Republic of Namibia

MINISTRY OF EDUCATION, ARTS AND CULTURE

NAMIBIA SENIOR SECONDARY CERTIFICATE (NSSC)

WOODWORK SYLLABUS

ORDINARY LEVEL

SYLLABUS CODE: 6190

GRADES 10 - 11

FOR IMPLEMENTATION IN 2019
FOR FIRST EXAMINATION IN 2020

Ministry of Education, Arts and Culture
National Institute for Educational Development (NIED)
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Woodwork Syllabus Ordinary Level Grades 10 - 11

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1. INTRODUCTION

The Namibian Senior Secondary Certificate (NSSC) Ordinary Level is designed as a two year course for examination after completion of the Junior Secondary phase. The syllabus is designed to meet the requirements of the *National Curriculum for Basic Education (NCBE)* and has been approved by the National Examination, Assessment and Certification Board (NEACB).

The National Curriculum Guidelines, applicable at the stage of Senior Secondary Education (Grades 10-12) and at equivalent stages of non-formal education, as a part of life-long learning, recognise the uniqueness of the learner and adhere to the philosophy of learner-centred education.

The Namibia National Curriculum Guidelines:

- recognise that learning involves developing values and attitudes as well as knowledge and skills
- promotes self-awareness and an understanding of the attitudes, values and beliefs of others in a multilingual and a multicultural society
- encourage respect for human rights and freedom of speech
- provide insight and understanding of crucial "global" issues in a rapidly changing world which affect quality of life: the AIDS pandemic, global warming, environmental degradation, maldistribution of wealth, expanding and increasing conflicts, the technological explosion and increased connectivity
- recognise that as information in its various forms becomes more accessible, learners need to develop higher cognitive skills of analysis, interpretation and evaluation to use information effectively
- seek to challenge and to motivate learners to reach their full potential and to contribute positively to the environment, economy and society

Thus the Namibia National Curriculum Guidelines provide opportunities for developing essential, key skills across the various fields of study. Such skills cannot be developed in isolation and they may differ from context to context according to the field of study.

The skills developed in Woodwork are:

- communication skills
- information skills
- numeracy skills
- self-management and competitive skills
- problem solving skills
- social and co-operative skills
- physical skills
- work and study skills
- critical and creative thinking skills

2. RATIONALE

This syllabus is part of the technology learning area in the *National Curriculum for Basic Education (NCBE)* and is intended to provide a sequence in Woodwork which fosters the development of both manual and intellectual skills. The approach to the subject which is advocated in this syllabus is problem centred and tries to involve learners in planning, designing and executing their practical work. The overall aim is to facilitate the acquisition of technical knowledge and skills, leading to self-reliance, which is essential for daily life,

further study and the world of work. Ultimately, the goal of Woodwork is to increase the technological literacy of learners.

The Woodwork syllabus is designed to build on knowledge and skills acquired in the Junior Secondary phase.

3. AIMS

The aims of the syllabus are the same for all learners. They are set out below and describe the educational purposes of a course in Woodwork for the NSSC examination. They are not listed in order of priority.

The aims are to:

- extend and deepen knowledge, skills and understanding relating to practical activities.
- provide opportunities for experiential development of artefact and implementation skills
- stimulate aesthetic sensibility and develop critical faculties in the context of technical, economic and moral value judgements
- develop an awareness of the significance of Woodwork upon society
- provide an opportunity for learners to work independently in order to lay the foundation to be able to organise and manage projects.

4. ADDITIONAL INFORMATION

4.1 Guided learning hours

The NSSCO level syllabuses are designed on the assumption that learners have about 130 guided learning hours per subject over the duration of two years, but this is for guidance only. The number of hours required to gain the qualification may vary according to local conditions and the learners' prior experience of the subject. *The National Curriculum for Basic Education (NCBE)* indicates that this subject will be taught for 8 periods of 40 minutes each per 7-day cycle, or 6 periods of 40 minutes each per 5-day cycle, over two years.

4.2 Prior learning

It is recommended that learners who are beginning this course should have previously studied Technical Studies A in Grades 8 and 9.

4.3 Progression

NSSCO levels are general qualifications that enable learners to progress either directly to employment, or to proceed to further qualifications.

