



## Board/Authority Authorized Course: **Advanced Climbing 12**

<b>School District/Independent School Authority Name:</b> Cowichan Valley School District	<b>School District/Independent School Authority Number (e.g. SD43, Authority #432):</b> SD79 Cowichan Valley
<b>Developed by:</b> Mark Whitney	<b>Date Developed:</b> May 1st, 2019
<b>School Name:</b> Cowichan Secondary	<b>Principal's Name:</b> Alison Keple
<b>Superintendent Approval Date (for School Districts only):</b>	<b>Superintendent Signature (for School Districts only):</b>
<b>Board/Authority Approval Date:</b>	<b>Board/Authority Chair Signature:</b>
<b>Course Name:</b> Advanced Climbing 12	<b>Grade Level of Course:</b> 12
<b>Number of Course Credits:</b> 4	<b>Number of Hours of Instruction:</b> 120 hours
<b>Course Category:</b> Leisure and Recreational Activities	<b>Course Code:</b> YLRA-2D

**Board/Authority Prerequisite(s):** None – Advanced Climbing 11 Recommended

**Special Training, Facilities or Equipment Required:**

Basic First Aid with CPR C, Climbing Gym Instructor Level 1 and Level 2 through the Association of Canadian Mountain Guides, Top-rope Climbing Instructor through ACMG. Requires a climbing gym with top-rope, lead, and boulder facilities.

**Course Synopsis:**

Advanced Climbing 12 is a course designed to further develop student's physical literacy in the specialized field of rock climbing. The course will introduce a variety of advanced movement and training techniques to build strength and coordination as well as risk management and injury prevention. Students will work individually and collaboratively as they develop personalized training plans, nutrition plans, and learn new belay techniques. Students will develop the instructional strategies and personal skills that are required to become a Climbing Gym Instructor Level 1 – a certification which they may then take through the Association of Mountain Guides. Students will research into Career Opportunities in the Climbing Industry as well as further Recreational Opportunities. Students will learn how to climb in competitions as well as judge climbing competitions – Lead, Speed, Top-Rope, and Boulder.

**Indigenous Worldviews and Perspectives:**

**Learning involves patience and time:** The structure of the course is centered on a collaborative learning environment. This will require students to make connections and organize their knowledge. Reflection on their own performance will be encouraged in order to further their own learning.

**Learning requires exploration of one's identity:** Through the climbing process students are encouraged and asked to always return to their own unique experience. They will learn their strengths, challenges and their innate abilities and capacity to learn and perform.

**Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors:** Many cultures revere the land, the mountains, and the high places. This principle will be supported by providing multiple access points for students to learn. The students will also be able to represent their learning in various ways.

**BIG IDEAS**

Climbing skills are maintained and enhanced through participation in a variety of climbing focused activities

Proper training guidelines and techniques along with understanding our strengths and weaknesses can help us reach our health, fitness, and competitive climbing goals

Safety and Injury Prevention practices, along with proper nutrition allow for lifelong participation in physical activities

Participating safely in climbing activities requires personal responsibility as well as communication and teamwork

Sharing knowledge and technique requires both planning and the development of personal instructional skills

**Learning Standards**

Curricular Competencies	Content
<p><i>Students are expected to do the following:</i></p> <p><b>Physical Literacy</b></p> <ul style="list-style-type: none"> <li>• Apply and refine movement concepts and strategies in different climbing focused physical activities</li> <li>• Refine and apply movement skills in a variety of physical activities and environments</li> <li>• Identify and participate in a variety of physical activities and climbing techniques</li> <li>• Demonstrate to others a variety of physical activities and climbing techniques</li> <li>• Identify and explain a variety climbing disciplines</li> </ul> <p><b>Healthy and Active Living</b></p> <ul style="list-style-type: none"> <li>• Participate in physical activities designed to enhance and maintain health components of fitness</li> <li>• Apply methods of monitoring and adjusting exertion levels, participation levels, and skill development, with regards to climbing focused physical activities.</li> </ul>	<p><i>Students are expected to know the following:</i></p> <p><b>Physical Literacy</b></p> <ul style="list-style-type: none"> <li>• proper technique for movement skills of a 5.10a grade on the Yosemite Decimal system</li> <li>• movement concepts and strategies</li> <li>• use of a camming-style belay device (gri-gri) for lead belaying</li> <li>• use of a tube-style belay device (ATC) for top-rope and lead belaying</li> <li>• use of a Munter hitch in belaying</li> <li>• clipping techniques for a variety of lead climbing situations</li> <li>• lead climbing skills required to climb a 5.9 grade on the Yosemite Decimal System</li> <li>• theories involved in the disciplines of traditional climbing, ice climbing, big wall climbing, and alpine climbing.</li> </ul>

