

Work at Heights Fundamentals Course

Course Location & Times

@ RiggIt Inc. 8021 Enterprise, Burnaby BC
Saturday 10:00 - 18:30, Sunday 09:00 - 17:30

This demanding foundational 16 hour course is designed for people planning to work at heights in British Columbia specifically and assumes participants are reasonably fit, have had some prior basic fall protection training, experience working at heights with simple fall protection systems and some knowledge of relevant legislation.

Those without prior formal training or experience will find this course particularly challenging if they don't acquaint themselves with some of the key legislation and materials or practice the knots, hitches and bends ahead of time. Experienced practitioners will likely find this course a challenging CPD refresher.

Work at heights often requires climbing or traversing structures indoors and outdoors beyond the reach of an aerial platform and this course orients participants to the tools and techniques required to move in this environment in an efficient, low risk and compliant manner.

Additionally, the ability to rescue ourselves and evacuate the heights by rappel if necessary or rescue our partner is an essential part of our skill set along with our ability to effectively participate in a small team rescue response. Strong, live load rope rigging fundamentals are essential in this arena of practice.

The ever evolving tools and techniques that best support work at heights and guide this course are derived from;

Fall Protection as referenced in **WCB OH&S Part 11** and the supporting **OH&S Guideline 11**
Rope Access as referenced in **WCB OH&S Part 34** and defined by **SPRAT/IRATA** and,
Rope Rescue as referenced in **WCB OH&S Part 32** and defined by **EMBC/NFPA**.

Today's competent practitioners are well acquainted with these standards and knowledgeably navigate the **Hierarchy of Regulatory Standards** for work at heights that defines equipment, training and operational standards applicable to their specific task.

We'll discuss jurisdiction, OH&S obligations, Hazard/Risk Management fundamentals and apply the **Hierarchy of Hazard Controls** and **Hierarchy of Fall Protection** throughout the course.

We'll start with a **New and Young Worker Orientation**, a **Work Plan/JHA**, review a **Written Fall Protection Plan and** document a harness inspection.

Participants will review Fall Protection Fundamentals per **Part 11**, equipment and techniques, fit a standard dorsal fall arrest harness on each other, conduct a hang test and deploy rescue stirrups. We'll review standard single and Y lanyards and understand the limits and risks of these tools particularly when working below 20' where the lanyard length and force limiting decelerator combinations put us at risk of hitting the ground.

We'll describe impact and compound forces in Kilo Newtons (Kn's) and learn how to best mitigate and manage them.

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Participants will be acquainted with rope access harnesses and gear that relies on sternal arrest and try lighter, shorter, force limiting lanyards in conjunction with a Work Positioning lanyard and practice tower climbing and evacuation.

Woven through the entire course will be steady practice in our rope rigging fundamentals. We'll practice the knots, hitches, bends and basic rope craft that allows us to anchor and grab ropes; create mechanical advantage or friction control and; in conjunction with releasable hitches and load transfers, move and manage up to 100kg all by ourselves with a bit of cord, a few carabiners and a couple pulleys. These skills are at the heart of rope rigging and essential to our practice.

Over the duration of the course, participants will learn by rigging or reviewing simple temporary **Travel/Restraint** and **Fall Arrest** anchors and systems, **Vertical Lifelines** and **Force Limiting Horizontal Life Lines**.

Participants will be assessed on their comprehension and competency in rigging these basic Fall Protection systems throughout the course.

Self and peer assessment are emphasized and students are introduced to a grading rubric that provides clear descriptions of a substandard, adequate or exemplary performance.

Successful completion of this course will prepare participants for further rope access or rope rescue training and is a prerequisite for further training by Pacific High Rigging & Safety.

Course ratio is currently at a maximum of 6:1 and a cost of \$750 plus 5% GST per participant. e transfers is the preferred method of payment.

While all equipment is provided except personal gloves, participants are encouraged to bring their personal equipment provided it's appropriate and in good condition.

Participants must download the WorkSafe App to their mobile devices and/or laptops or tablets and acquaint themselves with **Parts 11, 34 and 32 in the WCB OH&S Regulation** prior to the course.

I'm moving away from printed materials towards a tablet based digital manual and reference platform and recommending this approach for students and practitioners.

We will be advocating well dressed examples of the following knots, hitches and bends;
Figure eight knot rewoven and on a bight, bowline knot, butterfly knot, barrel knot and stopper knot.
Clove hitch, Munter hitch, three wrap prusik hitch, prusik on itself hitch
Figure eight bend, Double Fisherman's bend, Water/Ring bend.

If you're not familiar with these, find a piece of cord, go on line and start practicing.

Animated Knots by Grog and 3D Knots are two helpful examples.

The **blocked and releasable Munter hitch** is probably one of the most challenging and critical skills so try to figure it out ahead of time.

Perry Beckham

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