



GOLDEN STATE GUIDING // LEAD CLIMBING 101 COURSE

Hands on instruction for Lead Climbing and Lead Belaying, focusing on equipment, proper techniques, and the necessary skills to minimize risk.

Lead Climbing 101 Course Curriculum

There will be 3 areas of focus in the Lead Climbing 101 Course: Equipment, Lead Belaying and Lead Climbing.

1. **Equipment:** What is needed for Lead Climbing?
 - Rope** – Dynamic rope, typically 60 meters or longer and between 9.2mm and 10.0mm.
 - Quickdraws** – minimum 6, preferably 12. Usually sold in 6 packs.
 - Carabiners** – Minimum 4 locking HMS pear biners for bolted anchors.
 - Slings/Runners or Cordelette** – 1* 48” sling/runner for anchor or a 6-7mm cordelette between 20” - 25”.
 - Belay Device & Carabiner**– Any tube style belay device. GriGri’s are acceptable but know how to use this device. GriGri’s are considered “assisted breaking belay devices”, not auto-locking. A locking HMS or pear biner for your belay device.
 - PAS** – Personal Anchor System to clip directly into the anchor when a climb is completed.
 - Helmet** – Standard climbing helmet.
 - Harness** – Standard climbing harness.
 - Shoes** – Standard climbing shoes.
 - Extras** – backpack for gear, belay gloves.
2. **Lead Belaying:** Instruction and hands on practice regarding how to safely and efficiently Lead Belay and the techniques and commands involved.
 - Flaking the rope; look for soft spots (blown core), abrasions or knots in the rope, and know where to flake the rope in relation to the climb.
 - Review proper safety checks with your Lead belayer. Make sure the belay device is loaded properly, that the locking carabiner is locked and in the correct position and that the belayer’s harness is either double backed or properly fastened.
 - The appropriate amount of slack needed in the system to safely Lead belay is a couple feet of slack so there is a slight U shape in the rope right around mid-thigh level or less.
 - You must spot your climber before they clip the first draw by having one strand of the rope in the left hand (usually the climber side of rope) and one strand in the right hand (usually the braking side of the rope). Once the climber clips the first quickdraw then call out on belay.

- Proper commands for Lead Belaying (these are applicable to the climber as well).
 - **Belay On** is communicated by the belayer *AFTER* the first bolt is clipped by the climber.
 - **Up Rope** is communicated by the climber for his or her belayer to take in slack.
 - **Slack** is communicated by the climber for his or her belayer to give or pay out some rope to the climber.
 - **Tension on** is communicated by the belayer when the climber has reached the top of a climb, has requested **Tension** (slack taken out of the system) and is transitioning to be lowered.
 - Scenarios will be demonstrated where you will pay out slack “**Slack**” and take in rope “**Up Rope**”.
3. **Lead Climbing:** Instruction and practice regarding how to safely and efficiently Lead climb.
- Review proper safety checks with your Lead climber. Figure 8 follow through knot is properly tied with appropriate amount of tail (two fist lengths). Climbers harness is either double backed or properly fastened.
 - Clipping techniques (Gun and A-OK).
 - Back-clipping and the hazards involved (carabiner gate can open on a fall).
 - Z-clipping and the hazards involved (make sure to clip from the harness).
 - Demonstration on where the rope should run in relation to the climber and the wall.
 - Downside of rope drag and the benefit of clipping in a direct line.
 - Proper commands for Lead Climbing (these are applicable to the belayer as well).
 - **Climbing** is communicated by the climber to his or her belayer indicating they are now climbing and that the proper safety checks have been completed.
 - **Clipping** is communicated by the climber to his or her belayer indicating they are going to be clipping a quickdraw (some slack will be needed).
 - **Watch Me** is communicated by the climber when making a move/clip they may fall on.
 - **Falling** is communicated by the climber to let his or her belayer know they are falling and the system is about to be weighted.
 - **Take** is communicated by the climber to the belayer to take in all the slack as the climber is about to “take” a break by hanging on the rope or is possibly at the anchor and is preparing to be lowered.
 - **Note:** The commands **Up Rope** and **Slack** are also used by the climber as mentioned in the Lead belay section previously. Additionally, **Tension** is a newer command used by the climber once he or she has reached the anchor and is transitioning to being lowered and needs the rope to be pulled tight. Once **Tension** is communicated by the climber, the belayer will take in all the slack and communicate to the climber **Tension On**.
 - Partner up and demonstrate Lead Climbing techniques in a mock leading scenario.
 - Demonstrate how to coil a rope and create a backpack using the rope.