



RODKITS  Fishing Rod Building
Course

Lesson Plans

RodKits Fishing Rod Building Course

Australian Curriculum learning objectives:

- SISOFSH314A - Construct and repair fishing rods
- SISOFSH201A - Catch and handle fish

Required Resources:

- Access to the online course videos www.rodkits.com.au or a hard copy of the videos.
- Access to online resources
- Each student will require a U Build Rods RodKit which contains all of the fishing rod components.
- Rod building tools and materials – see course manual.

Course Outcomes:

This course will supply students with the knowledge to build and repair a fishing rod. It will focus on unique building techniques and different components of a fishing rod, sourcing them and applying them to a finished product. The course will also look at working with clients to establish requirements and trialling the finished rod.

This course will also touch on skills and knowledge required to identify and use tackle and equipment to catch fish in a sustainable environment.

Application of the Course:

This course applies to personnel working in or for the fishing industry. This includes fishing rod builders and repairers, individuals working in customer service roles in fishing and tackle shops, fishing tour guides, sports fishermen and those involved in fishing. It also applies to personnel working in or designing manufacturing processes and industrial material application and design. This unit may also apply to leaders working for outdoor education or adventure providers; volunteer groups; not-for-profit organisations or government agencies.

Lesson 1 - Unboxing the Kit

Resources Required:

- Video – Lesson 1 Unboxing the Kit
- RodKits or fishing rod components

Lesson Outcome:

Identify and understand the different components of a fishing rod. Identify a client's custom fishing rod requirements

Lesson Outline:

1. Teacher hands out Rodkits and Fishing rod parts worksheets.
2. Watch Video – Lesson 1 Unboxing the Kit and discuss parts of the fishing rod and their purpose.
3. Discuss different rod designs including line weights, different species, different fishing habitats (boat, beach, estuary, lake etc.)
4. Have students identify a client and produce some client requirements for a custom fishing rod.

Homework/extension:

This is a great opportunity to get students involved and have them seek out a potential client with some unique requirements. It encourages them to learn more about the rods they are going to build and to apply themselves into the process. Students are also encouraged to identify local fishing regulations for their chosen habitats.

Lesson 2 - Finding the Spine

Resources Required:

- Video – Lesson 2 Finding the Spine
- Rod Blank
- Tape
- Chinagraph Pencil
- Spine Finder

Lesson Outcome:

Identify the spine of the blank and understand why it is important.

Lesson Outline:

1. Watch Video – Lesson 2 Finding the Spine
2. Discussion – This is a great opportunity to look in to the materials used in making fishing rod blanks, the industrial applications of the materials and manufacturing process.
Some materials to consider: Carbon, plastic, fibreglass, bamboo, wood etc.
Characteristics: Strength, Elasticity / Rigidity, Form etc.
3. Proceed to have students identify the spine on each of their blanks.

Homework/extension:

Ask students to find the most unusual fishing rod construction they can.

Lesson 3 - Installing the Butt Cap, Rod Handle and Reel Seat

Resources Required:

- Video – Lesson 3 Installing the Butt Cap, Rod Handle and Reel Seat
- Rod Blank
- Butt Cap
- EVA grips
- Reel Seat
- Tape
- Chino graph Pencil
- Handle Kit Epoxy with Epoxy Filler
- Methylated Spirits
- Rags
- Gloves
- Sand Paper

Lesson Outcome:

Assemble the rod handle. Understand the processes and materials and how they can be applied to different applications.

Lesson Outline:

1. Watch Video – Lesson 3 Installing the Butt Cap, Rod Handle and Reel Seat
2. Discussion – Epoxy: What is it, where is it used and why is it so strong. Arbors what is their purpose and identify their use in other applications.
3. Proceed to have students install their handle assemblies.

Homework/extension:

Ask students to research different handle constructions and materials. This may give them an insight into how they might fulfil their client's requirements and how they want to finish their rod.

Lesson 4 - Installing the Rod Tip

Resources Required:

- Video – Lesson 4 Installing the Rod Tip
- Rod
- Rod Tip
- Thermal Glue
- Butane Burner or Heat Source to melt thermal glue.

