SAC rock curriculum
April 2004 – Terminology Update
Winter 2004 – 1st DRAFT

Size: If larger than typical sized trips, special provisions such as extra TLs and splitting the group to minimize impacts

_Trip Leader_: Has hard skills plus TL soft skills (teaching, supervision), and Wilderness First Aid training. Has final authority on trip decisions, often organizes trips, but can delegate logistics and applications if needed.

_Instructor_: Is checked off with all hard skills taught or needed for setup on trip, has discussed standards for check-offs with a Trip Leader, or in a SAC lead information session

_Assistant_: Is not fully checked off with hard skills at level needed, but at least checked off one level below (counts for ½ Instructor for ratios)

All Instructional Trips
- At least one TL
- Helmets on within the climbing area
- **Must have at least one person present currently certified in Wilderness First Aid (16+hr)**
- must be pre-announced
- For any trip where non-LD qualed individuals will lead, at least one member of the instructor team must have Rock Rescue Skills Checked off.

Beginning Class
1 evening (optional), 1 day

Goals: people with pre-experience checked off with basic skills (belay, rappel) if they are safe Exposure for everyone to TR climbing, belaying, and rappelling.

Helmets
Harnesses
Fig-8 with fishermans’s backup
Carabiners
ATC
Belaying (BUS belay)
Commands
Belay position
Backup belaying
Gear Care Intro (don’t drop or step)
Intro to rappelling (w/ fireman’s belay and discussion clipping-in to anchor)
Introduction to movement on Rock
Where to go (and not to go) from here
Expectations: All non-checked off belayers have a backup until proficiency is shown to TL or instructor (at TL discretion)
Those unable to get checked off for basic skills at the start of the class, must return on another trip (formal or informal) for check-off
Typical size: 10-12 students
Instructor:student =1:6max

**Anchors I :Rocks, Trees, Bolts**
1 (or 2) evening classes, 1 day trip

Goals: Understand Anchor concepts and analysis
Students get as much hands on anchor practice as possible
Students climb on anchors they set

Prerequisites: be checked-off for basic skills (exceptions at TL discretion)
Comfort with belay skills
Suggested: a few TR climbing trips (personal or club)

Discuss Approaches and Descents
Intro to Ratings, Topos, and Guidebooks
Knots:
- Overhand series (in webbing). Series = knot, knot-in-a-bight, follow-through, and “bend” (in this case water knot)
- Fig-8 series (in cord/rope)
- Girth Hitch
- Double&Triple-Fishermans
Equipment Strengths, Weakness
Equipment Care and Inspection
Locking vs Non- biner types
Opposite and opposed ‘biners
What makes a good anchor (SERENE)
Coiling a rope
Webbing management
Anchor Points types and evaluation
- Trees & shrubbery
- Horns & Chickenheads
- Chalkstones
- Boulders
- Pinches
- Bolts
- Fixed Gear (pitons, slings, etc)
- Chains (clip UNDER)
Anchor Practice and Instruction:
- SERENE
- Angles
- single strand webbing (use and extension)
- double strand webbing (use and extension)
- cordellettes
- sewn sling usage, pros, and cons
- sliding-X pros and cons
- equalization tricks

Throwing ropes
Anchor types: (bottom belay, top belay, tying ropes together, rappels)
Edge awareness and management: concepts, discussion, practice
Where to go (and not to go) from here

Teaching Expectations: all knots should have twice the length of the knot worth of tail
SERENE anchors, with special care on redundancy of gear
Minumum 1 locker and 1 non-locker OR 3 non-lockers at turn-around point
students are clipped in to an anchor when near the edge
Typical size: 8-10 students
Instructor:student =1:5max

Anchors II: Gear Anchors and Trad Following
1 (or 2) evenings, weekend (2day) trip

