING: GRADE 12 (TERM 4)

TERM 4		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	
CAPS TOPICS		**REVISION AND PREPARE FOR EXAMINATION** **NSC EXAMINATIONS**										***School holiday***
TOPICS/CONCEPTS, SKILLS AND VALUES												
REQUISITE PRE-KNOWLEDGE												
RESOURCES (OTHER THAN TEXTBOOK) **TO ENHANCE LEARNING**												
ASSESSMENT	**INFORMAL ASSESSMENT:** REMEDIATION											
	SBA (FORMAL)											