



# Progressive Development Of A High Performance Alpine Skier

Foundation Stage		Pre & Post Puberty			World Class Performance Full Maturation
PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
<p><b>Biological Age</b> Pre Puberty <b>Age</b> 2-6 years old <b>Play Age</b> 1-4 years <b>Participation</b> Ski 1 day a week or less 20 days a year At least 95% free skiing Play 2-4 other sports - gymnastics or balance-based sports</p>	<p><b>Biological Age</b> Pre Puberty <b>Age</b> 6-10 years old <b>Training Age</b> 1-4 years <b>Participation</b> Ski 2-3 days a week 50 days a year At least 90% free skiing Fun races Play 2-4 other sports</p>	<p><b>Biological Age</b> Pre Puberty <b>Age</b> Girls: 10-13; J4 (J5-J3) Boys: 11-14; J4 (J4-J3) <b>Training Age</b> 4-8 years <b>Participation</b> Ski 3-4 days a week 70 days/year At least 60% free skiing Competition Period: (Jan.-April) Number of race starts: 10-15 Ratio 1:6 (race:training) Play a complementary second sport</p>	<p><b>Biological Age</b> Puberty (Growth Spurt) <b>Age</b> Girls: 11-14; J3 (J4-J3) Boys: 12-15; J3 (J4-J2) <b>Training Age</b> 5-9 years <b>Participation</b> Ski 4-5 days a week 100 days/year At least 30% free-skiing Competition Period: (Dec.-April) Number of race starts: 15-30 Ratio 1:5 (race:training) Play a complementary second sport</p>	<p><b>Biological Age</b> Post Puberty <b>Age</b> Girls: 12-16; J3 (J4-J2) Boys: 14-17; J2 (J3-J1) <b>Training Age</b> 6-11 years <b>Participation</b> Ski 4-5 days a week 120-140 days/year At least 15% free skiing Competition Period: (Nov.-April) Number of race starts: 25-max 45 Ratio 1:4 (race:training) Play a complementary second sport</p>	<p><b>Biological Age</b> Full Maturation <b>Age</b> Female: 16+ J2-J1 Male: 17+ J1 <b>Training Age</b> Minimum 10+ years <b>Participation</b> Ski 4-5 days a week 130-150* days/year At least 10% free-skiing Competition Period: (Nov.-April) Number of race starts: 55* Ratio 1:3 (race:training) *based on the number of disciplines</p>
Conditioning Emphasis					
Introduction to conditioning through sports participation Play and fun emphasis, skiing, balance sports	Continue multi-sport, active lifestyle Play and fun emphasis, basic agility and balance, coordination. Incorporate activities that develop explosiveness (0-10 sec) and general endurance	1-2 dry land sessions perweek  Further development of previous components. Emphasis on aerobic conditioning. Incorporate own body weight training and body awareness training	1-2 dry land sessions per recovery week  Increase aerobic conditioning and balance/agility/coordination, particularly through growth spurt. Begin light external resistance work including bands, med balls, etc.	2-3 dry land sessions per recovery week  Strength and power, introduce progressively more anaerobic training, endurance, complex agility and balance	4-5 dry land sessions per recovery week  Strength, power and explosivity (particularly eccentric work), aerobic, efficiency and recovery, anaerobic training, core strength and reactivity to forces of skiing
Technical and Tactical Emphasis					
<b>Active start-learning and fun environments</b> Introduce stance, balance, edging, pressure and rotary movements for control. Develop turn shape and rhythm/timing, terrain in various snow conditions with an emphasis on gliding	<b>Adventure stage- skiing all terrain environments</b> Apply the fundamental skills in achieving consistent and symmetrical parallel turns with rhythm and timing. Introduction to carving, use of upper and lower body separation for angulation and pole plant.  Introduce course inspection and line choice and anticipate terrain and obstacles (gate, jumps, bumps, etc)	<b>Technical stage-ability to execute a carved turn</b> Sound fundamental technical skills are in place. Can execute linked, carved turns with all the technical components. Refine the ability to control the radius of the turn  Acquire specific technical and tactical skills including gate blocking, speed elements, course inspection, anticipation of speed, line and turn shape  Free ski all terrain with competence, with an emphasis on carving and athleticism.	<b>Tactical stage-event specific technical and tactical skills</b> Maintain technical skills through the growth spurt and refine tactical skills. Emphasize use of tactics to achieve carved turns on the most appropriate line for the athlete.  Develop speed and efficiency by refining carving and steering movements to achieve the desired turn radius in courses.  Using a variety of course sets, conditions and terrain to teach the skier to adapt to different situations	<b>Technical and Tactical Refinement stage-event specific technical and tactical skills</b> Refine technique and tactics after growth spurt. Integrate the increased strength, power and body size to achieve a more optimal line  Refine event specific technical and tactical skills (jumps, terrain, traverse, long turns, etc.).  Advanced tactics for difficult situations (a-rhythmical course sets, difficult conditions and terrain)	<b>Mastery or innovation stage. Event specific technical and tactical mastery</b> Mastery of technical and tactical skills based on the individual's style. Optimizes line for ability level and conditions in race situations  Mastery of event specific skills  Innovates with equipment advances
Equipment Selection & Preparation					
