



Accredited Senior Evaluator (ASE) Candidate Study Materials

Required:

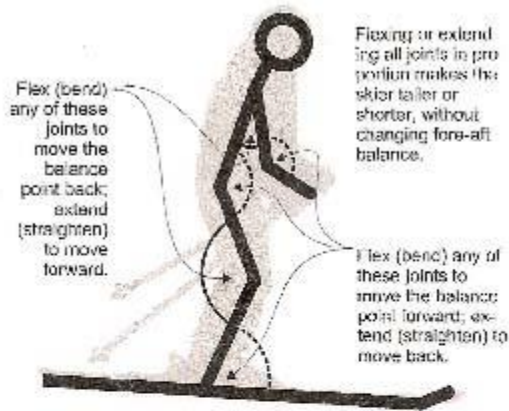
1. Central Division Senior Manual
2. Central Division Policies and Procedures
3. Central Division Senior Alpine Score Card

Recommended:

1. Core Concepts, For Snow sports Instructors, published by PSIA/AASI
2. Alpine Technical Manual, Skiing and Teaching Skills (second edition), published by PSIA/AASI
3. Tactics for All-Mountain Skiing, by Chris Fellows, published by PSIA/AASI
4. Snowboard Instructors Guide, published by PSIA/AASI
5. Educational web links for mostly free information
 - a. PSIA/AASI – Central Division web site: <http://www.psia-c.org/>
 - b. PSIA/AASI – National web site: <http://www.thesnowpros.org/>
 - c. PSIA/AASI Alpine Study Guide – Level 1: https://psia-c.org/forms/level1_studyGuide.pdf
 - d. Level II and Level III - Please see the PSIA-C Portfolio for information. AP 202 and 303 Courses are recommended prior to the Level II and III exam
 - e. PSIA/AASI Alpine Portfolio Guide – Level 1: https://www.psia-c.org/forms/alpine_level1.pdf
 - f. PSIA/AASI Alpine Portfolio Guide – Level 2: https://www.psia-c.org/forms/alpine_level2.pdf
 - g. PSIA/AASI Alpine Portfolio Guide – Level 3: https://www.psia-c.org/forms/alpine_level3.pdf
 - h. PSIA/AASI Movement Matrix - Available to members **at a cost:** <http://www.thesnowpros.org/PublicationsVideosResources/MovementMatrix.aspx>
6. Skiers Edge by Ron LeMaster
7. Skiing and the Art of Carving, by Ellen Post Foster
8. The Athletic Skier, by Warren Witherell & David Evrard
9. The Yikes Zone, by M. Blakely

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Fore-Aft Balancing Moves

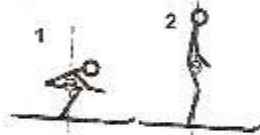


Flexing or extending all joints in proportion makes the skier taller or shorter, without changing fore-aft balance.

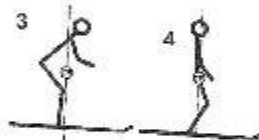
In addition to the joints illustrated, the spine and neck are also important fore-aft balance adjusters. In good skiing, most movements begin low, in the feet and ankles, and work their way up the body.

Note that stiff alpine ski boots significantly restrict the ankles' range of motion, so skiers must learn a new set of compensating movements in other joints of the body (see figures 7-10 below).

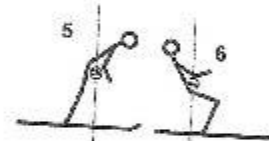
Fore-aft balance is deceptively complex! Beyond stance, the dynamics of motion affect balance. A skier must move back (or push the feet forward) when hitting sticky snow, for example, and must move forward when accelerating downhill, just to remain centered on the skis. A balanced stance in a braking wedge is much farther back than a straight run. Even the tune of skis affects balance—skis that don't slide easily will require the skier to move back.



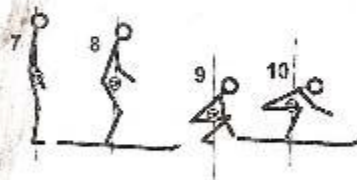
1 Skier 1 is flexing all joints proportionally, remaining in balance while in a deep crouch. Skier 2 is extending all joints evenly, remaining centered in a tall stance.



3 Skier 3 has little ankle flex, and compensates by flexing forward at the waist and reaching with the arms to remain in balance. Skier 4 is the opposite, overly based at the ankles, very upright in the upper body. These stances are typical of skiers with boots that are too upright (3) or boots with too much forward lean (4).

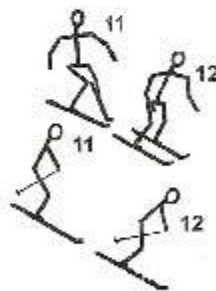


5 These skiers are both out-of-balance due to knees too extended (5) or too flexed (6), and no complementary movements of the other main joints (ankles, hips, or spine.)



