Freeski Training System

Development Phases Domain

Elements	Phase	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
	Biological Age	Early Childhood	Early Childhood	Pre-puberty before growth spurt	Puberty and growth spurt	Post Puberty after Growth Spurt	Full Maturation
	Chronological Age	2-6 years old	6-10 years old	Girls: 10-13 Boys: 11-14	Girls: 11-14 Boys: 12-15	Girls: 12-16 Boys: 14-17	Girls: 16+ Boys: 17+
	Time in Sport	1-4 years in sport	3-6 years in sport	4-7 years in sport	5-8 years in sport	6-11 years in sport	Training age: 10+ years in sport
	Training Volume	50 hours per season 1-2 sessions per week	150 hrs/season 2-3 sessions per week	220 hours/season 3-5 sessions per week	360 hours/season 4-6 sessions per week	480 hours/season 5-7 sessions per week	540 hours/season 5-7 sessions per week
	Summer/Off season Training	None	0-5 days	10 days	20 days	25 days	30+ days
	Coached Freeskiing	75%	65%	45%	30%	20%	15%
	Coached Drills	10%	20%	20%	20%	20%	15%
	Coached Venue Training	10%	10%	25%	35%	40%	45%
	Full Run Competition Simulation	5%	10%	10%	15%	20%	25%
	Freeski with friends and family	As much as enjoyable	As much as enjoyable	As much as enjoyable	As much as enjoyable while balancing rest, travel and recovery needs.	As much as enjoyable while balancing rest, travel and recovery needs.	As much as enjoyable with necessary balance of rest, travel and recovery needs.
	Complementary Sports	Participate in many physical activities. Explore individual coordination or balance-based sports. Team sports to build teamwork, ethics and fair play.	Play many sports. Active participation in coordination or balance-based sports. Participation in team sports build teamwork, ethics and fair play.	Continue to participate in many activities and sports. Begin to identify with primary vs. complementary sports.	Continue to participate in complementary sports while identifying clear goals in primary sport.	Use complementary sports and activities for variety and to enhance aerobic conditioning by increasing training volume in all activities.	Use complementary sports and activities for injury prevention, avoiding burnout, and to maintain all aspects of physical fitness.

Physical Fitness Domain

	General Concepts	Begin to develop fundamental movement skills through play, fun, novel activities.	Increase play to develop and enhance specific elements of physical fitness in open environments.	Start to incorporate focused dryland training 1-2 days per week. Enhance body awareness, balance, timing of moevements and spatial anticipation through games and drills.	Physical fitness is becoming an integral part of the season. 1-3 sessions per week. Increase hours of training with varied volumes and intensity.	Implement periodized training with varying volumes and intensity. Training is now essential to seasonal programming with 2-3 sessions per week and off-season fitness plans.	Multi-year periodized training plans with varying volumes and intensity are essential to prepare for full competition, training loads and long term performance.
	Growth and Development (Body Composition)	Body begins to develop into adult-like proportions in terms of how various body parts relate to each other. Muscle mass increases and fine motor skills begin to emerge.	Body continues to develop into adult-like proportions. Rate of growth slows, strength increases and ability to perform fine motor skills increases.	Rate of growth increases again in preparation for adolescence. Growth rate may have adverse effect on agility, balance and coordination. Weight and height increases.	Rate of growth reaches peak (Peak Height Velocity). Bodies reach adult heights, muscles grow rapidly while muscle to fat ratios differ between males and females. Heart rate, cardiac output and respiratory capacity increases leading to greater tolerance for exercise.	Growth rate slows and stops. Bodies are adult in proportion and muscle to fat ratios. Very little change in height from this point forward. Muscular, skeletal, cardio and respiratory functions are fully formed with capacity for heavier exercise or training loads.	Body finishes adolescent growth and development.

