

Physical Training for Climbing 1: Learning to Train

Workshop Outline

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1 Aim

The aim of the Physical Training for Climbing 1¹ Workshop is to make climbing coaches aware of:

- Theory behind physical training on a basic level
- Practical training sessions for general conditioning, strength, strength endurance and endurance

2 Introduction

The PT1 workshop has been designed to give coaches a basic understanding of physical training in climbing. This course follows on from **FUN**damentals 1 and 2, which cover climbing movement and technique. Early on in a climber's career the focus is crucially on these areas. Once a good grounding has been gained in technique and general movement, a climber will then begin to 'train' in order to create adaption and improvements in the physical elements of strength, endurance and general conditioning.

This course covers knowledge at a basic level and is suitable for coaches and instructors aiming to complete the Mountain Training Development Coach award, which begins to develop technical knowledge. At this level the coach will work with clients unsupervised and deliver training sessions, for which an understanding of their purpose is necessary.

There is an effective mix of theory and practical sessions meaning you will leave the day with the 'why' and the 'how'.

Moving on from **FUN**damentals 1 and 2, the importance of the Long Term Participant Development (LTPD) model becomes even more important. Here consideration needs to be given to the windows of opportunity as training in earnest begins. The focus on **FUN**damentals 1 and 2 was primarily on coaching young people.

The PT1 workshop does not have such a clear focus on children as the principles of training are the same for any age of climber. However throughout the course we will consider the age appropriateness of the training sessions we cover. This workshop is taught at indoor climbing walls, and designed for anyone who currently coaches climbing, or aims to coach, and wishes to develop their technical knowledge. For example, you may:

- currently hold a governing body award such as SPA, CWA or MIA and wish to develop your understanding of climbing training.
- assist in climbing coaching in your school, climbing centre, scout group or voluntary organisation and wish to develop your knowledge in more depth.

¹ 'Physical Training for Climbing 1 Workshop' is abbreviated to 'PT1 Workshop' throughout this document.

3 Learning Outcomes

By attending the PT1 Workshop, you will be able to:

1. Describe the essential demands of the sport and how these impact on creating effective training programmes.
2. Identify and explain fundamental concepts and processes in human energy metabolism and explain the physiological and nutritional basis of fatigue.
3. Describe the essential structures, function and adaptation of the cardiovascular and respiratory systems.
4. Identify and describe the essential structure, function, and adaptations of bone, muscle, tendon and ligament and explain their contribution to specific climbing movements.
5. Identify, explain and apply fundamental concepts of physiology in relation to training in order to structure a series of relevant training sessions.
6. Apply diagnostics, evaluate and interpret information collected from the analysis of performance and recommend appropriate actions and interventions.

4 Indicative Course Content

The following broad areas are covered in the PT1 Workshop:

- The demands of the sport
- Introduction to energy systems and its relation to types of training
- Basic physiology and anatomy
- Principles of training
- Types of training
- Acute responses and adaptations to exercise
- Assessing a climber's physical ability
- Practical sessions for conditioning, strength, strength endurance and endurance

See the "Guidance Notes" document for further detail.

5 Structure

The PT1 Workshop is a minimum of 8 hours long. The PT1 Workshop is taught at indoor climbing walls, including both bouldering and roped climbs. Information will be provided in the following ways:

- Presentations
- Demonstrations

- Written resources

6 Teaching and Assessment Strategy

The learning strategy will encompass learning by doing, learning with understanding and problem based learning to actively engage you in the process of investigation and with the acquisition of knowledge and key skills required to support it.

The teaching and assessment strategy incorporates formative assessment as a means of guiding you towards the attainment of the learning outcomes. As part of the formative assessment you will be encouraged to reflect upon your personal development.

There is no summative assessment resulting in a pass or fail. However, you will put into action what is being taught and you will receive verbal feedback throughout. By the end of the workshop you should have a picture of how you can apply the techniques and skills you have learnt in your own work. The more you put into the workshop, the more you will get out of it. The PT1 Workshop will be acceptable as evidence of accredited prior learning for local and national coaching qualifications.

There is an emphasis on practical learning through 'doing', and so you will be encouraged to share personal experiences in order to increase learning within the group. You will spend a large part of the day doing practical sessions in groups and pairs, providing the opportunity to explore training concepts in peer groups.

A certificate of attendance will be awarded by a National Mountaineering Council.

7 Eligibility

In order to attend a PT1 Workshop you do not need any formal climbing qualifications (however they can be beneficial). Participants are required to have some climbing experience and have completed **FUN**damentals 1 and 2 Workshops. You should have an interest in developing your climbing coaching skills. The minimum age for attendance is 14 years old.

Your personal climbing ability or technical competence is not a focus. However you must be able to put a harness on, tie in and belay, and to get the most out of the course lead climbing at French 6a minimum would be appropriate.

Any experience you have previously gained through teaching others will help you gain more from the day in terms of being able to reflect on what is being covered during the course.

8 Resources

See the electronic Physical Training 1: Learning to Train Resource Pack