- Plan ways to overcome potential barriers to participation in physical activities for self and others
- Identify and apply strategies to pursue healthy living goals
- Reflect on outcomes of personal healthy-living goals and assess the effectiveness of various strategies

#### **Safety, Injury Prevention, and Nutrition**

- Identify and apply safety regulations and procedure designed to ensure their own safety and the safety of others while pursuing their own physical fitness
- Identify and understand the measures needed in order to prevent injuries in climbing, as well the need to recognize signs of possible injuries
- Analyze the relationship between nutrition and performance in climbing

#### **Social Responsibility**

- Identify and apply the personal check, the partner check and correct communication practices involved in climbing
- Demonstrate the appropriate behaviours and practices that make each climbing discipline safe and enjoyable for self and others
- Demonstrate the knowledge of competition rules and the principles of fair play in judging climbing competitions

#### **Healthy and Active Living**

- principles of program design, including training principles to enhance personal fitness levels and climbing ability
- use of a personal logbook to monitor and adjust exertion levels, participation levels, and skill development
- work with others to enhance their level of fitness and climbing ability

#### **Safety, Injury Prevention, and Nutrition**

- proper safety protocols with regard to the various climbing disciplines – bouldering, top-rope climbing, lead climbing, indoor ice-climbing and outdoor climbing
- strategies for injury prevention and management
- benefits of proper nutrition for high performance climbing, competition climbing, expedition climbing and general good health

#### **Social Responsibility**

- all safety checks and commands use in a variety of climbing situations and disciplines
- consequences of poor behaviour, decision making and personal practices as they relate to making climbing a safe and enjoyable practices for all climbers
- the rules for Bouldering, Speed, Top-Rope and Lead Climbing Competitions according to Sport Climbing British Columbia and Climbing Escalade Canada

## Big Ideas – Elaborations

### **Climbing skills are maintained and enhanced through participation in a variety of climbing focused activities:**

- Students will learn and practice the skills and techniques required for Top-rope Climbing, Bouldering (low, rope-less climbing), Indoor Ice-climbing, as well as Lead Climbing and Rappelling.

### **Proper training guidelines and techniques along with understanding our strengths and weaknesses can help us reach our health, fitness, and competitive climbing goals:**

- Students will examine a variety of training concepts and develop personalized training programs based on their own strengths and weaknesses. Movement skills will be developed to meet students personal and competitive goals.

### **Safety and Injury Prevention practices, along with proper nutrition allow for lifelong participation in physical activities:**

- Students will develop personalized warm-up procedures and techniques, risk management strategies, as well as examine proper nutrition.

### **Participating safely in climbing activities requires personal responsibility as well as communication and teamwork:**

- Students will continue to focus on the self-check and partner check as essential elements of climbing safety as well as understand the more advanced checks and risk management strategies needed for lead and outdoor climbing.
- Students will examine the ethics of outdoor climbing and other wilderness-based pursuits.

### **Sharing knowledge and technique requires both planning and the development of personal instructional skills:**

- Students will model the skills and techniques required for Top-rope Climbing, Bouldering (low, rope-less climbing) to their peers.
- Students will share their knowledge of the rules of competition for SCBC Competitions in Lead, Speed, Top-Rope and Bouldering.

## Curricular Competencies – Elaborations

### ***Physical Literacy:***

#### Key Questions:

- What are the skills needed to improve to a 5.10a grade as a Top-rope climber?
- What new practices are required for Indoor Ice-climbing, Lead Belaying and Lead Climbing to a grade of 5.9?
- Which of the strategies and techniques covered are needed to be a successful Competitive Climber?
- How does climbing in the Outdoors require modifications of techniques for both the belayer and the climber?
- What instructional planning and techniques are required to model climbing skills to other climbers?

