



## ACA Core Skills Checklist

*OBJECTIVE: Provide students with the basic personal canyoneering skills needed to descend easy canyons as team members with competent leaders and mentors.*

STUDENT'S NAME: \_\_\_\_\_

ASSESSOR'S NAME: \_\_\_\_\_

RECOMMENDATION:       PASS       CONDITIONAL PASS       NO PASS

	DATE	SCORE
<b>Logistics and Safety</b>		
Understand the ACA Canyon Rating System and different types of canyon terrain, as well as the special issues related to that terrain (i.e. swift water canyons, dry and semi-dry canyons, slot canyons, pothole escape problems, long committing canyons, permit requirements).		
Using canyon beta; estimate equipment and supply needs, including rope lengths, anchor building material, water, food, and bivy gear.		
Understand leading causes of accidents in canyoneering and precautions that can be taken to avoid them.		
Understand how to find/read/interpret weather reports, cloud formations, changing weather patterns.		
Describe variables that contribute to flash flood risk. Describe flash flood warning signs. Describe appropriate responses to an impending flash flood.		
<b>Leave No Trace Ethics</b>		
Read the ACA's Canyons booklet <a href="http://www.canyoneering.net/docs/booklet.pdf">www.canyoneering.net/docs/booklet.pdf</a>		
Understand and apply low impact canyoneering practices.		
Understand and apply appropriate methods for human waste disposal.		
<b>Rope and Equipment Care</b>		
Understand and apply good rope care practices.		
Demonstrate coiling a rope; (a) Alpine coil, (b) Canyon coil.		
Stuff and use a rope bag.		
Understand and apply good equipment care practices.		

	DATE	SCORE
<b>Basic Knots</b>		
Tie and inspect; Figure Eight knot; (a) on a Bight, (b) Follow-through.		
Tie and inspect; Ring Bend in webbing (aka Water knot).		
Tie and inspect; Clove hitch.		
Tie and inspect; Munter hitch (aka Italian hitch, Dynamic hitch).		
Tie and inspect; Girth hitch.		
Tie and inspect; 3-wrap Prusik hitch.		
Tie and inspect; secure bend to connect two load-bearing ropes for rappelling (i.e. Double Fisherman bend, Figure Eight bend).		
<b>Intro to Anchors and Rigging</b>		
Evaluate and rig single-point natural anchors (i.e. tree, arch, boulder) using simple webbing wrap, cinching wrap (i.e. wrap 2 pull 1, wrap 3 pull 2, Girth hitch) and redundant wrap (i.e. Basket with Overhand knot at focal point). Explain the pros and cons of each.		
Evaluate and rig existing fixed artificial anchors (bolts) using the acronym EARNEST (Equalized, Angle, Redundant, No Extension, Strong, Timely).		
Set up and use a releasable/contingency system for rappel. Explain the hazards of using releasable systems and steps that should be taken to avoid accidents.		
Set up and use blocked rope systems (carabiner blocks) for rappel. Explain the hazards of using blocks and steps that should be taken to avoid accidents.		
Set up and use double rope system (Toss 'n Go) for rappel.		
Set up and use edge protection to protect rope from abrasion.		
<b>Signals</b>		
Understand and use proper verbal commands.		
Understand and use proper whistle signals.		
Understand and use proper hand signals.		
<b>Climbing, Spotting, Belaying, Handlines</b>		
Move on 3rd and 4th class terrain (scrambling - rock climbing terrain).		
Move on 5th class terrain (rock climbing terrain).		
Demonstrate chimneying, stemming and bridging techniques.		
Spot a climber; climbing up, climbing down.		
Understand and use partner capture (climbing down) and partner assist (climbing up) techniques for short vertical problems.		