4.4 Support materials and approved textbooks

NSSCO syllabuses, question papers, examiner reports and assessment manuals in subjects, where applicable, are sent to all schools. Approved learning support materials are available on the *Senior Secondary Textbook Catalogue for Schools*.

4.5 Industrial skills observation (ISO)

Learners will be exposed to industrial practical skills and are expected to compile a report on their industrial observation.

5. LEARNING CONTENT

The content is divided into 8 topics which are:

1. Health and safety
2. Tools
3. Machines
4. Trees/timber
5. Fastening and fitting
6. Drawing/communication
7. Joints and Joinery products
8. Finishing and finishes

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
1. Health and Safety	• know hazards in the workplace	• identify hazards in the workplace - obstruction - sharp corners or edges - loose clothing and jewellery - inadequate guards over machinery - personal safety; (personal protective equipment (PPE)) - workshop and environmental safety - hand tools and machinery - portable electrical equipment - loose lying nails, screws and bolts - earthing of electrical equipment - stacking of materials and hoisting - fire fighting and prevention
	• know contents of the first aid kit/ box	• identify contents of the first aid kit/ box - bandages - plasters - latex gloves - antiseptic ointment - pair of scissors - mouth guard - an eye bath - disinfectant
	• understand basic first aid procedures	• discuss the basic first aid procedures including; - treatment of bleeding wounds with HIV and AIDS in mind - electric shock - ABC of first aid application (Airway, Breathing, Circulation)

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
2. Tools 2.1 Measuring and marking out tools	• know different measuring and marking out tools	• identify the following measuring and marking out tools: - folding rule/steel rule - tape measure - pencil - marking knife - marking gauge - mortise gauge - cutting gauge - try square - sliding bevel - winged compasses/ dividers
	• have the skill to use measuring and marking out tools	• apply measuring and marking out tools correctly
2.2 Hand tools	• know different hand tools and how to use them	• identify and use the following hand tools correctly - holding tools - cutting, boring and shaping tools - hammers - files and rasps - saws - planes - chisels - drills and drill bits
	• know how to care for tools	• describe the care and maintenance for tools

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
3. Machines 3.1 Portable power tools	• know power tools	• identify the following portable power tools - electric hand drill - orbital/belt sander - jig saw - router - electrical plane, - skill (circular) saw - lamella (biscuit) saw - edging machine
	• have the skills to use portable power tools	• demonstrate the use of portable power tools
3.2 Stationary machines	• know the types of stationary machines	• identify the following stationary machines - circular saw - band saw - pillar drill - planning machine - lathe machine - sanding machine - radial arm saw

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
4. Trees/timber	• know the difference between conifer and broad leafed tree	• classify trees under the two major groups - conifers (softwood) - broad leafed trees (hardwood)
	• know tree felling processes	• describe the signs of maturity • describe the felling process of trees
	• understand the processing of timber	• explain the following conversion methods - plain sawing - quarter or radial sawing • explain the two forms of seasoning - natural method - artificial or kiln method
	• understand different types of timber products	• compare the following types of timber products: - hardboard - veneer board - batten board - block board - laminated board - plywood - medium density fiber (MDF) board - chipboard
	• know the effects of timber defects	• describe the effects of defected timber regarding workability - knots - warping

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
5. Fastening and fitting	• have the skill to apply fasteners and fittings	• apply the following - fasteners (nails, screws, bolts and nuts) - fittings (hinges, locks & catches, barrel bolt, knockdown) - adhesives (glue) - dowels
6. Drawing/communication	• have the skill to apply the drawing techniques to draw free hand sketches related to Woodwork	• draw free hand sketches of joinery products including the following joints: - half lap joints - T-joint - cross halving joints - corner joint - mitred joints - butt joints - mortise and tenon joints - dovetail joints - housing joints
7. Joints and Joinery products	• have the skill to construct the different types of joints	• construct joinery products including the following joints - half lap joints - T-joint - cross halving joints - corner joints - mitred joints - butt joints - mortise and tenon joints - dovetail joints - housing joints
	• have the skill to draw the different types of joints	• make scale drawings of joinery products and joints

TOPIC	**GENERAL OBJECTIVES** *Learners will:*	**SPECIFIC OBJECTIVES** *Learners should be able to:*
8. Finishing and finishes	• have the skill to apply different wood finishes	• apply the following wood finishes - painting/oiling, waxing, varnishing - stains • describe the purpose of the following wood finishers - sanding/abrasive paper - sanding sealer

6. ASSESSMENT OBJECTIVES

The four assessment objectives in Woodwork are:

A Knowledge with understanding
B Problem solving
C Interpretation of data
D Practical skills

A description of each assessment objective follows. Under each assessment objective a list is given of the skills a learner should be able to demonstrate.