Elements	**Endurance**	Foundations of endurance is established through sustained activity and play.	Continue to establish foundations of endurance through sustained activity and play. Add duration to activities and games. Manage duration of activity by introducing time-structured games and activities.	Develop aerobic conditioning with scheduled activities along with increased time spent in games and training	High duration, low intensity activities such as running, swimming, biking or hiking are incorporated into the training plan. Include team sports and multi plane activities such as soccer, basketball, utlimate frisbee, etc.	Develop understanding of the inverse relationship between volume and intensity. Maintain a sport specific and training endurance level.	Develop and/or maintain appropriate energy systems for success in discipline.
	Mobility	Explore activities and games that use a variety of body management, locomotro and object control skills.	Introduce and practice mobility exercises through unorganized play and some structured activities.	Introduce range of motion, mobility drills, general exercise preparation and coordination through semi structured play.	Incorporate daily flexibility training. Limit the loss of mobility, functional strength, balance and coordination during growth spurt through multi joint and whole body exercises.	Practice a variety of core stability exercises. Incorporate mobility training specific to the sport or discipline.	Incorporate varied and sport-specific core stability exercises.
	Strength	Explore whole body movements which encourage range-of-motion and exploration of movement options.	Continue with whole body activities and exercises. Introduce more targeted focus on specific body movements.	Implement structured body weight exercises with proper technique to develop overall strength.	Majority of time spent in movement, mobility, warm up and mechanics. Short duration (20 min) in structured strength and power movements. Light resistance work including bands, med balls, etc.	Practice safety and competence with free weight techniques. As technique is mastered, increase external loads with focus on whole body movements while addressing any imbalances.	Master Olympic lifts and supplemental lifting exercises. Utilize eccentric training for overload.
	Power	Fast movements developed by running, jumping and throwing.	Use fun playful activities to enhance body awareness, spatial awareness and object manipulation. Incorporate activities that develop quickness (0-10 sec bursts).	Appropriate volume and intensity of body-weight training. Use dynamic exercises and movements in multiple planes to enhance power movements.	Practice Olympic lifting technique with no weight. Target all major muscle groups with body weight exercises. Add light weights for biologically advanced athletes. Continue jumping exercises and introduce limited plyometric training.	Continue to incorporate full body movements while increasing volume in jumping, etc. Add duration to strength portion of the workout with continued emphasis on mobility, movement, mechanics and warm up.	Strength and Power programs become more planned and periodized. Workouts become more individualized. Still fun but purposeful in developing the needs of the individual athlete.
	Motor Skills	Create a foundation for agility, balance and coordination (ABC) through participation in multiple sports or physical activities.	Increase ABC through fluidity of movement and range-of-motion in simple activities.	Incorporate multi-plane movements that increase ABC and range of motion across all planes of movement. Begin to use focused exercises to target specific movements.	Limit the loss of flexibility, functional strength, balance and coordination during growth spurt. Use mobility training along with agility, balance and coordination through growth spurt.	Use sport specific exercises and more complicated ABC drills to enhance range of motion that target sport specific movements patterns.	Increase difficulty of balance drills for precision of motor control. Increase flexibility exercises consistent with specific demands of the sport.
	Nutrition, Hydration, Recovery	Well rounded nutrition is practiced by parents, child, coaches and club. Proper rest and sleep habits help with recovery and energy management.	Basic athletic and healthy nutrition concepts are addressed by parents, child, coaches and club. Proper rest and sleep habits are formed.	Athlete awareness increases about importance of nutrition. Healthy sleep habits becomes a component of training and physical fitness.	Athlete can identify nutritious from non-nutritious food in their diet. Begin to link nutrition with performance. Hydration is monitored. Introduce cool-down, sleep, rest and recovery as part of the training plan.	Implement plans for a balanced diet to enhance performance. Keep a logbook of all training related activities such as hydration, diet, rest, recovery, sleep, and other factors that contribute to or diminish physical fitness.	Athlete uses diet planning to maximize training and recovery. Utilize physiologic measures and logbook diary to monitor training. Maintains and respects all facets of healthy habits and lifestyle.