### ***Healthy and Active Living:***

#### Key Questions:

- How will the principles of Aerobic Training, Strength Training, Power Training, Anaerobic Training, Antagonistic Muscle Training improve climbing performance and promote personal health and fitness?
- What advanced climbing movement skills will address student-specific areas of weakness while maximizing areas of strength?
- How does tracking goals, progress, and areas of strength and weakness in a personal log lead to improvement in personal health and fitness?

### ***Safety, Injury Prevention, and Nutrition:***

#### Key Questions:

- How does a comprehensive warm-up lead to injury prevention and maximizing performance?
- What should a climber eat?
- What are the inherent risks involved in climbing and what can be done to mitigate such risks?

### ***Social Responsibility:***

#### Key Questions:

- Why are personal and properly communicated partner checks key components of every climbing discipline?
- What are the specialized safety checks and risk-mitigating techniques used in Lead Climbing?
- How are we responsible for our actions in the outdoors and what effects can this have on our environment and how we are perceived as outdoor enthusiasts?
- What are the rules of competition for climbing in a Sport Climbing BC Competition?

## **Content – Elaborations**

### **What are the skills needed to improve as a Top-rope climber (to a 5.10a level) and Boulderer?**

- Belay Ticket
- Demonstrate mastery of the following climbing skills and techniques:
  - Inside Edge

## Content – Elaborations

- Basic Footwork (step through, outside edge, twist lock)
- Weight Shift (medial and lateral), Resting on holds
- Hand Matches
- Foot Matches
- Simple Flagging
- Use of Holds (underclings, laybacks, crimps, slopers, pockets)
- Lock Offs
- Static and Dynamic Movement
- Climbing Pacing
- Footwork Training

### **What new practices are required for Indoor Ice-climbing, Lead Belaying and Lead Climbing at a 5.9 level?**

- Clipping
- The Mechanics of Lead Belaying with a Gri-gri
- Mock Leads
- Downclimb belaying
- Advanced Climbing Knots, Rope Stacking and storage
- Use of Indoor Ice Tools in both Top-Rope climbing and Lead Climbing

### **Which of the strategies and techniques covered are needed to be a successful Competitive Climber?**

- Design a personalized 4:3:2:2:1 training schedule (and other training schedules) for self and others
- The SCBC rules of Competition Climbing (Boulder, Lead, Top-Rope, and Speed)
- Hypergravity training

### **How does climbing in the Outdoors require modifications of techniques for both the belayer and the climber?**

- Introduction to the **theories** of Trad climbing, Ice climbing, Big Wall, Alpine, etc.
- Reading Terrain
- Outdoor Climbs to build climbing resume
- Understand the Yosemite Decimal System and the V-scale for Boulders
- Camping and Backpacking Basics
- Rappelling (with back-up)
- Inquiry into the career possibilities in the outdoor climbing industry

## Content – Elaborations

### **What instructional planning and techniques are required to model climbing skills to other climbers?**

- Be able to Model **ALL** 'Introductory Climbing' Workshops/Skill Sessions to fellow students
- Inside Edge
- Basic Footwork (step through, outside edge, twist lock)
- Weight Shift (medial and lateral), Resting on holds
- Hand Matches
- Foot Matches
- Simple Flagging
- Use of Holds (underclings, laybacks, crimps, slopers, pockets)
- Lock Offs
- Static and Dynamic Movement
- Climbing Pacing
- Footwork Training

### ***Healthy and Active Living:***

### **How will the principles of Aerobic Training, Strength Training, Power Training, Anaerobic Training, Antagonistic Muscle Training improve climbing performance and promote personal health and fitness?**

- Training Principles – skills and aerobic conditioning
- Training Principles – strength training
- Training Principles – anaerobic conditioning
- Training Principles – antagonistic muscles
- Core workouts

### **What advanced climbing movement skills will address student-specific areas of weakness while maximizing areas of strength?**

