

Instructor's Meeting: Wednesday, April 7, 6:00 PM

Location: Online via Zoom – meeting link sent via separate email

General Instructions:

- 1) COVID protocols - you must agree to the following to participate:
 - a) Signing the COVID waiver, preferably electronically (i.e. scan and email)
 - b) Wearing a mask in public
 - c) Social distancing
 - d) Self-selecting out if feeling unwell or if instructed by one of the event leaders
 - e) Willingly subject yourself to infrared no-touch forehead temperature check on arrival and as requested by the event leaders
 - f) Use gloves and use hand-sanitizer frequently (club provided)
 - g) Do not share food
- 2) Wear a yellow T-shirt, even if you don't have the AMC shirt.
- 3) Wear a name tag. It is preferred that you supply your own (e.g. climbing tape on your helmet) to minimize contact
- 4) Pre-arranged instructor list and assignments for each day – no “show up and help” – **watch your email**
- 5) We have established ways to teach; not because it is the “only way to do it”, but for consistency. Teach by showing, allowing students to do it themselves – give them their space and avoid the temptation to “reach in” and take over.
- 6) Please tune in to the Zoom lectures! This helps keep our instruction consistent. If you’re not listening, you may not pick up on something I tell the students and when they ask about it later, you may tell them something different.
- 7) Backup all belays and rappels on all class days – you may need to fill in as the belayer at some stations.
- 8) No self-rescue in the gym. This will be practiced on the second Saturday (grad-climb day)
- 9) Students will keep their harnesses, personal anchors and helmets for the duration of the class – no comingling of gear. We’ll hand out equipment on Saturday at Target and discuss proper care for their safety equipment.
- 10) The students will have only seen a demo video of proper belay technique. Assume they do not know what they are doing. Please review the PBUS belay instructions at the end of this syllabus and be prepared to observe/correct/teach it at all stations where a belay is involved.
- 11) The students will have only seen a demo video of how to tie a knot. Be prepared to demonstrate the water knot, grapevine (will be needed for their auto block prior to rappelling) and especially the figure-8 with a follow-through for properly tying into their harness.

Key points to address when tying knots:

- Overhand/waterknot – length of tails, 4-way tightening, recheck all knots periodically
- Figure 8 – use harness to demo, get the figure 8 in the right place to start so that you don’t have to tie off the tail, 4-way tightening
- Grapevine – look for double Xs on one side and 4 straight lines on the other, get the tail length right – a skosh longer than the length of the knot. Remember, if demoing with a rope start with more tail.

AMC Documents Link

Here is the link for the syllabus and AMC Rock Climbing & Self Rescue Manual:

<http://arizonamountaineeringclub.net/schools/outdoor-rock-climbing-school/basic-outdoor-rock-climbing-school-syllabus-manual/>

Here is an interesting link for knot tying, some people may find it useful:

<http://www.animatedknots.com/>

Instructor Syllabus - Session #1

When: Tuesday, April 13th, 6:00 pm

Where: Online via Zoom – meeting link sent via separate email

1. Lectures:	Start Time?
a. Scott N. _____ introductions (20 min)	6:00
b. _____ club leadership speaks about membership, Meetup, outings, etc. (5 min.)	6:20
c. Scott N. _____ glossary slide show (5 minutes)	6:25
d. Scott N. _____ general/safety lecture (25 minutes)	6:30
e. Scott N. _____ gear lecture – helmet, shoes, harness demo (25 minutes)	6:55
f. 10-minute break	7:20
g. _____ Video _____ overhand, water knot (15 minutes)	7:30
h. _____ Video _____ figure 8 on a bight, follow-through (15 minutes)	7:45
i. _____ Video _____ grapevine & stopper knot (15 minutes)	8:00
j. _____ Video _____ rope coiling - backpack coil (10 minutes)	8:15

Read Chapters 3 & 4 – covered tonight

Read Chapters 2, 5, 6, & 7 – will be covered on Thursday

Instructor Syllabus - Session #2

When: Thursday, April 15th, 6:00 pm

Where: Online via Zoom – meeting link sent via separate email

1. Lectures:

- a. Scott N. Review knots
- b. Scott N. The climbing world: access, ethics, ratings
- c. Video **Bottom Belay** – Explain configuration, demo belay process & climbing calls
(slot device & Muentner)
- d. Video **Top Belay** - Explain configuration, demo belay process using Muentner & climbing calls
- e. Video **Rope throwing and Rappel setups** - with **extended slot device** and **Autoblock** rappel
backup