Technical Domain							
	General Focus	Active start - Learning and fun environments	Adventure stage - Riding all terrain, exploring the mountain	Technical stage - Developing precision of basic skills while learning advanced techniques over a variety of terrain and features	Tactical stage - Application of technical skills to Event/Discipline specific tactics.	Technical and Tactical Stage - Refinement of Event/Discilpine specific technical and tactical skills	Mastery and Innovation stage - Event/Discilpine specific technical and tactical mastery
	Turn Shape and Technique	Able to link round-shaped turns controlled by the inside edge of the outside ski on the snow.	Turn size and shape is dictated by the skier not the environment. Activities emphasize a wide variety of turn shapes and sizes.	Ability to maintain turn shape in a variety of turn sizes while maintaining balance. Able to ski switch confidently on most terrain.	Skiers can confidently adapt turn shape and technique in rapid sequences in order to achieve mutliple tasks on any terrain.	Mastery of a wide variety of turn shapes, styles and techniques both regular and switch. Precise controlled movements dictate turns in all conditions.	Can ski anything, anywhere in any any condition with confidence, speed and style.

Elements	**Athletic Stance and Balance**	Ski stance is athletically adaptable. Can ski medium radius turns with parallel skis while maintaining balance.	Legs start to separate from upper body to initiate turns. Center of mass moves with terrain and turns to remain balanced.	Ability to dynamically adjust balance and stability to match terrain or task.	Ability to dynamically adjust balance and stability with precision and coordination.	Mastery of balance and stability in all situations. Recovery moves are inherent to maintain balance.	Completely at home on skis where precise, coordinated movements and dynamic balance are second nature.
	Alignment and Separation of Movements	Learn effective body alignment in relation to skis and terrain.	Mastery of effective body alignment on a variety of terrain.	Develop ability to separate movements of upper and lower body.	Ability to use a variety of high intensity movements to maximize performance in competitive venues, significant use of upper-lower body seperation.	The rider is using seperation of movements across mutliple planes and aspects to create complex chains of movements.	Able to link complex chains of movement together in a smooth and fluid manner with exact precision.
	Rotary, Edging and Pressure	Movements are varied, such as; wedge, parallel, converging & diverging steps, skating, etc. leading to outside ski dominance. Able to move from foot to foot and jump off both feet. Competency with hockey stops.	Skier demonstrates outside ski dominance throughout the entire turn, and becomes aware of the skis orientation on the snow. Skier demonstrates rotary, edging and pressure skills individually and within the turn.	Sound fundamental skills are mastered and integrated in the skier's movement patterns. Higher intensity and complex movement patterns are emphasized to achieve a desired outcome on specific terrain.	Ability to glide on a flat base at high speeds. Can ride switch confidently in most terrain with precise movements. Able to adapt and refine pressure movements on the fly to maximize effectiveness and fluidity in all terrain.	Ability to glide on a flat base at high speed both regular and switch with complete mastery and confidence on any terrain around the mountain. Switch skiing is as effortless as regular. Exact precision of pressure and edge movements is mastered.	Exact and precise rotary,edging and pressure movements are utilized in complex chains of movements to accomplish a variety of task, tricks or skills. These movements are ingrained, habitually and occur automatically.
	Terrain Parks and Features	Starting to catch air on small, natural features. Learning basic flatground tricks involving simple rotations and variable pressure on the skis.	Comfortable grabbing over small jumps and exploring small rotations 180 to 360 in both directions. Beginning to explore simple rail features.	Competent on small to medium jumps, basic grabs, ability to ride comfortably in halfpipe and rail features.	Comfortable spinning over large jumps as well as in the pipe. Begin experimenting with single inverted manuevers and should be able to handle increasingly more difficult rail features with confidence.	Full HP and SS runs with speed, confidence, amplitude and style. Creativity in trick selection and flow. Beginning to experiment with double cork and multiple, linked rotations beyond 900 (HP) and 1080 (SS).	Pushing the envelope of what they are capable of. They have a deep and automatic understanding of the cause and effect of various movements and can link together complex runs at the highest level of dififculty with the highest level of precision.