A Knowledge with understanding

Learners should be able to:

- demonstrate the ability to state facts, recall and name items, recall and describe processes
- demonstrate the ability to apply and relate knowledge to design
- make reasoned arguments and anticipate consequences of the outcomes of the design and practical process
- demonstrate a critical awareness of the interrelationship between woodwork and the needs of society

B Problem solving

Learners should be able to:

- identify problems and come up with specific solutions by composing a design brief analyse a problem by considering relevant functional, aesthetic, human, economic and environmental factors and draw up specifications
- investigate, research, collect and record relevant data
- generate a range of outline solutions to a identified problem, giving consideration to the constraints of time, cost, skills and resources
- develop, refine, test and evaluate the effectiveness of the solutions

C Interpretation of data

Learners should be able to:

- interpret data in one form and where necessary change it into an applicable form
- interpret and produce data in a variety of forms such as charts, diagrams, graphs, flow charts and drawings
- propose, develop and represent ideas in a detailed form, shape construction, movement, size and structure through graphical representation and three dimensional modelling

D Practical skills

Learners should be able to:

- plan and organise procedures involved in the making of an artefact
- select from a range of resources appropriate for the making of the artefact
- demonstrate appropriate manipulative skills by showing an understanding of resources, in relation to their use
- test and evaluate the product in terms of aesthetic, function and technical quality

7. SCHEME OF ASSESSMENT

Learners must be entered for Paper 1, Paper 2 (practical examination) and Paper 3 (artefact and portfolio).

Differentiation

All learners are expected to pursue the same curriculum content and differentiation will be by outcomes.

Description of papers

Paper 1

Written	**2 Hours**	**100 Marks**	**Weighting 50 %**

This paper will consist of approximately **ten** short answer questions and structured questions for a total of **30 Marks** and **70 Marks** respectively.

Paper 2

Practical examination	**3 Hours**	**50 Marks**	**Weighting 25 %**

Each learner will undertake a practical examination which is a compulsory component to assess practical skills. The practical examination will be internally marked and externally moderated by DNEA.

Paper 3

Artefact/project and portfolio	**4 Terms**	**50 Marks**	**Weighting 25 %**

Each learner will undertake a personally identified project from a topic supplied by DNEA. The project will be internally marked and externally moderated by DNEA.

Learners will be expected to demonstrate practical skills. The work presented for assessment will typically be in the form of an A3/A4 size folder.

The folder should include a drawing according to scale of the artefact as well as photographic evidence of the artefact. (See external moderation section for the assessment criteria of the course work).

The learners must commence with their artefact in the second trimester of Grade 10 and complete it by the end of the second trimester of Grade 11.

8. SPECIFICATION GRID

Assessment Objectives	Paper 1 Marks	Paper 2 Marks	Paper 3 Marks	Overall Weighting of papers
A Knowledge with understanding	60	0	0	30%
B Problem solving	20	0	15	17,5%
C Interpretation of data	10	10	15	17,5%
D Practical skills	10	40	20	35%
Total marks	**100**	**50**	**50**	**200**
Weighting	50%	25%	25%	100%

The assessment objectives are weighted to give an indication of their relative importance. They are not intended to provide a precise statement of the number of marks allocated to a particular assessment objective.

9. GRADE DESCRIPTIONS

Learners who have followed this curriculum are eligible for the award of grades A* to G.