Equipment Selection & Preparation Adhere to USSA and FIS rules for all equipment selection <b>Skis:</b> Chest high with a variation based on height, weight and skill level <b>Boots:</b> Proper boot fit with soft even forward flex for ankle movement to facilitate a balanced, athletic stance <b>Protection:</b> Helmet required at all times <b>Poles:</b> Optional - introduce at older levels as skill level develops	Adhere to USSA and FIS rules for all equipment selection <b>Skis:</b> 1 pair only for this age group. Head height with a variation based on height, weight and skill level. Introduce ski preparation <b>Boots:</b> Proper boot fit with soft even forward flex for ankle movement to facilitate a balanced, athletic stance <b>Protection:</b> Helmet required. Older athletes may need shin/arm protection <b>Poles:</b> Length = forearm horizontal with pole tip in snow	Adhere to USSA and FIS rules for all equipment selection <b>Skis:</b> Slalom, GS and super G skis with training skis. Develop tuning skills <b>Boots:</b> Proper boot fit, flex and performance. Boot flexes and responds as it interacts with the ski and plate. Performance considerations may include flex, cant, forward lean, ramp angle and foot beds <b>Protection:</b> Head, arm, hand, shoulder, back, teeth (mouth guard) and shin protection recommended, based on event <b>Poles:</b> SL-pole guard for blocking & protection, may be slightly shorter. GS-standard length. Speed-contoured shaft as needed	Adhere to USSA and FIS rules for all equipment selection <b>Skis:</b> Slalom, GS and super G skis with training skis. Refine tuning skills <b>Boots:</b> Proper boot fit, flex and performance. Boot flexes and responds as it interacts with the ski and plate. Performance considerations may include flex, cant, forward lean, ramp angle and foot beds <b>Protection:</b> Head, arm, hand, shoulder, back, teeth (mouth guard) and shin protection recommended, based on event <b>Poles:</b> SL-pole guard for blocking & protection, may be slightly shorter. GS-standard length. Speed-contoured shaft as needed	Adhere to USSA and FIS rules for all equipment selection <b>Skis:</b> Slalom, GS and super G skis with training skis. Tuning skills continue to improve. Insight into waxing and grinding necessary for speed skiers <b>Boots:</b> Proper boot fit, flex and performance. Boot flexes and responds as it interacts with the ski and plate. Performance considerations may include flex, cant, forward lean, ramp angle and foot beds <b>Protection:</b> Head, arm, hand, shoulder, back, teeth (mouth guard) and shin protection recommended, based on event <b>Poles:</b> SL-pole guard for blocking and protection, may be slightly shorter. GS standard length. Custom pole sizing and contouring for individuals	Adhere to USSA and FIS rules for all equipment selection. Equipment testing including skis, boots, plates, bindings and poles is recommended to maximize performance <b>Skis:</b> Race and training skis for all disciplines. Professional support or consultation is recommended for preparation <b>Boots:</b> Discipline specific boots may be necessary to maximize performance <b>Protection:</b> Head, arm, hand, shoulder, back, teeth (mouth guard) and shin protection recommended, based on event <b>Poles:</b> SL-pole guard for blocking & protection, may be slightly shorter. GS standard length. Custom pole sizing and contouring for individuals
Performance Psychology Emphasis					
<b>Sampling Years</b> Fun, variety, positive reinforcement and perseverance. Positive parental support is essential. Parent actively driving the involvement.	<b>Sampling Years</b> Teamwork and sportsmanship. Encourage a balanced lifestyle that encourages healthy habits and promotes success in sport and life. Positive parental support is essential. Families get involved with clubs.	<b>Sampling Years</b> Positive self talk, work ethic and perseverance, task-oriented skills, focus on success of tasks and processes not results, encourage the use of imagery and visualizing good technique, teamwork and sportsmanship. Positive parental support and club involvement.	<b>Sampling Years</b> Positive self talk, work ethic and perseverance, goal setting, task-oriented skills, focus on success of tasks and processes not results, encourage the use of imagery and visualizing good technique, teamwork and sportsmanship. Positive parental support and club involvement.	<b>Commitment</b> Develop and refine race day plan. Develop mental rehearsal routines, refine goal setting process, what to focus on, what works on race day, develop "athletic plan" to approach training sessions and life. Parents continue to support the commitment of the athlete in the sport.	<b>Specialization and Mastery</b> Refine performance psychology tool skills: Imagery; goal achievement; performance planning; attention and focus; self regulatory talk & confidence; dealing with competition, risk, failure & fear; identify optimal performance state. Parents continue to support the commitment of the athlete in the sport.
Competition Emphasis					
Council and league team competition:  Innovative with FUN focus interclub competition	Team and Council races, YSL and BWL Championships  Divisional and State Championships and qualifiers	Divisional and state series, qualifiers and events  Regional Junior Olympics	Regional qualifiers for J2's NorAms and Nationals  Regional FIS Series and FISU	Regional qualifiers for J2's NorAms and Nationals  Regional FIS Series and FISU	NorAm Cup, Regional FIS Series, European FIS races, FISU  Olympics, World Ski Championships, World Jr. Championships, World Cup, European Cup