

Technical Foundations

Course Description:

This one-day indoor session focuses on the technical aspects of contemporary skiing and the foundations for understanding skiing and movement analysis models. Participants will have the opportunity to hone their technical understanding through discussion as well as time spent moving and experiencing how biomechanics and basic physics principles affect skiers and riders. Video may be used to help understand how movement analysis models are supported by the technical foundations

Learning Outcomes:

- Demonstrate how biomechanics allows the body to move utilizing movement, discussion, questions and answers.
- Demonstrate how basic physics principles cause and allow skiers and riders to move utilizing movement, discussion, questions and answers.
- Demonstrate how biomechanics combined with basic physics principles can help us understand effective and ineffective skiing and riding movements utilizing movement, discussion, questions and answers.
- Demonstrate how movement analysis models are supported by biomechanics and basic physics principles using video combined with movement, discussion, questions and answers.

Sample Learning Experiences:

- Utilize Bob Barnes' Technical Foundations DVD to guide course content and discussion.
- Organize group to participate in a variety of classroom styles, such as: large room lecture, small group discussion and others.
- Bring information to life through interactive participation, fun demonstrations, movement, discussion, analogies, comparisons to participants' actual lesson experiences and other creative means.
- Have group experience movements that will allow them to feel and see how the technical fundamentals are anchored in the principles learned.
- Utilize video of skiing and riding to see and discuss actual skiers and riders and how the technical foundations principles and movement analysis models work

together to help us understand effective and ineffective riding and skiing movements and outcomes.

Materials Needed:

- Large room with computer, speakers, LCD and power point capabilities.
- Any handouts to enhance learning.
- Props that can assist with enhancing the learning; skis, boards, boots, other "toys" that bring learning to life.
- Current version of the Technical Foundations DVD