



Susie Lachowski, PhD, CSCS
Paul Marquis, PT

Blood Flow Restriction Training Certification Course Course Objectives and Outline

Course Objectives:

Upon completion of the course, attendees will be able to:

- Understand the history of blood flow restriction training/therapy
- Explain key physiological concepts relating to strength training and altered hemodynamic patterns (BFR)
- Demonstrate knowledge of important safety procedures employing BFR to patients/clients
- Identify key similarities and differences with BFR devices
- Demonstrate proper procedures and use of BFR devices
- Discuss relative and absolute contraindications to BFR training/therapy
- Explain proper use and protocols of BFR to various populations and conditions

Course outline:

- **Registration/Welcome**
- **Introduction**
 - o Experience of presenters: Use of BFR modality, devices, research, practitioner over the past 10+ years
- **History of BFR**
 - o Where did BFR originate?
 - o How did the modality grow to where it is today?
 - o Discuss BFR development through the past 5 decades
- **Muscular strength and hypertrophy review**
 - o Review of muscle physiology
 - Muscle fiber types and activation
 - Review of key musculoskeletal principles
 - o Strength training and hypertrophy mechanisms
- **BFRT Modality**
 - o What is it? Detailed description and explanations
 - o BFR physiology
 - Hemodynamic patterns
 - Mechanisms of activation
 - Local and systemic responses



- **Efficacy, Safety and Application of BFR**
 - Key peer reviewed studies
 - Efficacy
 - Safety
 - Relative & absolute contraindications
 - Myths, common questions
 - Programming and protocols

- **Active Sessions and Demonstrations**
 - Demonstration and use of various BFR devices
 - Rigid devices, rigid pneumatic devices, elastic devices, elastic pneumatic devices
 - Pros, cons, efficacy, and safety of each

- **Elastic Pneumatic System**
 - Upper body work-out
 - Lower body work-out
 - Full body work-out

- **Assessment:** Quiz and applied knowledge

- **Summary review and Q&A**