	DATE	SCORE
Belay a climber; climbing up, climbing down, using rope from fixed anchor, using rope from human anchor.		
Understand and apply appropriate use of a hand line.		
Understand and apply appropriate use of a friction hitch safety on a hand line.		
<b>Rappelling, Belaying, Self-Rescue</b>		
Rappel; control speed while rappelling, apply brake to stop mid-rappel.		
Rig rappelling device for correct friction on 8mm to 11mm ropes, single and double strand, understand the variables that contribute to friction requirements.		
Add friction while rappelling.		
Lock off while rappelling using leg wrap.		
Lock off rappel device while rappelling.		
Provide bottom belay for rappeller.		
Understand pros and cons of using a self-belay (auto-block).		
Demonstrate appropriate rappelling practices to minimize rope abrasion.		
Use rope grab (friction hitch or mechanical ascender) and foot loop to remove tension from rappel device to free stuck gear while rappelling.		
<b>Swimming, Jumping, Water Slides</b>		
Swim 50 yards with gear, using floatation if necessary.		
Jumping; identify hazards, correct body position.		
Water slides; identify hazards, correct body position.		

### Recommendations After Training

- Students should continue practicing technical skills in low-risk conditions, such as on a low angle slab or on high-angle faces with a top-rope belay provided by a competent belayer.
- Students should descend canyons with competent leaders and mentors, starting with easy Class 2 and 3 canyons then progressing to intermediate Class 3 canyons.



## ACA Aspirant Skills Checklist

*OBJECTIVE: Provide students with the intermediate personal and group canyoneering skills needed to become contributing team members with competent leaders and mentors.*

*NOTE: Skills Checklists are cumulative in nature. Students must know all the skills from the 'Core' Checklist in addition to the skills listed here.*

STUDENT'S NAME: \_\_\_\_\_

ASSESSOR'S NAME: \_\_\_\_\_

RECOMMENDATION:       PASS       CONDITIONAL PASS       NO PASS

	DATE	SCORE
<b>Navigation, Map Reading, Canyon Topos</b>		
Read contour lines on a topographic map; identify terrain features (hills, saddles, ridges, drainages), determine relative steepness of grade, identify potential high ground and escape routes.		
Identify relative size of watershed using topo map.		
Orient map with compass and terrain.		
Use GPS to determine grid coordinates, mark waypoints and go to waypoints.		
Plot grid coordinates on a topographic map.		
Prepare and use a canyon topo.		
<b>Knot Craft</b>		
Tie and inspect; Frost knot in webbing. Make ladder with webbing.		
Tie and inspect; Bowline with Yosemite finish.		
Tie and inspect inline knots; (i.e. Alpine butterfly, Directional Figure Eight).		
Tie and inspect; (a) Munter hitch, (b) mule hitch or two half hitches.		
Tie and inspect; (a) Valdotaian tresse, (b) Asymmetric Prusiks.		

	DATE	SCORE
<b>Anchors</b>		
Understand and apply good principles of anchor location; DEAR (Dry, Efficient, Accessible, Rope Retrieval)		
Understand and apply good principles of anchor construction; EARNEST (Equalized, Angle, Redundant, No Extension, Strong, Timely)		
Apply sequencing and friction to utilize otherwise marginal anchors.		
Construct, evaluate and rig multi-point natural anchors using EARNEST.		
Construct, evaluate, rig and use dead man anchors.		
Demonstrate how to backup / test a marginal anchor.		
<b>Rigging</b>		
Set up and use releasable single rope system (contingency), including three parts: (1) friction mechanism to allow controlled lowering, (2) tie-off that is releasable under tension, and (3) identifying risks and setting safety to mitigate those risks.		
Identify situations that dictate setting rope length to height of rappel.		
Set up and use single rope systems, demonstrate methods for setting rope length (i.e. estimating height, lowering first person, setting releasable).		
Understand the pros and cons of double rope systems (toss 'n go).		
Lower a person, using hands free backup (i.e. friction hitch attached to the harness of the person in control of lowering).		
Set up and use Courtesy Rigging to facilitate trouble-free rope retrieval.		
Set up and use a safety line to protect a traverse.		
<b>Belaying</b>		
Set up and use a Self belay		
Demonstrate proper bottom belay (Firemans belay).		
Set up and use a top-rope belay system.		
Demonstrate proper belay commands / verbal communication techniques.		
<b>On Rope Techniques, Companion Rescue</b>		
Shift Rappeller from rappel line to top rope belay line.		
Ascend a fixed rope using friction hitches; single strand, double strand.		
Ascend a fixed rope using mechanical ascenders; single strand.		
Transition from rappel to ascend and from ascend to rappel.		
Pass a knot while rappelling. Pass a knot while ascending.		
Demonstrate rappelling on a Guided Rappel. Explain safety concerns and mitigation.		
Contact Rescue - Rappel on secured rope to provide assistance to person stuck on rappel; provide foot loop to free stuck gear (Not a pick-off).		