The candidate is likely to have shown the ability to:

	A	C	E	G
Knowledge with understanding	**Excellent ability to** • identify detailed facts and techniques in relation to the content of the syllabus	**Good ability to** • identify facts and techniques accurately in relation to the content of the syllabus	**Some ability to** • identify basic facts and techniques accurately in relation to the content of the syllabus	**Limited ability to** • identify basic facts accurately in relation to the content of the syllabus
	• describe/ explain/define the theories and principles of the syllabus in detail	• describe/ explain/define clearly the theories and principles of the syllabus	• familiarity with the basic theories and principles of the syllabus	• be familiar with the basic principles of the syllabus
Problem solving	**Excellent ability to** • analyse and evaluate problems and situations	**Good ability to** • analyse and evaluate problems and situations	**Some ability to** • identify and define / describe problems and situations	**Limited ability to** • identify problems and situations

Problem solving (continued)	**Excellent ability to** • use judgement to structure/ create effective plans of action	**Good ability to** • use judgement to structure/ create appropriate plans of action	**Some ability to** • structure/ create reasonable plans of action	**Limited ability to** • suggest solutions
Interpretation of data	**Excellent ability to** • communicate information, ideas and processes (and solutions) in detail	**Good ability to** • communicate information, ideas and processes (and solutions)	• communicate information, ideas and processes (and solutions)	• communicate information, ideas and processes (and solutions)
	• choose the most appropriate method to communicate in different situations	• choose appropriate methods to communicate in different situations	• choose communication methods for different situations	• choose different communication methods
	• interpret and handle information appropriately	• interpret and handle information adequately	• interpret and handle information	• handle information
Practical skills/ realisation	**Excellent ability to** • apply a plan/ specifications effectively and systematically	**Good ability to** • apply a plan/ specifications accurately and adequately	**Some ability to** • apply a plan/ specifications	**Limited ability to** • apply a plan/ specifications
	• manage resources effectively	• manage resources	• manage resources	• manage resources
	• use equipment and tools effectively	• use equipment and tools appropriately	• use equipment and tools	• use equipment and tools
	• demonstrate correct techniques	• demonstrate appropriate techniques	• apply techniques	• be familiar with techniques
	• apply numerical skills effectively	• apply numerical skills appropriately	• apply numeric skills	• apply numeric skills
	• adhere to safety measures	• adhere to safety measures	• adhere to safety measures	• be familiar with safety measures
	• evaluate work and progress	• monitor and comment on work and progress	• comment on their work	• make basic comments about their work

10. GLOSSARY OF COMMAND WORDS FOR ASSESSMENT

Analyse	examine in detail to show meaning, identify elements and the relationship between them
Calculate	work out from given facts, figures or information
Classify	to assign things or people to classes or groups
Compare	identify/comment on similarities and/or differences
Conceptualise	to arrive at a concept or generalization as a result of things seen experienced or believed
Contrast	identify/comment on differences
Convert	change from one form, state, etc., to another
Define	give precise meaning
Demonstrate	to show or prove something clearly and convincingly
Describe	state the points of a topic / give characteristics and main features
Determine	use the information given to work out the answer
Develop	take forward to a more advanced stage or build upon given information
Discuss	write about issue(s) or topic(s) in depth in a structured way
Display	to make something visible or available for others to see
Distinguish	show the difference between one or more variables
Evaluate	judge or calculate the quality, importance, amount, or value of something
Explain	set out purposes or reasons / make the relationships between things evident / provide why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Interpret	reasoning or some reference to theory, depending on the context
Investigate	examine a problem in a systematic way
Justify	support a case with evidence/argument
List	give a number of points, generally each of one word
Outline	set out main points

Relate	find the relationship between one or more variables
Report	to give information about something that has happened
Research	methodical investigation into a subject in order to discover facts, to establish or revise a theory or to develop a plan of action based on the facts discovered
Select	choose from a number of alternatives
Sketch	make a simple freehand drawing showing the key features, taking care over proportions
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals

11. GLOSSARY OF SUBJECT TERMS

Acquaint	to make somebody aware off or familiar with something
Aesthetics	how something looks, especially when considering how pleasing it is
Artefact	any object made human beings with a view to be used
Axonometric	used to describe a method of drawing a 3-dimensional object so that the vertical and horizontal axes are drawn to scale but the curves and diagonals appear distorted
Communication (graphical)	the exchange of information between individuals, by means of speaking or using a system of signs or behaviour (drawing)
Computer Aided Drafting (CAD)	drawing with the help of a computer
Computer Aided Manufacturing (CAM)	producing with the help of a computer
Conservation	the ethical use and protection of resources example are trees, mineral resources wild life water etc.
Conversion	the act or process of changing from one form, state, etc., to another
Defects	any condition which will reduce the materials strength (wood)
Earthing	electrical term known as grounding design to protecting electric wire prevent shocking
Ergonomics	the study of how a workplace and the equipment used there can best be designed for comfort, safety, efficiency and productivity
Fasteners	hardware device that mechanically joints or fix two or more objectiv together
Industrial skills	test on general knowledge and skills when using tools and machines
Media	the various means of mass communication thought of as a whole, includin radio, television, magazines and newspapers, together with the peopl involved in their production
NOSA	National Occupational Safety Authority
Oblique	sloping or joining something at an angle that is not a right angle
Obstruction	something that blocks or close up a obstacle
Origin	place where something come from
Pictorial	containing illustrations or photographs as opposed to written text (3 dimentional sketches)
Portable tools	electric tools that can be carried around
Power tools	tools that is actuated by an additional power source

Principle	the basic way something works
Recognise	be aware of a fact or problem
Scale	a ratio representing the size of an illustration or reproduction, especially map or a model, in relation to the object it represents
Specification	a detailed description of a particular thing, especially one detailed enoug to provide somebody with the information needed to make that thing
Technology	scientific knowledge used in practical ways in industry
Time management	to plan and execute a task within a given period
Triangulation	a navigation technique that uses the trigonometric properties of triangles t determine a location or course by means of compass bearings from tw points a known distant apart.
Wasting	take away or remove

ANNEXE A: Practical assessment criteria

Assessment Objectives	Level of Response	Mark Range	Max. Mark
1. Planning	limited general knowledge and inaccurate description of items outlined in the syllabus	0-1	5
	describe with accuracy and understanding a wide range of items outlined in the syllabus	2-3	
	Excellently demonstrate a detailed knowledge of syllabus content presented in a variety of contexts	4-5	
2. Interpretation of data	Convey information using elementary technical vocabulary	0-1	5
	Convey information using appropriate technical vocabulary	2-3	
	Convey information appropriately, precisely and concisely	4-5	
4. Practical skills	Tools not fully utilised and properly used, safety compromised , low accuracy, low quality of product and not fully completed	0-11	35
	Tools used satisfactory, safe use of tools and equipment satisfactory, safety precautions satisfactory, accuracy is sometimes compromised and quality of the product is average	12-23	
	Excellent and safe use of tools and equipment most of the time, safety precautions are observed, Learner worked accurately most of the time and delivered a product of high quality	24-35	
5. Evaluation	No or very cryptic evaluation that does not really say anything	0-1	5
	Learner reflected on the process but did not mention what was wrong or could be done different	2-3	
	Learner reflected on the process, highlighted challenges and mentioned what could be done different	4-5	
		Total	**50**

ANNEXE B: Woodwork Practical examination assessment summary form (NSSCO)

Please read the instructions printed overleaf <u>before</u> completing this form.

Centre number					Centre name			November	**2**	**0**		
Candidate number	Candidate name		Teaching group/ set	**Part A**	**Part B** Making (max 40)		**Part C**	**Total mark**	**Internally moderated mark**			
				Short questions (max 5)	Interpretation of data (max 5)	Practical skills (max 35)	Evaluation (max 5)	**(max 50)**	**(max 50)**			
Name of teacher completing this form					Signature			Date				
Name of internal moderator					Signature			Date				