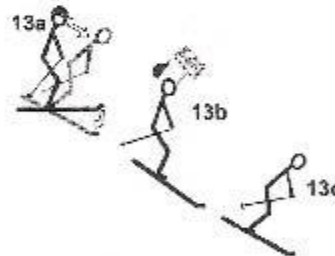
7 Note how joints must flex in different combinations for skiers, with stiff boots and restricted ankle motion, vs. non-skiers. A non-skier standing upright and in balance (7) extends all joints, while a skier (8), whose ankles are set at an angle, must compensate by flexing other joints for balance.

When a non-skier crouches low (9), the ankles bend and the knees raise, bringing everything forward, allowing the back to remain somewhat upright. The skier (10), with restricted ankle flex and no heel lift, must bend farther forward at the waist and reach with the arms to compensate. These new movements are skiside, the skills that must be learned.



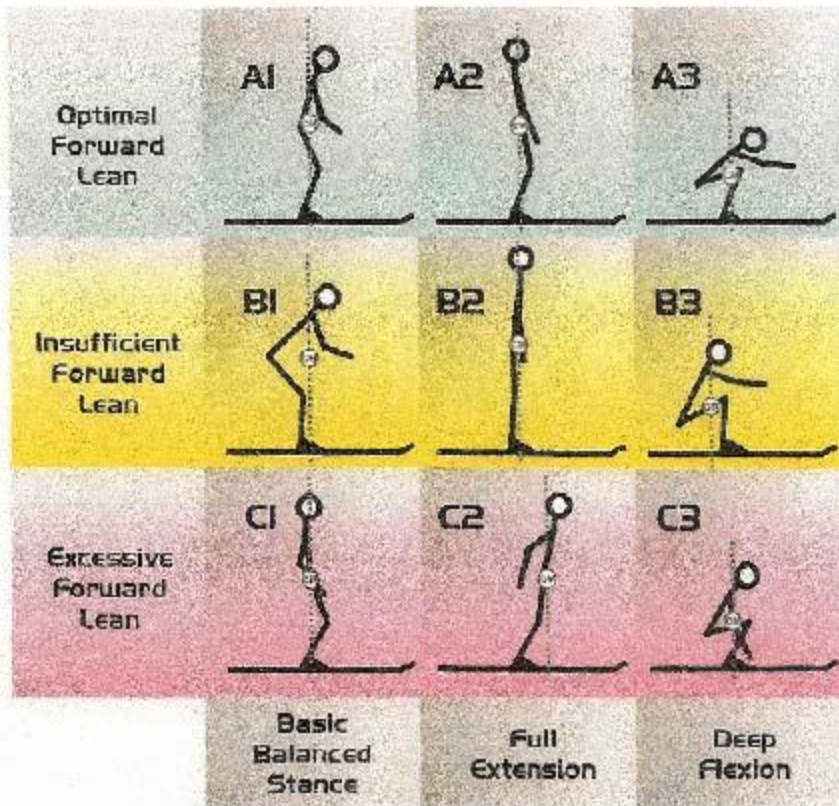
Dynamic Issues of Fore-Aft Balance

Skiers 11 and 12 are both in balance! Skier 11 has the brakes on hard, so what looks like leaning back is actually balanced. The same thing would happen in very sticky snow. Skier 12's skis are sliding well with the tracks off, so he is in balance, demonstrating a good, natural stance.



Dynamic Issues 2

Skier 13 shows the effect of tilting a ski and compensating on skis. When going from level to an incline, the skier must move forward to remain in balance. Note that this is what happens every time we start a turn—when traveling across a hill, we are on a level surface; we must move forward when we turn down the hill.



Forward lean affects basic stance and range of vertical motion.

A—Basic, relaxed stance with optimal forward lean (A1); note parallel shins and spine, slight flex of all joints, and balance over the mid-foot. Optimized skier can extend tall (A2) and flex deeply (A3), while maintaining fore-aft balance over the ski's "sweet spot."

B—Typical basic stance of skier with boots too upright (B1), head forward of waist and reaching with arms to center balance. This skier can extend very tall (B2), but loses balance to rear when deeply flexed (B3). Because they cannot bend their knees much, such skiers tend to stand very tall and stiff, and have difficulty absorbing moguls.

C—Typical basic stance of skier with too much forward lean (C1), slouching, pelvis and knees forward with torso and arms back to center balance area. This skier can easily flex low (C3), but loses balance forward when extended tall. Because they cannot straighten their knees, these skiers rely on muscular (high) strength, and tend to fatigue easily.

(Note that these illustrations assume stiff, snag, high-performance boots. Softer boots that allow greater ankle motion sacrifice some performance, but they are more forgiving of forward lean misadjustment.)

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