Lesson Outcome:

Install the rod tip to the blank.

Lesson Outline:

1. Watch Video – Lesson 4 Installing the Rod Tip
2. Discuss why thermal glue is used for the tip but nowhere else on the rod.
3. Proceed to have install their rod tips.

Homework/extension:

Ask students to identify 5 other applications in industry that use or could benefit from thermal glue applications.

Lesson 5 - Placing the Guides

Resources Required:

- Video – Lesson 5 Placing the Guides
- Rod
- Guides
- Chinagraph Pencil
- Safety Glasses
- Rod Holder
- Tape or Guide Holders
- Spin Reel + Line
- Rod Recipe
- Tape measure

Lesson Outcome:

Place guides onto the rods and understand why and how guide placement is important.

Lesson Outline:

1. Watch Video – Lesson 5 Placing the Guides
2. Proceed with a single student's rod and perform the guide placement process. Make this interactive and discuss as you progress.
3. Use the measurements from your guide placement and have students mark their rods

Alternatively you can use a rod recipe and skip step 2.

Homework/extension:

None

Lesson 6 - Setting up Your Work Area for Guide Binding

Resources Required:

- Video – Lesson 6 Setting up Your Work Area for Guide Binding
- Rod Stands
- Glue, Epoxy or Screw and Drill

Lesson Outcome:

Assemble the rod stands

Lesson Outline:

1. Watch Video – Lesson 6 Setting up Your Work Area for Guide Binding
2. Have students assemble their rod stands and set up their work areas.

Homework/extension:

As an alternative you can build your own rod building station. The components required are very simple.

Lesson 7 - Binding the Guides

Resources Required:

- Video – Lesson 7 Binding the Guides
 - Rod
 - Guides
 - Thread
 - Rod stands
 - File or Grinder
 - Safety Glasses
 - Tape
 - Guide holder
 - Bobbin holder
 - Thread scissors or blade
 - Burnishing tool
 - Pull through
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- Binding a guide image handout.

Lesson Outcome:

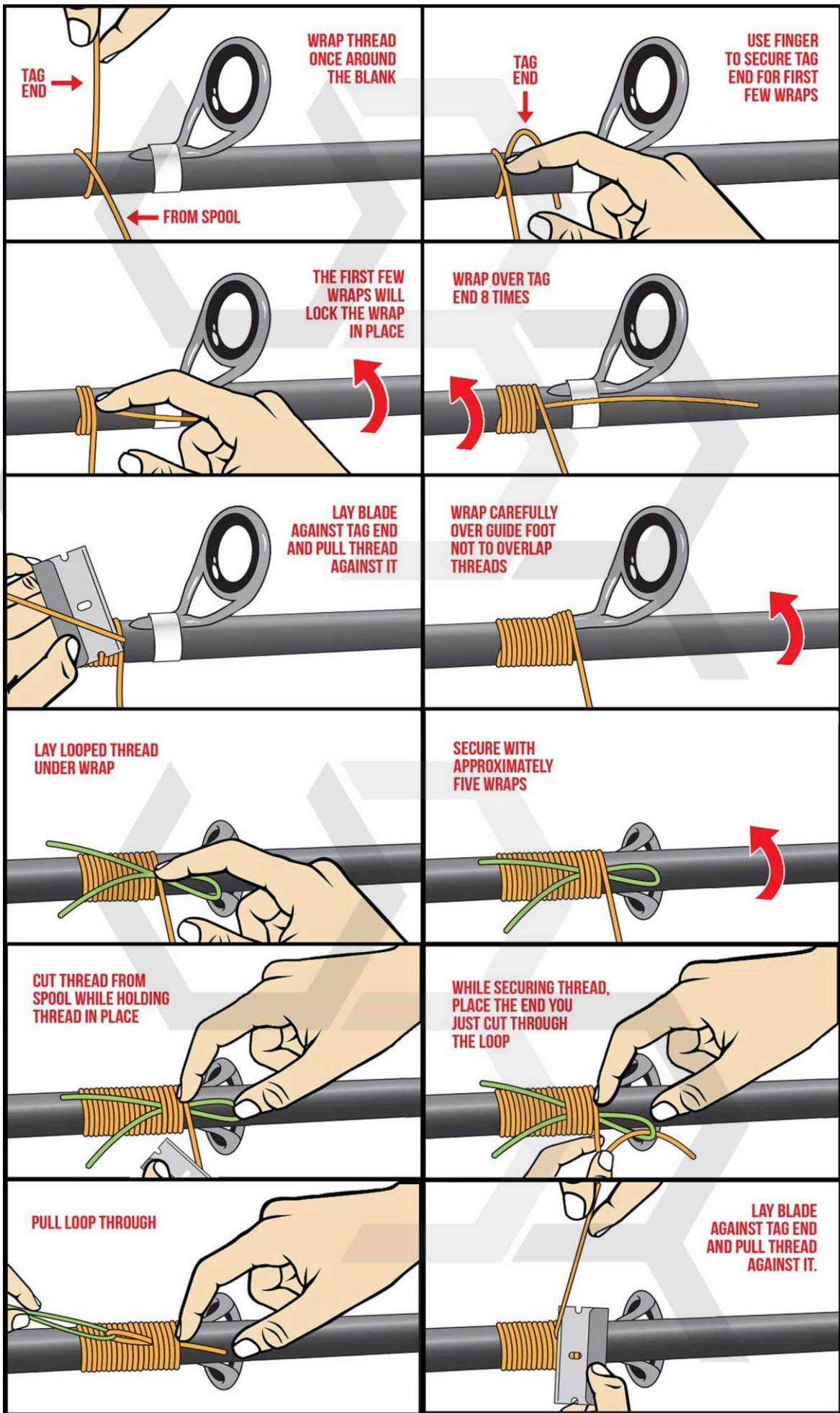
Install all guides onto the rod.