ANNEXE C: Coursework assessment criteria

Criterion	Level of Response	Mark Range	Max. Mark
1. Generation and exploration of ideas	A limited range of ideas with a tendency to focus on a single concept; little or no evaluation of ideas	0-1	**5**
	A range of appropriate solutions proposed. Ideas examined with evaluations leading to the identification of possible ideas for development	2-3	
	A wide range of appropriate solutions with imaginative interpretation; detailed evaluation of ideas and consideration of the requirements of the specification	4-5	
2. Development of proposed solution	Some decisions made about form, wood and/or construction methods; a working drawing with little detail	0-3	**5**
	Appropriate decisions made about form, wood and construction details/ production methods; evidence of some testing and/or trialing; A simple plan showing awareness of the main processes involved;	4-6	
	Appropriate testing and trialing resulting in reasoned decisions about form, materials, construction/production methods and other items	7-10	
3. Planning for production	Limited evidence of any forethought;	0-1	**10**
	Satisfactory planning showing an order for the sequence of operations; satisfactory working drawing showing overall layout and major dimensions	2-3	
	Clear and detailed planning showing an effective order for the sequence of operations; time schedule of production, tools and materials. Clear and detailed working drawings and other information giving full details of final product	4-5	
4. Product realisation	Exhibit a reasonable standard of outcome, be mainly complete and satisfy some aspects of the specification	0-7	**25**
	Some minor inaccuracies and blemishes; complete and functioning as intended	8-16	
	Completed to a high standard of outcome with precision and accuracy; fully meet the requirements of product specification	17-25	
5 Testing and Evaluation	Little or no evidence of testing; general overall appraisal with little reference to the specification	0-1	**5**
	Appropriate reporting and/or comment on simple testing; reference to specifications with some conclusions leading to possible modifications or improvements	2-3	
	Objective testing with reference to specifications and user; detailed and meaningful conclusions leading to proposals for further development.	4-5	
		Total	**50**

MODERATION

(a) Internal moderation

When several teachers in a centre are involved in internal assessment, arrangements must be made within the centre for all learners to be assessed to a common standard.

It is essential that within each centre the marks for each skill assigned within different teaching groups (e.g. different classes) are moderated internally for the whole centre entry. The centre assessments will then be subjected to external moderation.

(b) External moderation

Coursework assessment summary forms must be received by Regional Office / REXO during the first week of September along with samples of the coursework undertaken by the learners and the schemes of assessment for each assignment. The samples should cover the full ability range. If there are ten or fewer learners, all the coursework that contribute to the final mark for all learners must be sent to DNEA. Where there are more than ten learners, all the coursework that contribute to the final mark for ten of them will be required. The centre should select learners covering the whole mark range, with the marks spaced as evenly as possible, from the top mark to the lowest mark. If appropriate, the samples should be selected from the classes of different teachers. A further sample of coursework may subsequently be required. All records and supporting work should be retained until after the publication of the results.

The Directorate of National Examination and Assessment (DNEA) will issue instructions to centres in Namibia concerning external moderation arrangements.

ANNEXE D: Woodwork Coursework assessment summary form (NSSCO)

Please read the instructions printed overleaf <u>before</u> completing this form.

Centre number						Centre name			November				2	0		
Candidate number	Candidate name						Teaching group/set	Generation & exploration of ideas (max. 5)	Development of proposed solution (max. 5)	Planning for production (max. 10)	Product realisation (max. 25)	Testing and evaluation (max. 5)	**Total marks (max. 50)**	**Internally moderated marks (max. 50)**		
Name of teacher completing this form									Signature				Date			
Name of internal moderator									Signature				Date			

A. INSTRUCTIONS FOR COMPLETING COURSEWORK ASSESSMENT SUMMARY FORMS

1. Complete the information on top of the form.
2. List the candidates in an order which will allow ease of transfer of information to a computer-printed coursework mark sheet MS1 at a later stage (i.e., in candidate index number order, where the list is known; see item B.1 below). Show the teaching group or set for each candidate. The initials of the teacher may be used to indicate a group or set.
3. Transfer each candidate's marks to this form as follows**:**
   (a) Where there are columns for individual skills or assignments enter marks initially awarded (i.e. before internal moderation has taken place).
   (b) In the column headed 'Total Mark', enter the total mark awarded before internal moderation has taken place.
   (c) In the column headed 'Internal Moderated Mark', enter the total mark awarded ***after*** internal moderation has taken place.
4. Both the teacher completing the form and the internal moderator (or moderators) should check the form and complete and sign the bottom portion.