2. Announcements

3. Review Saturday's class

Read Chapters 2, 5, 6, & 7 – covered tonight

Read Chapter 9 for Saturday & Sunday

Read Chapter 8 for next Saturday

Instructor Syllabus - Session #3 (1st Climbing Day):

When: Saturday, April 17th, arrive at 6:00 AM leave by 6:15 AM

Where: Target Parking Lot – SE corner of 101 & Frank Lloyd Wright

Hint: If you are coming north on the 101, take the Frank Lloyd Wright exit and turn into the Target parking lot directly from the frontage road just before you hit the Frank Lloyd Wright intersection. If you miss it, just turn right at Frank Lloyd Wright and take an immediate right into the shopping center. **Park near the entrance from the Frontage Road.**

Supplies - general: Hand sanitizer, mask, first-aid kits, radios, extra batteries, **maps**, comb, pruners, extra water, trash bags.

Supplies for check-in: waivers, student nametags, instructor nametags, pens, markers.

Scott N. _____

Student Gear: Harnesses & personal anchors (2 bags), Helmet boxes

Scott N. _____

Supplies for problem setup: Ammo box w/ hardware kits, static ropes, climbing ropes, slings, biners, tape for students, instructor check-sheets, large cones, **PRO – Lots of Cams (#1 - #4)**

Scott N. _____

Supplies for trails: small cones, orange flagging, **pruners**, walking sticks for snake patrol.

Scott N. _____

Instructor's gear: harness, standard harness gear, yellow T-shirt

1. Send instructor group out early (7:10 am) to set stations at Sven Slab area
 - a. Set up demo of overhanging rappel and bottom belay of rappel
 - b. All belays and all rappels should be backed-up (safety-belayed)
 - c. Go over safety items below. Extra checks of harness & helmet needed for first students at each station.
 - d. Go over how students will move through areas
 - e. Mark trails with small cones, caution tape
 - f. Hand out check-sheets, trash bags, maps
 - g. Each instructor should take anchor gear (see instructor map) and rope for each station
 - h. Check each rope you put up for wear, etc., before you put it up
2. Demo helmets at check-in. Use **climbing tape for Name Tags** on helmets
3. Designate lead and tail vehicles to take students out so no one gets lost.
4. Announcements after regrouping at the practice area – Scott N.
 - a. Review today's class - plan on staying until 4:00 or all problems are done
 - b. Plan on lunch break about noon; re-group for lunch
 - c. Review Sunday's class, upcoming Club meeting (if appropriate)
 - d. **Safety:** COVID – hand sanitizer, masks, social distancing
 - e. **Safety:** do not belay until your climber has checked you out
 - f. **Safety:** do not climb until your belayer has checked you out
 - g. **Safety:** do not belay, climb, or rappel until an **instructor has checked you out**
 - h. **Safety:** wear helmets
 - i. **Safety: Always use Autoblock on rappel**
 - j. **Safety:** watch out for cactus, snakes
 - k. **Safety:** drink water
 - l. **Safety:** use sunscreen
 - m. **Any special medical conditions (e.g. potential allergic reaction to bees!)?**
 - n. Identify EMT's, medical help _____
 - o. Stay on trails (for safety, low impact); do not wear climbing shoes between main areas
 - p. You will take your first fall today; if you go to a rappel station first, tell the instructor at your first climbing area, and he/she will have you take your first fall
 - q. Hand out maps to practice area - explain the various stations
 - i. Mandatory stations are top belay and long rappel
 - ii. novices should not do the long rappel first
 - r. Check each student as the team leaves to make sure:
 - i. harness is on correctly, no twisted leg loops, doubled-back
 - ii. helmet is on properly
 - iii. all gear is racked on harness

Instructor Syllabus - Session #4 (2nd Climbing Day)

When: Sunday, April 18th, arrive at 6:45 AM, leave by 7:00 AM

Where: Starbucks - 2501 West Happy Valley Road #50, Phoenix, AZ 85085 (across the parking lot from Lowe's).

Supplies - general: Hand sanitizer, mask, first-aid kits, radios, extra batteries, **maps**, comb, pruners, extra water, trash bags.

