

Stand Up OTH: ATS Clinic Outline

Group Size: 8-10

**Time: 3 hours (new instructors) –
1.5 (returning instructors, combine w/ Holds, Assists, Outriggers)**

Objectives: Introduce and/or review American Teaching System (ATS), with main focus on levels 1-5. Give instructors knowledge and confidence to implement ATS in their lessons, and to use it to improve their personal skiing. Introduce/review Student Assessment.

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol

Introduction: Overview of clinic. Preview evaluation form and skills to be checked off.

Assessment: Get general idea of skiing experience and levels. Check knowledge and/or experience of ATS. Check skier levels on the hill.

Goals and Objectives: Each instructor will:

- demonstrate knowledge of responsibility code
- demonstrate skills for evaluation sheet check off
- demonstrate knowledge of ATS progressions 1-5, applied to lessons & personal skiing
- demonstrate awareness of teaching and learning styles, communication approaches, student assessment and lesson planning/goal setting

Present and Share Information:

- Demonstrate how to address communication, teaching and learning styles throughout
- Demonstrate activity progression throughout: *static, simple, complex, whole exercise*

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructor show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- Laminated training cards
- CKSS Safety Procedures
- CKSS Volunteer Instructor Job Requirements/Descriptions
- PSIA manuals
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information

ATS – Clinic Outline

American Teaching System: methodology for teaching ski progressions to any skier

Student assessment – Cognitive, Affective, Physical (CAP)

- Other activities, sports? ("teaching for transfer") Skied before?
- Student goals? Student concerns?
- Emotional state? Motivation?
- Disability information, secondary disabilities?
- Circulation problems?
- Medication that could impact skiing?
- Catheter or other medical equipment?
- Handshake / push away
- Observe walking (cane, crutches, walker, wheelchair)
- Observe balance (stand on one foot)
- Limited range of motion?
- Move feet in various directions, point and flex foot, push against your palm with their toes
- Cognitive abilities / understanding / focus. How do they communicate?

Equipment selection

- As little equipment as we can safely use
- Wear pattern on shoes/boots? (consider canting or filling voids in the ski boot)
- Weight primarily on heels or toes? When the student is walking does the movement come primarily from the legs, hips or shoulders?
- Leg length differences?
- Orthotics/braces? Generally students do not need to use Ankle / Foot orthotics (AFOs) in boots. If the student must use the AFO, a larger size boot may be required.
- Amputations / prostheses? Where are the amputations? (above or below the knee)
- Contractures / fused joints?
- Pronation (rotate inward) / supination (rotate outward) of the foot?
- Knock kneed or bow-legged?
- Ski boots dry?

Communication/terminology to be used w/ student

- Student's level, but do not dumb down
- Learning styles: visual, auditory, kinesthetic (thinker, seer, feeler, doer)
- Ask for permission before touching
- Positive feedback first, then possible improvements
- Stop, Left/Right, Yes/No, Cold, Drop (emergency stop), etc.

Responsibility code

- Always stay in control
- People ahead of you have the right of way
- Stop in a safe place for you and others
- Whenever starting downhill or merging, look uphill and yield
- Use devices to help prevent runaway equipment
- Observe signs and warning, and keep off closed trails
- Know how to use the lifts safely

Incident protocol

- When in doubt, call ski patrol
- Always alert site coordinator & fill out incident report (even if patrol is not called)
- Also mention to parents in case of possible bruising, etc.
- Never move skier if:
 - Head, neck or back pain
 - Joint pain
 - Unconsciousness
 - Severe bleeding

Developmental Framework for Adaptive Skiing

- Desired Outcomes: e.g. lesson goals or the effect of a particular task
- Tactics: choices to achieve goals based on student ability & desires, e.g. equipment, terrain, speed, line
- Skills Concepts (BERP): edging, rotation and pressure are integral to all turns and essential for maintaining balance. Drills (1 run for each skill set) – Goal = skill blending and teaching with tasks
 - Edging: side stepping, **traverse/side slipping**, hockey stops, railroad track turns
 - Rotation: **garlands**, **J turns**, **hockey stops**, pivot slips
 - Pressure: **falling leaf**, **backwards skiing**, **1000 step turns**, **shuffle turns**
 - Balance = outcome of ERP, but also: stretch & relax, hop, up/down, fore/aft, side/side

