

Rock Climbing Basics



Objective: Train and learn basic climbing techniques, becoming able to join in multi-pitches routes and mountain climbing.

Contents:

General concepts:

- ✓ Introduction to rock climbing (history, characteristics of the rocks, different techniques)
- ✓ Mountain ethics and minimum impact conduct
- ✓ General concepts (Dynamic safety chain, fall factor, risk management)
- ✓ Orientation (reading topos and natural)
- ✓ Plan / Logistics/ Accident prevention

Safety equipment:

- ✓ Materials
- ✓ Certifications and specifications
- ✓ Inspection
- ✓ Correct use

Ropes and knots:

- ✓ Structure of ropes and knots
- ✓ Most important knots (figure eight, munter-hitch or UIAA dynamic knot, girth and clove-hitches, overhand, friction knots)

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Using the ATC to belay the guide and abseil
- ✓ Connection to the belay station
- ✓ Belay station and anchorages
- ✓ Belaying the guide from the station
- ✓ Aid climbing A0/ A1
- ✓ "Ferrata" climbing
- ✓ Setting and checking abseil system
- ✓ Abseil technique and belay
- ✓ Using the UIAA dynamic knot to belay and abseil
- ✓ Self-Rescue (rope ascension with friction knots)

Duration: 8 lessons (approximately 30hrs)

Included: All climbing gear except de climbing shoes (rent: R\$ 20 per class), climbing manual and certification issued by AGUIPERJ (local professional climbing guides association)

Schedule: The locations and contents can be modified along the course if necessary. The lessons will be scheduled according to student and guides availability.

Course Plan

1st Lesson:

Location: Morro da Babilônia (Urca)

General concepts:

- ✓ Climbing history (worlds and brazil)
- ✓ Mountain ethics and minimum impact conduct
- ✓ General concepts (Dynamic safety chain, fall factor, risk management)
- ✓ Characteristics of the rocks (cracks, slabs, edges, flakes, chimney, friction)
- ✓ Different free climbing techniques (cracks, face, slabs, overhangs, chimney)

Safety equipment:

- ✓ Introducing to PPE - Personal Protection Equipment (Helmet, harness, belay device, rock shoes, chalk bag, slings and carabineers)
- ✓ Correct use

Ropes and knots:

- ✓ Most important knots (figure eight, girth hitch, double-overhand, friction knots)

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Using the ATC to belay the guide and abseil
- ✓ Slab climbing
- ✓ Learning footwork
- ✓ Connection to the belay station
- ✓ Setting and checking abseil system
- ✓ Abseil technique and belay (self-belay using friction knot and belaying from the end of the rope)

2nd Lesson:

Location: Morro do Cantagalo (Lagoa)

General concepts:

- ✓ Review

Safety equipment:

- ✓ Certifications and specifications
- ✓ Correct use review

Ropes and knots:

- ✓ Knots review (figure eight, girth hitch, double-overhand, friction knots)

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Using the ATC to belay the guide and abseil
- ✓ Face climbing
- ✓ Testing the rock
- ✓ Connection to the belay station
- ✓ Setting and checking abseil system
- ✓ Abseil technique and belay

3rd Lesson:

Location: Platô da Lagoa (Lagoa)

General concepts:

- ✓ General concepts review (Dynamic safety chain, fall factor, risk management)

Safety equipment:

- ✓ Materials
- ✓ Certifications and specifications
- ✓ Inspection
- ✓ Correct use

Ropes and knots:

- ✓ Rope and knot structures
- ✓ New knots (munter-hitch or UIAA dynamic knot, clove-hitch)

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Using the GRI-GRI
- ✓ Sport climbing (vertical and overhanging)
- ✓ Setting top rope system and cleaning the route
- ✓ Using the UIAA dynamic knot to belay and abseil
- ✓ Locking the belay system
- ✓ Self-Rescue (rope ascension with friction knots)

4th Lesson:

Location: Tijuca National Park

General concepts:

- ✓ Learning to read topos and climbing guide books
- ✓ Planning for the mountain route (special techniques and equipment)

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Mountain climbing

5th Lesson:

Location: Pão de Açúcar (Urca) – CEPI

General concepts:

- ✓ Mountain ethics and minimum impact conduct review
- ✓ reading topos

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Aid climbing technique
- ✓ "Ferrata" climbing technique
- ✓ Connection to the belay station
- ✓ Setting and checking abseil system
- ✓ Abseil technique and belay

6th Lesson:

Location: Pão de Açúcar (Urca) – Stop Chimney

General concepts:

- ✓ Learning to read topos and climbing guide books
- ✓ General concepts (Risk management)
- ✓ Planning for chimney/ Accident prevention

Climbing techniques:

- ✓ Preparation – Equipping and checking
- ✓ Communication
- ✓ Chimney climbing
- ✓ Setting and checking abseil system
- ✓ Abseil technique and belay

7th Lesson: Skills examination

Location: Cantagalo

Evaluated skills:

- ✓ Climbing system (fall factor, dynamic safety chain, risk management)
- ✓ Equipping and checking
- ✓ Most important knots (figure eight, munter-hitch or UIAA dynamic knot, girth and clove-hitches, overhand, friction knots)
- ✓ Belaying the guide using “ATC”
- ✓ Locking the belay device
- ✓ Connection to belay station
- ✓ Belaying the guide from the station
- ✓ Abseil technique and belay (self-belay using friction knot)

8th Lesson: Graduation

Location: Student choice

- General review
- Multi-pitch route
- Get certification