Supplies for check-in: waivers, student nametags, instructor nametags, pens, markers. Scott N. _____

~~**Student Gear:** Harnesses and Personal Anchors (2 bags), Helmet box~~ Scott N. _____

Supplies for Climbs: Ammo box w/ hardware kits, static ropes, climbing ropes, slings, biners, tape for students, instructor check-sheets, **maps** Scott N. _____

Instructors Gear:

- Harness, standard harness gear, yellow T-shirt
- Pro as required to set up climbs

- ~~1. Check out harnesses~~
2. Announcements - Scott N.
3. Review Sunday's class
4. Plan on staying until 3:30 pm to break down climbs and help to carry out gear

Read Chapters 8 & 10 for next Saturday

AMC Basic School Syllabus - Session # 5: Self-Rescue

When: Saturday, April 24th, arrive at 6:00 AM leave by 6:15 AM

Where: Target Parking Lot – SE corner of 101 & Frank Lloyd Wright

Hint: Same place as last Saturday!

Equipment: All climbing gear, helmet, gloves, hiking boots/shoes, climbing shoes

Supplies for trails: small cones, orange flagging, **pruners**, walking sticks for snake patrol.

Instructors Gear:

- Harness, standard harness gear, yellow T-shirt
- Pro as required to set up climbs

Setup Morell's Boulder, Sven Practice Area, Sven Slab, others.

Students will rotate through climbing and self-rescue throughout the day.

Key points to remember while prusiking:

1. Always carry your prusiks with you, even when sport climbing
2. Carry them properly chained for easy access
3. When belaying, ALWAYS anchor or make sure an anchor is accessible to enable belay escape
4. The small waist prusik goes on first, and comes off first
5. Always "dress" your prusik hitch
6. If prusik hitch slips, add another wrap
7. Always tie off short a minimum of 10' - 15'
8. Plan so you always have 2 points of contact
9. Keep an eye on biners for cross loading and make sure biners are locked
10. Do not grab prusik knot (slide knot with hand either above or below prusik hitch)
11. Prusiks will not catch a fall
12. When carrying prusiks off harness, carry around shoulder and head (NOT around the neck)
13. Since you are most likely not using your prusiks often, inspect grapevine knots/condition of prusiks before using
14. Prusik cord must be smaller in diameter than rope to work properly

FAQs

1. YES – You can prusik up a double rope (may require more wraps of prusik hitch)
2. YES – You can prusik up/down with only one prusik (in a pinch) – use the rope
3. Ascenders - Mechanical ascending device used mostly by cavers, aid climbers, and rescue personnel
4. Prusiking with a pack - special technique required (at all times keep pack attached to anchors or yourself, some people pre-rig a loop at top of pack for hauling a pack or prusiking with a pack)
5. Top heavy climbers (special technique for prusiking will be dealt with on an individual basis)
6. Getting yourself up while dangling upside down with a chicken hitch around your foot (most importantly - relax, take some deep breaths, hopefully you will be able to muscle yourself back upright)

Belay Practice Steps

Setup: Use 20' webbing with Klemheist hitch on Light Pole with a Locker for an anchor at chest height. The student pair will work from a "ground" point 20-30 feet from the anchor. Run the rope from the "ground" point up through the anchor master point and back to the "ground".

Bottom Belay Practice:

- Climber ties in, belayer sets up belay with slot device. Tie stopper knot in belayer's end of rope to "close the system"; always close the system to make sure rope can't run through belay device.
- **Partner checks.** Climber – harness doubled back on three, through both, good knot. Belayer – harness doubled back on three, locked and loaded. Double check each other and keep it short and sweet.
- Belayer takes in slack until tight to climber. No need for climber to say "That's Me" because they are standing next to each other and it's obvious. Climber uses "Ready" and "That's Me" in top belay situations when it makes sense.
- Climber: "**On Belay?**". Belayer: "**Belay On**". Climber: "**Climbing**", but waits for permission to climb. Belayer: "**Climb On**", confirming to climber that he is really ready for climber to start.
- Climb to anchor while belayer practices "**Pull, Brake, Under, Slide**" (PBUS) belay technique.
- When climber reaches top of climb, calls "**Take**" and waits for belayer to say "**Gotcha**" before weighting the rope. Climber calls "**Lower Me**" when ready. Belayer calls "**Lowering**" and lowers climber back to the "ground". Climber calls "**Off Belay**" to indicate he is safe and ready to be taken off belay. Belayer calls "**Belay Off**" as soon as he releases the brake and starts to undo belay set up.
- When climber is back on the "ground", have belayer switch from slot device to **Muenter**. Repeat the climb to get practice using the Muenter. Demonstrate how knot "flips" when transitioning from taking in rope to catching a fall or lowering. **Keep rope strands parallel when moving rope through the Muenter to avoid putting twists in the rope.** Note that brake position is forward rather than back, but back works OK and it's better to reinforce the automatic habit of braking in the same direction.
- Switch climber and belayer and repeat.