5 Fundamentals of Skiing – what we see as great skiing regardless of discipline or equipment:

1. Pressure (fore-aft): **Control the relationship of the center of mass (CoM) to the base of support (BoS) to direct pressure along the length of the skis** – Balance over center of mass, pressure along length of ski (accurately control turns), e.g. athletic stance, shins against cuff in both boots, hands in front; how far forward along length of the ski does snow spray start; imaginary line from ankles to hips should be parallel with imaginary line along the back
2. Pressure (lateral): **Control pressure from ski to ski and direct pressure toward the outside ski** – Slightly more pressure on outside ski helps turn initiation
3. Pressure (vertical): **Regulate the magnitude of pressure created through ski/snow interaction** – Flex and extend, open/closed ankles
4. Edging: **Control edge angles through a combination of angulation and inclination** – Same edge angle on each ski, smooth transitions between flat ski and edged ski (hold/slip, carve/shape, accurately control turn radius)
5. Rotation: **Control the skis' rotation with leg rotation, separate from the upper body** – Rotation from lowest functioning muscle group / body part, with steady upper body facing down the fall line, smooth turns with even radius, speed control via turn shape

Progressions

Choose skill and terrain wisely: New hill, old skill -- new skill, old hill

Level 1 – Flat terrain:

- assessment & goal setting
- introduce equipment
- move around in boots
- athletic stance: jump and land, or stretch tall and relax
- move around in skis (first one ski, then both skis):
 - slide forward and back
 - **figure eight**
 - side stepping
 - **wagon wheel**
 - games, e.g. Simon Says, Follow the Leader

Remember:

- where to meet
- chairlift challenges
- reciprocal teaching
- permission for feedback

* **bold** = drills with instructor participation

* **underlined** = required functional skiing tasks

Level 1-2 – Gentle slope:

Parallel progression: if student is unable to make a wedge, or if student has very good leg strength and seems able to learn quickly – teach by stepping into the turn

- straight run (with terrain to stop) (side step up, then wagon wheel to fall line)
- gliding wedge (intro static wedge on flat)
- braking wedge – increase braking action by larger wedge + edge angle
- **wedge to turn** (pressure on outside ski's big toe)
- vary size of wedge to control speed
- turn to stop
- ensure student can complete emergency stop (wedge or hockey turn, "drop" command)
- metaphors:
 - steering wheel, lunch tray, (camcorder)
 - quarter in front cuff of ski boot, or tomatoes for ketchup

Level 2-3:

- vary shape and speed of turns
- **traverse, followed by turn**
- linking turns
- vary turn shape to control speed
- drills: garlands, side slipping, 1000 steps, hop steps

Level 3-4 – working toward parallel turns

- **Wedge Christies**
- intro to pole touch
- extension movements in direction of turn ("foreagonal")
- edge release movements and skidded turns
- vary turn radius
- drills: pat-the-dog, bicycle turns, turns lifting the tail/whole ski

Level 5-6 – match skis earlier in turn, then fully parallel, pole touch

Note: Our ultimate goal is to teach the student proper skiing skills and how to control their own speed. Teach them speed control by varying turn shapes and finishing turns.

Additional materials to cover if time or to answer specific questions

Movement Analysis & Drills (based upon BERP and 5 Fundamentals)

Skills (BERP): most effective from the lowest functioning muscle group / body part up, i.e. perform movement analysis from the snow up and then offer a prescription for change.

5 Fundamentals: which fundamental interactions with the snow do you observe

- What's happening on the snow? Turning or tipping?
- DIRT: Duration, Intensity, Rate, Timing
- Simply describe what you see (without value judgement)
- Start with positive feedback
- Prescription for change

Helpful drills

- Hourglass turns
- Exaggerate the time spent in fall line in order to make turns rounder, less jagged (have them count 1-1000 while in fall line with a flat ski, don't hang out in the traverse)
- Teaching new skill: on known, mastered terrain; static, exaggerated, then dynamic
- Defensive stance: reduce terrain
- Circle drill to observe all skiers during one run: ski a few turns, stop, next skier skis past and stops a few yards down from you, and so on until everyone is at the bottom

Teaching Cycle

- Introduce lesson and develop trust
 - Assess students and their movements
 - Determine goals and plan experiences
 - Present and share information
 - Guide practice
 - Check for understanding
 - Debrief the learning experience
- ...repeat

Notes

- Teach to their motivation and try to give them the tools to best serve their students (What thrills you about teaching?)
- Make them comfortable physically and socioemotionally
- Use callbacks
- Use reciprocal teaching, especially with returning instructors (have them pair up, one teaches the other a skill, observes, offers feedback and prescription for change; then reverse the pair)
- Use chairlift challenges

Stand Up OTH: Holds/Assists + Outriggers Clinic Outline

Group Size: 8-10

Time: 3 hours (new instructors) – 1.5 (returning instructors, combine w/ ATS)

Objectives: Introduce and practice skills for stand up outrigger use. Introduce and practice holds and physical assists. Introduce and practice use of bamboo pole as an assist.

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol

Introduction: Overview of clinic. Introduce concept of 3-track and 4-track skiing.

Assessment: Assess skiing skills, and awareness about diagnoses that may 3-track or 4-track.