Tactical Domain							
Elements	**General Focus**	Have fun and gaining confidence on skis. Mileage around the mountain is maximized with an emphasis on fun, freeriding with friends.	Tactics are learned through self-discovery by riding around the mountain and adapting to different terrain. Skis challenging terrain or difficult snow conditions.	Gaining comfort in applying various tactics in order to ski terrain using different strategies to achieve differing results.	High intensity and more complex movement patterns are mastered. Dynamic and complex movement patterns are emphasized to achieve a desired outcome on specific terrain and features.	Refine event specific technical and tactical skills to achieve desired outcome. Integrate the increased strength, power and body size to achieve more complex movements and precision of skill application.	Mastery of tactical strategies based on the individual's style, discipline and goals.
	Terrain	Explore the mountain and gain confidence on variety of groomed runs. Starting to catch air on small, natural features.	Explores the mountain environment and riding in variable terrain. Learning to perform a variety of tasks all over the mountain and in the park.	Confident on most terrain and beginning to explore man-made terrain features.	Confidence on the mountain. Ability to ski anywhere in any condition with confidence and speed.	Innovation on the mountain. Ability to ski anywhere, anytime in any condition using the all terrain with speed, style and creativity.	Complete mastery of all environments. Ability to ski anywhere with creativity and innovate on the fly.
	Halfpipe	Ability to adapt to changing terrain pitches using effective stance and balance.	Learning to ride transition by adapting body alignment and movements in the pipe. Using effective edge control to manage speed and gain amplitude. Reaching the lip of pipe with straight airs and basic spins below the lip.	Gaining confidence in the halfpipe. Learning straight airs above the lip of the pipe and basic spins at the lip. Using effective pressure control to pump transition to maintain speed throughout the pipe.	Dynamic drop-ins, active pumping to generate speed in transition with effective edge transfers. Ability to air out of the pipe and rotate in multiple directions beyond 360.	Dynamic drop ins with speed and control. 6-10 feet of air all the way down the pipe. Linking tricks together regular and switch while beginning to incorporate inverted movements into the HP routine.	Full pipe runs with maximum amplitude and speed from top to bottom. Linked tricks with multiple rotations at 900 and beyond. Incorporating single and double inverted tricks into full runs. Creatvity in run choice is essential. Ability to revise trick sequence as conditions or events dictate.

	Slopestyle	Beginning to catch air on natural features and perform some simple flatground tricks such as ollies, butters, presses. Entry into terrain park on smaller jumps or rails.	Getting comfortable grabbing over small jumps and exploring small rotations 180 to 360 in both directions. Beginning to explore simple rail features.	Learning to spin beyond 360 in both directions forward and switch.	Comfortable spinning over large jumps in multiple directions beyond 360 and starting to experiment with inverted or off-axis skills.	Completing full slopestyle runs with multiple directions of rotation both regular and switch with some off-axis manuevers. SS Routines are planned out and incorporate a variety of jump and rail tricks.	Full runs with maximum amplitude and speed from top to bottom. Linked tricks with multiple rotations at 900 and beyond. Incorporating single and double inverted tricks into full runs. Creatvity in run choice is essential. Ability to revise trick sequence as conditions or events dictate.