B. PROCEDURES FOR EXTERNAL MODERATION

1. The Directorate of National Examinations and Assessment (DNEA) sends a computer-printed coursework mark sheet MS1 to each centre showing the names and index numbers of each learner. Transfer the total internally moderated mark for each learner from the Coursework Assessment Summary Form to the computer-printed Coursework mark sheet MS1.
2. The top copy of the computer-printed coursework mark sheet MS1 and samples of the candidates' work covering the full ability range must be dispatched in the specially provided envelope to reach the DNEA, on date to be announced officially.
3. Indicate the candidates who are in the sample by means of an asterisk (*) against the candidates' names on the overleaf. The size of the coursework sample should be as follows:

Number of candidates entered	***Number of candidates whose work is required***
0 – 10	All candidates
11 - 50	10
51 - 100	15
above 100	20

4. Where more than one teacher is involved in marking the work, the sample must include candidates marked by all teachers. Candidates must be selected so that the whole range is covered, with marks spread as evenly as possible from the top mark to the lowest mark.
5. DNEA reserves the right to request further samples of coursework.
6. Send with the sample work records of the centre's criteria for the award of marks and information as to how internal moderation was carried out.

ANNEXE E: List of Tools, equipment and materials

Marking out tools

- steel rule
- folding rule
- tape measure
- winged compasses and compasses
- marking knife and pencil
- try square
- sliding bevel

Basic hand tools

- files and rasps
- saws
- planes
- chisels and gouges
- hammers and mallets
- boring tools
- screwdrivers
- pincers

Machines

- electrical hand drill
- jig saw
- orbital sander
- belt sander
- circular saw
- sanding machine
- band saw
- pillar/pedestal drill
- lamello saw/biscuit saw
- edging machine
- router
- electrical plane
- skill saw /festool saw with guide
- lathe
- radial arm saw

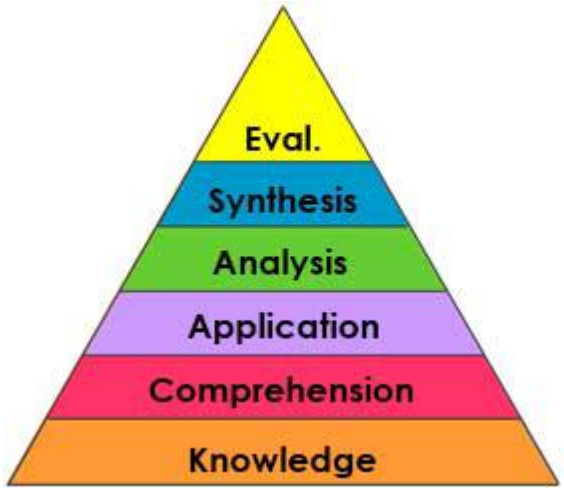
Materials

- hardboard
- plywood
- South African pine
- chip board
- mahogany
- oak
- fibre board
- screws
- nails
- bolts and nuts
- hinges

ANNEXE F: Bloom's Taxonomy

<table>
<tr>
<td> 

New version</td>
<td>In 1956, Benjamin Bloom headed a group of educational psychologists who developed a classification of levels of intellectual behaviour important in learning. During the 1990's a new group of cognitive psychologist, lead by Lorin Anderson (a former student of Bloom's), updated the taxonomy reflecting relevance to 21st century work. The graphic is a representation of the NEW verbage associated with the long familiar Bloom's Taxonomy. Note the change from Nouns to Verbs to describe the different levels of the taxonomy.

Note that the top two levels are essentially exchanged from the Old to the New version.</td>
<td> 

Old version</td>
</tr>
<tr><td>Remembering: can the student recall or remember the information?</td><td colspan="2">define, duplicate, list, memorise, recall, repeat, reproduce, state.</td></tr>
<tr><td>Understanding: can the student explain ideas or concepts?</td><td colspan="2">classify, describe, discuss, explain, identify, locate, recognise, report, select, translate, paraphrase.</td></tr>
<tr><td>Applying: can the student use the information in a new way?</td><td colspan="2">choose, demonstrate, dramatise, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.</td></tr>
<tr><td>Analysing: can the student distinguish between the different parts?</td><td colspan="2">appraise, compare, contrast, criticise, differentiate, discriminate, distinguish, examine, experiment, question, test.</td></tr>
<tr><td>Evaluating: can the student justify a stand or decision?</td><td colspan="2">appraise, argue, defend, judge, select, support, value, evaluate</td></tr>
<tr><td>Creating: can the student create a new product or point of view?</td><td colspan="2">assemble, construct, create, design, develop, formulate, write.</td></tr>
</table>

Source: https://www.slcschools.org/departments/curriculum/language-arts/documents/BloomsTaxonomy

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