	DATE	SCORE
<b>Swimming, Swift Water</b>		
Swim 50 yards with gear, without floatation.		
Create and use flotation with gear available.		
Describe stream hazards; foot entrapment, strainers, siphons, undercuts, recirculating currents, and appropriate methods for dealing with them.		

### **Recommendations After Training**

- Students should continue practicing technical skills in low-risk conditions, such as on a low angle slab or on high-angle faces with a top-rope belay provided by a competent belayer.
- Students should descend intermediate canyons with competent leaders and mentors, taking on progressively more anchor, rigging and problem-solving responsibilities.



## ACA Canyon Leader 1 Skills Checklist

*OBJECTIVE: Provide students with the advanced personal and group canyoneering skills needed to become effective problem-solvers and leaders.*

*NOTE: Skills Checklists are cumulative in nature. Students must know all the skills from the 'Core' and the 'Aspirant' Checklists in addition to the skills listed here.*

STUDENT'S NAME: \_\_\_\_\_

ASSESSOR'S NAME: \_\_\_\_\_

RECOMMENDATION:     \_\_\_PASS     \_\_\_CONDITIONAL PASS     \_\_\_NO PASS

	DATE	SCORE
<b>Anchors</b>		
Construct, evaluate, rig and use dead man anchors using different and varied materials.		
Set up and use human anchors. Explain why and how to properly sequence this type of anchor.		
Construct, evaluate, and rig Carin anchors.		
<b>Rigging</b>		
Rig and use static courtesy rigging to facilitate easy rappel starts & rope retrieval.		
Rig and use dynamic courtesy rigging to facilitate easy rappel starts & rope retrieval.		
Set up and use releasable twin rope system (jester, joker), including three parts: (1) friction mechanism to allow controlled lowering, (2) tie-off that is releasable under tension, and (3) identifying risks and setting safety to mitigate those risks.		
<b>Core Rope Work</b>		
Transition from providing a bottom belay to lowering for an incapacitated person who is on rappel.		
Demonstrate use of simple lift-shift systems to help someone on rappel free stuck gear.		
Convert static single rope rigging (e.g. block) to lower. Use hands free backup (i.e. friction hitch) when lowering.		
Tension a guide rope at the bottom using mechanical advantage.		
Set up and use a retrievable guided rappel system.		

	DATE	SCORE
Protect traverse and rappel with a retrievable safety line.		
Set up and use a counter-weight rappel		
<b>On Rope Techniques, Companion Rescue</b>		
Demonstrate a 'soft' rappel start; explain when such a start should be used.		
Use drop loop 2:1 to provide lift for rappeller to free stuck gear.		
Demonstrate tandem rappel (aka assisted rappel).		
<b>Participant Coaching / Teaching</b>		
Rappelling Coaching / Teaching.		
Downclimbing Coaching / Teaching.		
<b>Problem Solving Scenarios</b>		
Scenario 1: Shirt / Hair stuck in rappelling device		
Scenario 2: Tangled roped and/or rope doesn't touch the ground		
Scenario 3: Late start - move group expeditiously		
Scenario 4: Evacuate lower leg injury - stable patient; normal conditions		
<b>Emergency Response</b>		
Activate EMS system Non-Life threatening (Local SAR; Emergency Contacts)		
Activate EMS system Life Threatening or Time Critical (Local SAR; Emergency Contacts)		
Personal Locator Beacon (PLB) instruction / usage		

### **Specialized Skills for Class A/B Canyons**

*OBJECTIVE: Provide students with the advanced personal and group canyoneering skills needed to become effective problem-solvers in Class A/B canyons.*

<b>Class A/B Canyons — Core Skills</b>		
Down Climbing / Stemming ability.		
Big Rappels (Free hanging and/or 250'+) - Adding friction mid-rappel; communication - radios; hanging packs		
Advanced partner captures		
<b>Class A/B Canyons — Pothole Escape</b>		
Escape a pothole using partner assist techniques.		
Escape a pothole using counter-weight techniques (pack toss).		
Escape a pothole using aid hooking techniques.		