- Heel Hook/Toe Hook
- Drop knee
- Intermediate Flagging (back-flagging and cross-flagging)
- Difficult Hand Matches (crimps, slopers, pockets)



## Content – Elaborations

### **How does tracking goals, progress, and areas of strength and weakness in a personal log lead to improvement in personal health and fitness?**

- Climbing Logbook
- Climb by Route on top-rope – record in logbook
- Self Assessment and Teacher Assessment of participation level in ‘Fitness/Core’ Sessions and ‘Warm-ups’
- Personal Fitness Log – record minutes of Fitness/Strength training
- Ongoing Record of Personal Performance Climbs and Boulder Problems (successful climb at or near top grade, demonstrate confidence in movement)
- Ongoing Record of top ‘red-point’ and boulder grade
- Ongoing Goal Setting (micro – macro)

### ***Safety, Injury Prevention, and Nutrition:***

#### **How does a comprehensive warm-up lead to injury prevention and maximizing performance?**

- Warm ups
- Stretching and flexibility
- Balance

#### **What should a climber eat?**

- Nutrition for Athletes and Climbers – diet planning, expedition meal planning

#### **What are the inherent risks involved in climbing and what can be done to mitigate such risks?**

- Safety and Gym Maintenance
- Crumple Falls
- Simple Climbing Knots
- Risk Management and Injury Prevention

### ***Social Responsibility:***

#### **Why are personal and properly communicated partner checks key components of every climbing discipline?**

- Partner Checks, Belay Tests

## Content – Elaborations

### What are the specialized safety checks and risk-mitigating techniques used in Lead Climbing?

- Lead Belay Test
- Lead Partner Checks
- Spotting

### How are we responsible for our actions in the outdoors and what effects can this have on our environment and how we are perceived as outdoor enthusiasts?

- The environmental impact of climbing
- Access issues in climbing
- The ethics of camping and climbing

### What are the rules of competition for climbing in a Sport Climbing BC Competition?

- SCBC Rules of Competition Climbing in Lead, Speed, Top-Rope, and Bouldering
- Judge a climbing competition or participate as a competitor

### Recommended Instructional Components:

- Direct Instruction (Introduction, Demonstration, Practice, Review)
- Hands (and feet!) on activity (practice and development)
- Partner and Group Work
- Climbing Games
- Problem Solving Scenarios and Critical Thinking
- Field Work
- Modelling skills to peers
- Climbing Competitions

**Assessment: Ensure alignment with the [Principles of Quality Assessment](#)**

This course is assessed by using the Triangulation of Assessment, which allows the teacher to collect evidence of student learning; this evidence is collected from the following three sources: conversations, observations, and products.

- Focuses on the three components of the curriculum model; knowing, doing, understanding
- Provides ongoing descriptive feedback to students.
- Student involvement in assessment and feedback.
- Student logs / critical reflection and design for learning.
- Indigenous learning circles for reflection, question, and group understanding.
- Focuses on Instructional Techniques and Strategies for Sharing Learning with peers and younger students.
- Record time spent working with others (instruction of belay techniques, coaching movement, judging competitions).
- Investigation into Career Opportunities and Further Recreational Opportunities available in the field of Climbing.

The teacher will use this information to make a final assessment on the three components of the curriculum model - knowing, doing, understanding and will determine if the student demonstrates the concepts and competencies relevant

**Learning Resources:**

1. The Rock Climber's Training Manual: A Guide to Continuous Improvement, Michael Anderson PhD, Mark L. Anderson, Fixed Pin Publishing
2. Climbing Gym Instructor Technical Manual: A Reference Guide for Professional Indoor-climbing Instructors, Brian Spear, Association of Canadian Mountain Guides
3. Mountaineering: The Freedom of the Hills, Ronald C. Eng editor, The Mountaineers Books
4. Nanaimo Crags: Rock Climbing Guide, Ryan Kurytnik, KKP Nanaimo
5. Crest Creek Rock Climbs: A Heathen's Guide to Vancouver Island's Coolest Climbing Area, Chris Barner, Ahren Rankin, Heathens and Wild Isle Publications
6. Leave No Trace: A Guide to the New Wilderness Etiquette, Annette McGivney, The Mountaineers Books