Lesson Outline:

1. Watch Video – Lesson 7 Binding the Guides
2. Have students assemble their rod stands and set up their work areas.
3. Proceed to have students complete all their bindings.

Homework/extension:

There are many different binding designs. Watch advanced lessons to see some advanced binding techniques and have students apply these to their rods. Some are quite simple. Some are very difficult.



Lesson 8 - Aligning the guides and Prepping for epoxy

Resources Required:

- Video – Lesson 8 Aligning the guides and Prepping for epoxy
- Rod
- Reel

Lesson Outcome:

Make sure all the guides are aligned correctly ready for the epoxy coat.

Lesson Outline:

1. Watch Video – Lesson 8 Aligning the guides and Prepping for epoxy
2. Discuss the process and why it is important to the finished rod.
3. Proceed to have students align their guides.

Homework/extension:

Students can make their fishing rods more unique by adding decals or writing on their rods.

Lesson 9 - Apply the Epoxy Coat

Resources Required:

- Video – Lesson 9 Apply the Epoxy Coat
- Rod
- Dryer
- Epoxy Kit
- Measuring Syringes
- Mixing Cup
- Mixing Sticks
- Electronic Dryer (optional)
- Sable Brush
- Alcohol Burner

Lesson Outcome:

Finish the fishing rod with clear coat epoxy

Lesson Outline:

1. Watch Video – Lesson 9 Apply the Epoxy Coat
2. Discuss epoxy and its purpose in this application. Discuss the pitfalls of not mixing or applying it correctly.
3. Proceed to have students clear coat their rods.

Homework/extension:

None

Lesson 10 - Trialling the Rod – Sustainable Fishing

Resources Required:

- Finished Rods

Lesson Outcome:

Students will be able to evaluate their finished rods and the process. They should also understand the affect fishing has on the environment and how they can help create a sustainable fishing future.

Lesson Outline:

1. Inspect the fishing rods to ensure it meets design parameters and quality.
2. Trial Rods. This can be done in a dry setting or by field excursion.
3. Have students evaluate their fishing rods and ensure suitability of intended use according to organisational policies and procedures. Will the rods adhere to local fishing regulations and standards?
4. Identify improvements or modifications to the fishing rod and implement if necessary.

Homework/extension:

For in depth study into sustainable fishing see SISOFSH201A Catch and handle fish.

Go Fishing!!