



Action Verbs:

Apply: select and use information and/or knowledge and understanding to explain a given situation or real circumstances

Appreciate: recognise the meaning of, have a practical understanding of

Collaborate: work jointly with others or together on an activity or project

Communicate: use visual gestural, verbal or other signs to share meaning or exchange information; interaction between sender and recipient; both work together to understand

Compile: to build up gradually

Consider: think carefully about something, typically before making a decision

Create: process and give form to the topic of what is to be created using selected methods and material and/or to give the material used a new form

Demonstrate: prove or make clear by reasoning or evidence, illustrating with examples or practical application

Devise: to plan or invent with careful thought

Discuss: offer a considered, balanced review that includes a range of arguments, factors or hypotheses; opinions or conclusions are supported by appropriate evidence

Evaluate: (data) collect and examine data to make judgements and appraisals; describe how evidence supports or does not support a conclusion in an inquiry or investigation; identify the limitations of data in conclusions; make judgements about the ideas, solutions or methods

Evolve: to develop through experience

Strand 1: Principles and practices

In this strand, students learn about and employ the fundamental principles and practices associated with the study of Wood Technology. They learn to work safely and efficiently with equipment and materials, and apply principles of craft excellence through design and manufacture. They will investigate the environmental benefits and impacts of using wood as a natural and renewable resource and learn about sustainable practice.

Students should be able to:

- 1.1 **explore** key elements required for the completion of tasks
- 1.2 **justify** the selection of plans, processes and materials for the completion of tasks
- 1.3 **collaborate** effectively in a workshop learning environment
- 1.4 **manage** themselves and their resources

Planning and managing

The learning outcomes in this element encourage students to develop a range of project management skills while evolving their designs to the creation stage. Students develop the necessary knowledge and skills that will enable them to effectively solve contextual problems.

Communicating

The learning outcomes in this element encourage students to select and use appropriate media to communicate design ideas and technical information. Students will use technical language associated with wood science and technology. They learn about the important role that communication plays in addressing global and local environmental issues.

Students will plan and narrate their design evolution highlighting critical features of their solutions to design problems.

Creating

The learning outcomes in this element encourage students to be creative and to explore ways in which they can apply their knowledge and skills and appreciate the practices needed to produce purposeful, functional, appealing artefacts. Students develop their creativity across the three strands and use the natural aesthetics and properties of wood to enhance the appearance and function of their artefacts.

Environment and sustainability

The learning outcomes in this element encourage students to appreciate the environmental benefits and impacts of using wood as a natural and renewable resource, and to use sustainable practice throughout their learning. Students explore the role of forestation and wood in terms of global and local ecology and sustainability.

- 1.5 **represent** key information graphically
- 1.6 **create** sketches and working drawings to recognised standards using a variety of media
- 1.7 **explain** the function and application of a range of tools, equipment, fixtures and fittings

- 1.8 **apply** knowledge of and skills in a range of appropriate existing and emerging principles, processes and techniques
- 1.9 **demonstrate** principles of craft excellence through the design and realisation of tasks and artefacts
- 1.10 **apply** recognised health and safety practices in the use of tools, equipment and materials

- 1.11 **investigate** the environmental impacts of using wood as a natural and renewable resource
- 1.12 **appreciate** sustainable practice throughout their learning

Strand 2: Design thinking

In this strand, students explore design briefs and their solutions. They use key principles of design and produce sketches, drawings, models/prototypes and artefacts that illustrate their design thinking. Students consider factors such as materials, cost, time resources and skills to produce purposeful, functional, appealing artefacts. They also consider the environmental and social impacts of design decisions and investigate how to minimise material use and manage waste.

Students should be able to:

- 2.1 **explore** design problems
- 2.2 **manage** information and thinking to support an iterative design process
- 2.3 **evaluate** their own progress to inform future learning
- 2.4 **understand** key principles of design and ergonomics
- 2.5 **communicate** relevant information
- 2.6 **produce** sketches, drawings and models/prototypes to explore design ideas
- 2.7 **communicate** a suitable approach to solving a problem
- 2.8 **compile** a folio through appropriate media

- 2.9 **evolve** their solutions based on critical reflection
- 2.10 **devise** templates and models using various media
- 2.11 **produce** purposeful, functional, appealing artefacts
- 2.12 **create** an artefact having considered factors such as materials, cost, time resources and skills

- 2.13 **recognise** the environmental and social impacts of design decisions
- 2.14 **investigate** how to minimise material use and manage waste

Strand 3: Wood science and materials

In this strand, students explore the natural and physical properties and characteristics of wood. They learn how to use the natural aesthetics and properties of wood to enhance the appearance and function of artefacts. They explore the role of forestation and wood in terms of local/global ecology and sustainability and recognise the importance of considering the impact on the natural environment when sourcing materials.

Students should be able to:

- 3.1 **identify** common species of trees
- 3.2 **evaluate** the characteristics and properties of common species of trees
- 3.3 **understand** the properties associated with a range of materials applicable to Wood Technology
- 3.4 **evaluate** the use of wood in comparison to alternative materials
- 3.5 **explain** the properties associated with the classification of wood
- 3.6 **discuss** the use of wood in comparison to alternative materials
- 3.7 **justify** the use of materials based on characteristics and properties within a context
- 3.8 **utilise** the natural aesthetics and properties of wood to enhance the appearance and function of an artefact
- 3.9 **create** an artefact that demonstrates an understanding of the properties associated with a range of materials applicable to Wood Technology
- 3.10 **appreciate** the role of forestation and wood in terms of local/global ecology and sustainability
- 3.11 **investigate** the journey of wood from forest to end use
- 3.12 **consider** the impact on the natural environment when sourcing materials

Action Verbs:

Explain: give a detailed account including reasons or causes

Evaluate: (ethical judgement) collect and examine evidence to make judgements and appraisals; describe how evidence supports or does not support a judgement; identify the limitations of evidence in conclusions; make judgements about the ideas, solutions or methods

Explore: to think or talk about something in order to find out more about it

Identify: recognise patterns, facts, or details; provide an answer from a number of possibilities; recognise and state briefly a distinguishing fact or feature

Investigate: observe, study, or make a detailed and systematic examination, to establish facts and reach new conclusions

Justify: give valid reasons or evidence to support an answer or conclusion

Manage: to work upon or try to alter for a purpose

Produce: make or manufacture from components or raw materials

Recognise: identify facts, characteristics or concepts that are critical (relevant/appropriate) to the understanding of a situation, event, process or phenomenon

Represent: bringing clearly and distinctly to mind by use of description or imagination

Understand: have and apply a well-organised body of knowledge

Utilise: make practical and effective use of

Teacher Name:

WOOD TECHNOLOGY PLANNER

Class Group:

Unit:

Duration:

Commencement Date:



Consider the age, stage and prior learning of the students.

What learning do we want to focus on?

Explore both the strands and elements when choosing learning outcomes.



Identify the learning outcomes for your unit of learning.

Identify the key learning for students using action verbs to support your thinking.

Consider how we will assess and report evidence of learning



Develop ideas for how students could experience this learning.

How will I know they are learning?



Using your own classroom context, what methodologies and resources will support students in experiencing the learning outcomes.

Ensure assessment aligns with the learning outcomes and their action verbs