Goals and Objectives: Each instructor will:

- demonstrate knowledge of equipment
- demonstrate basic use of stand up outriggers
- demonstrate how to use a physical hold and bamboo pole
- demonstrate awareness of safety related to OR use, holds/assists, and bamboo pole

Present and Share Information:

- Demonstrate how to address communication, teaching and learning styles throughout
- Demonstrate activity progression throughout: *static, simple, complex, whole exercise*

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructors show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- Laminated training cards
- CKSS Safety Procedures
- CKSS Volunteer Instructor Job Requirements/Descriptions
- PSIA manuals
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information

Stand Up OTH: Tethering Clinic Outline (NEW Instructors)

Group Size: 8-10

Time: 3 hours (new instructors)

Objectives: Introduce equipment for tethering. Introduce and practice skills required to safely tether a stand up skier.

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol
- Tether policy = cinched to bare skin
- Be aware: Tethering makes a large footprint on the hill

Introduction: Overview of clinic. Introduce concept of tethering.

Assessment: Assess skiing skills for tethering

Goals and Objectives: Each instructor will:

- demonstrate skiing skills necessary for tethering
- demonstrate tethering skills
- demonstrate knowledge and awareness of safety related to tethering

Present and Share Information:

- Demonstrate how to address communication, teaching and learning styles throughout
- Demonstrate activity progression throughout: *static, simple, complex, whole exercise*

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructors show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- Laminated training cards
- CKSS Safety Procedures
- CKSS Volunteer Instructor Job Requirements/Descriptions
- PSIA manuals
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information

Stand Up OTH: Tethering & Slider Clinic Outline (RETURNING Instructors)

Group Size: 8-10

Time: 3 hours (returning instructors)

Objectives: Review equipment and safety considerations with tethering. Review and practice skills required to safely tether a stand up skier. Introduce or review and practice skills for tethering slider.

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol
- Tether policy = cinched to bare skin
- Be aware: Tethering makes a large footprint on the hill

Introduction: Overview of clinic. Check who wants to be checked off for slider tethering.

Assessment: Ask about experience with tethering. Assess levels of experience within group.

Goals and Objectives: Instructors will:

- demonstrate skiing skills necessary for tethering
- demonstrate tethering skills with a stand up skier with Tip Connectors.
- demonstrate tethering skills with slider (if they want to be checked off)
- demonstrate knowledge and awareness of safety related to tethering

Present and Share Information: Draw out experience and information from returning instructors as much as possible

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructors show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- Laminated training cards
- CKSS Safety Procedures
- CKSS Volunteer Instructor Job Requirements/Descriptions
- PSIA manuals
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information

Stand Up OTH: VI Clinic

Group Size: 6 max

Time: 3 hours (returning instructors only)

Objectives: Introduce and practice skills to guide VI skiers.

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol

Introduction: Overview of clinic

Assessment: Assess skiing skills, and awareness/knowledge of visual impairment

Goals and Objectives: Each instructor will:

- demonstrate how to evaluate vision
- demonstrate basic guiding skills
- demonstrate awareness of safety related to VI guiding

Present and Share Information:

- Demonstrate how to address communication, teaching and learning styles throughout
- Demonstrate activity progression throughout: *static, simple, complex, whole exercise*

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructors show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- Laminated training cards
- CKSS Safety Procedures
- CKSS Volunteer Instructor Job Requirements/Descriptions
- PSIA manuals
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information

Stand Up OTH: Ski Bike Clinic

Group Size: 6 max

Time: 1.5 hours

Objectives: Introduce and practice skills to ride and teach ski bike

Safety Message:

- CKSS approach = Safety first, followed by fun and learning
- CKSS helmet policy (i.e. required for everyone)
- Skier responsibility code
- Incident protocol

Introduction: Overview of clinic

Assessment: Assess skiing skills, and awareness of ski bike

Goals and Objectives: Each instructor will:

- demonstrate knowledge of progression for teaching ski bike
- demonstrate basic riding and ski bike tethering skills
- demonstrate knowledge of safety and how to load/unload bike on lift

Present and Share Information:

- Demonstrate how to address communication, teaching and learning styles throughout
- Demonstrate activity progression throughout: *static, simple, complex, whole exercise*

Guided Practice: See bullet points on next page

Check for understanding:

- Ask questions and ask for paraphrase, have instructors show understanding by doing tasks
- Give feedback using 5Ps: 1. Personal contact, 2. Permission, 3. Private vs public, 4. Preference on FB, 5. Paraphrase

Summarize

Materials and references:

- CKSS Safety Procedures
- General info on ski bikes: www.ski-bike.org
- PSIA-Rocky Mountain has a ski bike teaching guide: www.psia-rm.org
- Ski volunteer information: www.allinahealth.org/Courage-Kenny-Rehabilitation-Institute/Programs-and-services/Adaptive-sports-and-recreation/Alpine-ski-and-snowboard/Ski-volunteer-information