### **Specialized Skills for Class C Canyons**

*OBJECTIVE: Provide students with the advanced personal and group canyoneering skills needed to become effective problem-solvers in Class C canyons.*

	DATE	SCORE
<b>Class C Canyons — Core Skills</b>		
Assist swimmer(s) while maintaining separation with sequencing, tag lines, throw bags, and/or flotation devices..		

**Recommendations After Training**

- Students should continue practicing technical skills in low-risk conditions, such as on a low angle slab or on high-angle faces with a top-rope belay provided by a competent belayer.
- Students should descend intermediate to advanced canyons with competent mentors, taking on progressively more anchor, rigging and problem-solving responsibilities.



## ACA Canyon Leader 2 Skills Checklist

*OBJECTIVE: Provide students with the advanced rope skills and skills needed to conduct basic companion rescue.*

*NOTE: Skills Checklists are cumulative in nature. Students must know all the skills from the 'Core', 'Aspirant', and the 'CL1' Checklists in addition to the skills listed here.*

STUDENT'S NAME: \_\_\_\_\_

ASSESSOR'S NAME: \_\_\_\_\_

RECOMMENDATION:    \_\_\_ PASS        \_\_\_ CONDITIONAL PASS        \_\_\_ NO PASS

	DATE	SCORE
<b>Anchors</b>		
Correct placement of fixed artificial anchors considering rock type and quality, bolt selection (i.e. type, diameter, length).		
Construct, evaluate and rig chock anchors (chock stones, knot chocks). Explain the pros and cons to using knot chocks/stone chocks.		
Rig and use transient anchors (Wanchor, Sand Trap, hooks).		
<b>Core Rope Work</b>		
Demonstrate proper techniques for multi-pitch rappels; security, sequencing, rope management.		
Tension a guide rope; (a) at the top with piggyback system using mechanical advantage or counter-weight, (b) at the bottom using human anchor.		
Set up and use a rappel deviation (aka redirect).		
Set up and use combination rappel-lower to avoid multi-pitch rappel.		
Demonstrate proper techniques for a simultaneous rappel.		
Set up and use retrievable rigging systems for LMAR; (a) retrievable webbing, (b) macrame/CEM. Use secure rigging system for all but LMAR.		
Set up and use "tail up" retrievable rigging systems (i.e. fiddle stick) for LMAR. Use secure rigging system for all but LMAR and plan for contingencies, such as someone stuck on rappel (i.e. top rope belay, rescue rope on standby).		
<b>Rigging and Rescue</b>		
Demonstrate an understanding of how various rigging and belay systems can facilitate or hinder rescue.		

	DATE	SCORE
Demonstrate basic understanding of mechanical advantage systems using pulleys for hauling. Understand how various haul systems can increase or decrease the load held by the anchor.		
Demonstrate various ways to create a Progress Capture Device (PCD) for hauling systems.		
Convert static twin rope rigging (e.g stone knot) to lower. Use hands free backup (i.e. friction hitch) when lowering.		
Convert tail-up rigging (e.g. fiddlestick) to lower utilizing rescue rope. Use hands free backup (i.e. friction hitch) when lowering.		
Demonstrate cut and lower rescue system utilizing rescue rope for someone stuck on a rope that is rigged double-strand. Use hands free backup (i.e. friction hitch) when lowering.		
Perform a pick-off rescue of a person stuck on rope utilizing a second rescue rope, including the use of a self-belay.		
Perform a pick-off rescue of a person stuck on rope without utilizing a second rescue rope, descending the subject's tensioned rope. Include the use of a self-belay.		
Demonstrate from-the-bottom-rescue, ascending the subject's rope from below, passing the person to a position above them, then lowering them to the ground.		
Demonstrate the use of guide line, track line or tag line when hauling or lowering to hold subject away from the wall.		
Demonstrate improvised patient carries that utilize one carrier and multiple carriers.		

<b>Class C Canyons — Swift Water Rescue</b>		
Swift water contact rescue		

### Recommendations After Training

- Students should continue practicing rescue skills in low-risk conditions, such as on a low angle slab or on high-angle faces with a top-rope belay provided by a competent belayer.
- Rescue skills are necessary skills we hope we never need to use. We must have the discipline to practice the skills so we can draw upon them in those rare moments when they are needed.