	Ski Cross	Beginning to ski with confidence. Gaining mileage and confidence around the mountain.	Learning a variety of movements through freeskiing that will transfer to a race course. Gaining confidence gliding on flat terrain around the mountain. Learning to hit jumps at variable speeds.	Can effectively follow a race course by using a variety of turn shapes or and matching changes in terrain. Skis berms in one consistent line and can remain flat base through vertical features. Hitting larger jumps at varying speed to learn different jump techniques.	Further refinement of tactics to maintain speed and manage the course through a combinations of movements and skills. Skis berms with abiliity to maintain speed and gaining confidence switching between jump techniques. Gliding is precise and effective.	Using all skills to achieve precision of movements to generate speed. Development of race tactics and strategies.	All SX skills work together smoothly to maximize speed on the course. Race tactics are thorough and complete with a deep understanding of the "flow of the race".
Equipment Selection & Preparation Domain							
Elements	**Skis**	Twin tip skis Chest high, with a variation based on height, weight, and skill level.	1 pair of twin tip skis. Eye level with a variaition based on height weight and skill.	1 pair of skis is sufficient to use for slopestyle and halfpipe. Introduction into tuning equipment. Skis should be to forehead or above.	2 pair of skis is recommened specific for each discipline. Tuning skills continue to improve	Discipline specific skis, 2 pair are recommended for each discipline. Tuning skills continue to improve.	Discipline specific skis Professional support or consultation is recommended for preparation.
	Boots	Proper boot fit with soft even forward flex.	Proper boot fit with soft even forward flex.	Proper boot fit is critical, footbeds are recommended.	Proper boot fit, flex and performance. Begin to test discipline specific boots	Proper boot fit is key, with custom footbeds.	Discipline specific boots to maximize performance.
	Protection	Helmet required at all times.	Helmet required.	Helmet required, back protection, impact shorts, mouth guard recommended.	Helmet required, back protection, impact shorts, mouth guard recommended	Helmet required; back protection, impact shorts, and mouth guard recommended.	Helmet required; back protection, impact shorts, and mouth guard recommended.
	Poles	Optional - introduce at older levels as skill level develops.	With pole tips in snow arm should be at 90 degrees.	With pole tip in snow arm should be at 80 degrees.			
Mental Training Domain							
	Goal Setting	Define what a goal is. Remember, sport related activities and experiences are designed for enjoyment. End sessions by summarizing tasks and activities accomplished.	Clarify how to set goals. Describe which sport related activities and experiences cause enjoyment. Collaborate with supportive individuals and groups who can help interpret and organize the goal setting process.	Identify the 'why' for sport participation and deconstruct into goals. Outline each factor linked to training and competition to identify controllables. Utilize reflection of past experiences to build awareness of effects on performance. Collaborate with individuals and groups that support and align with stated goals.	Examine the 'why' for participation and deconstruct into long term goals. Align and apply challenging process goals for factors linked to training and competition. Create a reflective practice to evaluate past experiences, refine process goals and compose routines. Collaborate with individuals and groups that support and align with stated goals.	Clearly understand and define the 'why' for sport participation. Set process and performance goals prior to seasonal activities. Use a reflective practive to assess and refine goals. Form support structures that effectively encourage and assist goal attainment stategies.	Demonstrate a clear purpose and systematic approach to setting and achieving challenging goals for all factors linked to training and competition. Engage a support network to help schedule and prioritize periodization plans.
	Team, Training & Competition	Engage with all team members to learn and model fair and generous behavior. Perform game play that facilitates enjoyment of the sport.	Engage with all team members to demonstrate fair and generous behavior. Perform training exercises that facilitate fun and skill acquisition. Perform in competitions to have fun, acquire skills, and to learn teamwork and sportsmanship.	Engage with and support team members who share similar motivations. Perform training exercises that facilitate overall skill development and goal achievement. Perform in competitions to further develop skills, engage with others and achieve process goals.	Engage with and support team members who share similar motivations. Perform training exercises that facilitate focused skill acquisition and goal achievement. Perform in competitions to demonstrate and distinguish skills in support of performance goals.	Collaborate with team members who share similar motivations and behaviors. Perform training exercises that facilitate mastery of skills. Perform in competitions to demonstrate the mastery of factors linked to goal achievement and performance outcomes.	Challenge team members to share a common motivation for high performance and support one another with training and competing to one's potential.