Goals: Understand Gear placement concepts and analysis
Understanding Gear anchors for top ropes
Understand gear cleaning and rope management for multi-pitch
Students practice lead belay
Students get as much hands on practice placing protection and building anchors as possible
Students follow a trad protected climb
Discussion of Risks, Retreat, and Safety issues of multi-pitch climbing
Practice rappel with auto-block backup (check-off if student is ready)
Discussion of Approaches and Descents
Working knowledge of Ratings, Topos, and Guidebooks
Students are prepared to second a more experienced leader on traditional climbs

Prerequisites: Checked off for Basic & Anchors I skills
Competence with Belaying
Previous rapelling experience
Competence with setting-up top rope anchors using trees rocks and bolts
Familiarity with anchor theory (angles, SERENE, etc)
Suggested: significant experience setting anchors using trees rocks and bolts
Knots:
- review previous knots
- Auto-block

Gear introduction (Strengths, things to watch out for)
- General Good Anchors: Rock quality, Surface Area, Direction of Pull, ease of cleaning
- Hexes
- Nuts
- Tricams
- Cams
- Mention others

Practice placing all types of gear

Review of webbing, cordelletes, & natural anchors

Practice equalizing gear placements into anchors

Intro to multi-pitch climb concept.
- Safety on approaches and descents
- Multi-pitch sequence
- What it takes to bail

Lead belay (position)

Leader-Follower Communication (names, verbal and non-verbal)

Bottom Anchors (when required, other thoughts)

Clipping in to multi-pitch anchors

Discussion of ratings, topos, guidebooks

Basic non-climbing gear to bring on a multi-pitch
- headlamp
- Small pack (optional)
- water
- food
- shell
- warm layers (wool or synthetic)
- knife (Safety of knifes around taught rope)

Time and rope management

Cleaning and Re-racking

Discuss Rappelling
- Device types
- Tying ropes together
- Retrieving ropes
- Knots in end
- Backups

Students demonstrate comfort with managing themselves on rappels with attention to:
- tethers, anchors, clipping-in
- rigging rappel device
- proper use of auto-block third-hand
- practice leg-wraps

Where to go (and not to go) from here

Teaching Expectations:
Typical class size: 8-10
Instructor:Student Ratio = 1:5max (1:4 prefered)

**Trad Lead**
2-3 evenings, 2 weekend (2days/ea) trips

Goals: Demonstrate solid Gear placements and analysis abilities

Students get as much hands on practice placing protection and building anchors as possible
Students spend time mock leading a trad protected climb
If students demostrate competence on mock leads, they may lead a trad climb with instructor
Students can describe Risks, Retreat, and Safety issues of multi-pitch climbing
Practice rappel with auto-block backup (check-off if student is ready)

Approaches and Descents
Working knowledge of Ratings, Topos, and Guidebooks
Students are prepared to second a more experienced leader on traditional climbs

Prerequisites: Checked off for Basic & Anchors I & Seconding & Anchors II skills
Experience following a multi-pitch climb
Competence with setting-up anchors
Competence with anchor theory (angles, SERENE, etc)
Competence lead belaying

Theory
Connecting ropes for rappel
Runnering, Rope Drag
Single, Double, Twin
Understanding anchors for multi-pitches
Understanding Sport vs Trad leading
Clipping in Properly (not Back-clipping, not Z-clipping)
Efficiency
Falling
Fall-Factors
Multi-pitch rappel theory
mid-climb rope organization
Racks and racking
Picking routes, ratings
Retreating and Bailing
Things to think about in the backcountry
Where to go (and not to go) from here

Practice
Optionally spending time sport leading
Review and more practice with gear placements and assessment
Practice setting multi-directional anchors
Students Follow an experienced leader on a multi-pitch climb
Mock Leads
Belay Escape
Prussiking
If appropriate lead climbing
Rigging a rappel station
Knots: clove hitch, munter, munter-mule, prussik, kleimheist

Teaching Expectations:
Typical class size: 8-9
Instructor: Student Ratio = 1:4max (1:3max while leading)

Revisions
April 2004, B Palmintier