Top Belay Practice:

- Leave the climber tied in from the previous scenario and standing on the "ground". Move the belayer up to the anchor, have him clip in with his personal anchor, and get out of the belay set-up. The scenario is that the person at the anchor just lead this pitch, set up the anchor, and is ready to belay the second up. The climber and belayer will assume that they are widely separated and cannot see each other.
- Climber ties in and calls "**Ready**" and then waits for the belayer to pull in the slack. Belayer pulls in the slack until it goes tight and Climber calls "**That's Me**". Belayer then gets into the "redirected belay" set-up using the standard slot device. When ready, calls down to the climber "**On Belay**". Climber: "**Climbing**", Belayer: "**Climb On**". When climber reaches the top, he clips into the anchor with his personal anchor and calls "**Off Belay**" when safe. Belayer verifies the climber is safe, then calls "**Belay Off**" and gets out of belay.
- For the sake of time, **do NOT switch** partners and repeat. They both experienced the process adequately.
- Make the point that being widely separated can be a big communication problem when Belayer and Climber cannot see or hear each other. You **MUST** have a **backup communication method**; **radios** and/or "**rope tugs**" are common – work it out ahead of time.

Rappel Practice

Setup: Same as the Belay practice set-up. Use 20' webbing with Klemheist hitch on Light Pole with a Locker for an anchor at chest height. Pretend the Locker is a Rappel Ring, since that is often the case.

Each student should work through this entire process of rappel set-up and rappelling.

Rappel Set-up Steps:

- Clip personal anchor into main anchor master point for safety.
- Find one end of the rappel rope, run it through the master-point locking biner, and tie a stopper knot. Pull some rope through the master point biner, then find the other end of the rope and tie another stopper knot.
- Grab both ends of the rope and run it through your hands until you have the middle of the rope at the rappel ring. This guarantees both ends are equal length, rather than depending on a middle marker.
- Butterfly coil one side of the rope, set it down carefully, then butterfly the other side. When done, pick up the other coil so you have one in each hand.
- Yell "**ROPE**" once, wait 3 or 4 seconds to give people a chance to clear the area, then yell "**ROPE**" again and toss both coils at once. We should now be ready to get set up on rappel.

Rappel Steps:

- Set up the extended rappel device on the harness using the 48" sewn runner. Thread the runner through the tie-in points on the harness and even-up the ends; this is a Basket hitch. Tie an overhand in the middle for redundancy and to shorten the extension. Set up the slot device on the extension with the double rope.
- Add the autoblock on the double rope brake. Use one of the smaller lockers on the belay loop with the 6mm autoblock cord (i.e. shortest prussick). Start with 3 wraps on the brake strands of the rope. Students will dial this in on Saturday when they actually body-weight their rappel.
- Double check the system - SLOW DOWN, FOCUS, and CHECK the system! Be systematic and check the entire system from one end to the other – Anchor, Rope, Rappel Device, Extension, Harness, Autoblock. Convince yourself that it's all good and you are **willing to bet your life** on it, **or don't proceed!** Bad mistakes happen here!
- Test the system by weighting it, including the effectiveness of the autoblock, while still clipped in with the personal anchor. Make sure the personal anchor isn't taking any load.
- When you are convinced everything is a GO and you are ready to actually start rappelling, unclip the personal anchor, **keeping the brake hand on the brake!**
- Yell "**ON RAPPEL**" to warn people below and proceed to rappel to the bottom.
- When on the "ground", COMPLETELY disconnect from the rope (rappel device and autoblock removed), then yell "**OFF RAPPEL**" to let people waiting above know that you are free of the rope and the next person can start getting into the rappel. If you are still working on getting the rope out of your rappel device when you yell "Off Rappel" the next person above will start pulling up some rope and you may lose your rappel device as the two of you play tug-of-war.