Elements	**Self-Talk**	Model verbal cues that generate fun and fair play. Encourage games that highlight positive self talk and positive attitudes.	Describe which thoughts support confidence and motivation. Learn to use an internal dialogue that generates confidence and motivation.	Interpret recurring thoughts that arise during performance related experiences. Identify self talk patterns and their affect on attitude and intensity levels. Assign verbal cues and scripts that support sustained focus and/or a shift in focus.	Develop a supportive internal dialogue that generates confidence, motivation and grit to achieve goals. Use self talk to regulate intensity levels and maintain or shift focus	Continue to monitor and evaluate self talk during performance related experiences. Incorporate self talk into routines and process goals.	Master use of self talk strategies to meet the demands of the moment.
	Mental Imagery	Recall past activities that fostered enjoyment and successful performance of skills.	Visualize the sport environment and how to perform sport related skills. Visualize how to perform training exercises, and in competition, before executing	Identify the benefits of mental imagery. Imagine past successes and future achievements that generate confidence, motivation and grit to achieve goals.	Imagine past performance related experiences to evaluate cause/effect. Use imagery to generate confidence, motivation and grit to achieve goals. Imagine future scenarios to effectively plan and prepare for training and competition.	Continue to develop imagery skills. Master use of imagery for training purposes and pre-performance routines.	Master use of imagery to meet performance needs in all situations.
	Intensity	Learn to take a deep breath before attempting a specific skill, activity or exercise.	Identify when intensity levels increase. Practice taking deep breaths to regulate increased levels of intensity.	Evaluate intensity levels during past performance related experiences to determine causality and effectiveness. Perform mindful breathing techniques and engage in supportive self talk to either increase or decrease intensity levels to maximize performance output.	Continue to develop mindful breathing skills and integrate with supportive self talk. Adjust habits and routines to generate effective intensity levels.	Establish breath control and generate consistency of intensity levels during performance related experiences.	Master all techniques for managing intensity levels to meet the demands of the moment in all situations.
	Focus	Learn attentive body language and non-verbal cues to focus attention on a specific skill, activity or exercise.	Practice body language and non-verbal cues to increase sustained focus during training sessions.	Learn mindful practices to strengthen the ability to focus, refocus and shift attention on demand. Formulate cues that support adherence to goals and focusing on the right thing at the right time	Determine where focused attention should be at any given time for all factors linked to training and competition. Continue to develop mindfulness to strengthen the ability to focus, refocus and shift attention on demand. Formulate cues that support routines, process goals and focusing on the right thing at the right time	Continue to evaluate where focused attention should be at any given time to support process goals. Incorporate mindful practices into daily routines in and away from training and competition	Demonstrate a mindful awareness and engagement to focus on the present moment to meet performance demands in all situations.
Competition Domain							
Elements	**General Focus**	**Love the Sport for Fun**	**Compete for fun**	**Compete for skill development**	**Compete for skill acquisition**	**Compete for skill mastery**	**Compete to Win**
	Number of competitions		1 or 2 local events	4-8 events per season	6-12 events per season	8-15 events per season.	10-16 events per season.
	Events		Fun local or club based competitions that emphasize skill progression.	Regional USASA and USSA events	USASA Regional and Nationals. USSA Junior Nationals. Potential qualification for USSA Revolution Tour and FIS Junior World Championships.	USASA Regional and Nationals, USSA Revolution Tour, USSA Junior Nationals, FIS Junior World Championships. FIS SX at age 16.	USSA Grand Prix, FIS NorAm and World Cup, Other pro level invite events (Dew Tour, etc.)
	Organizations			USASA/USSA	USASA, USSA, FIS	USASA, USSA, FIS, AFP	USSA, FIS, AFP
	Disciplines			Experiment with all disciplines	Compete in many disciplines	Begin to specialize	Specialization