Appendix

Month 1, Week 1	
Cocontraction (Figure 1)	The athlete starts in upright sitting position with straight legs. The athlete places a towel or T-shirt under the knee and then tries to push the knee into the ground without lifting the heel off the floor.
Wall squat	The athlete lowers to squatting position (athletic position) with the back positioned against the wall. The athlete stands with the feet shoulder-width apart, the knees slightly bent, and the toes pointing straight forward. During the lowering of the body, the weight on the heels should be maintained, and the knees should never be in front of the toes. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.
Lateral jump and hold (Figure 2)	The athlete stands with feet shoulder-width apart and knees slightly bent. The athlete jumps laterally over a line, keeping the knees slightly bent, and landing on the other side of the line. Upon landing on the opposite side, the athlete immediately descends into the athletic position.
Front lunge (Figure 3)	The athlete takes an exaggerated step forward from a standing position, so that the front leg is positioned with the knee flexed to 90° and the lower leg is completely vertical. During this step, the hips are positioned as low as possible while maintaining the trunk upright. Physiologic curvature of the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. After 7 seconds, the athlete returns to the original position.
Step-hold (Figure 4)	The athlete takes a fast step forward and balances in the athletic position (7 s) on the stepping leg. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.

Figure 1. Cocontraction

Figure 2. Lateral jump and hold

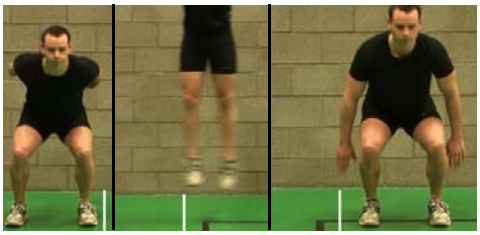


Figure 3. Front lunge

Figure 4. Step-hold

Month 1, Week 2	
Cocontraction (Figure 1)	The athlete starts in upright sitting position with straight legs. The athlete places a towel or T-shirt under the knees and then tries to push the knees into the ground without lifting the heels off the floor.
Squat	Lowering in squatting position (athletic position): The athlete stands with the feet shoulder-width apart, the knees slightly bent, and the toes pointing straight ahead. During the lowering of the body, the weight on the heels should be maintained, and the knees should never be placed in front the toes. Physiologic curvature of the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.
Step-hold (Figure 4)	The athlete takes a fast step forward and balances in athletic position (7 s) on the stepping leg. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.
Walking lunge	The athlete takes an exaggerated step forward from a standing position so that the front leg is positioned with the knee flexed to 90° and the lower leg is completely vertical. During this step, the hips are positioned as low as possible while maintaining the trunk upright. Physiologic curvature of

	the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. After 7 s, instead of returning to the start position, the athlete steps through with the back limb and proceeds forward with a lunge on the opposite limb.
Lateral jump and hold (Figure 2)	The athlete stands with the feet shoulder-width apart and the knees slightly bent. The athlete jumps laterally over a line, keeping the knees slightly bent, and landing on the other side of the line. During landing on the opposite side, the athlete immediately descends into the athletic position.
Front lunge (Figure 4)	The athlete takes an exaggerated step forward from a standing position so that the front leg is positioned with the knee flexed to 90° and the lower leg is completely vertical. During this step, the hips are positioned as low as possible while maintaining the trunk upright. Physiologic curvature of the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. After 7 s, the athlete returns to the starting position.
Month 1, Week 3	
Squat	Lowering in squatting position (athletic position): The athlete stands with the feet shoulder-width apart, the knees slightly bent, and the toes pointing straight ahead. During the lowering of the body, the weight on the heels should be maintained and the knees should never be placed in front of the toes. Physiologic curvature of the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.
Lateral jump and hold (Figure 2)	The athlete stands with the feet shoulder-width apart and the knees slightly bent. The athlete jumps laterally over a line, keeping the knees slightly bent, and landing on the other side of the line. During landing on the opposite side, the athlete immediately descends into the athletic position.
Single tuck-jump soft landing (Figure 5)	The athlete descends to the athletic position and continues by performing a maximal-height jump. During the jump, the athlete pulls the knees up as high as possible toward the chest, keeping the trunk upright. On landing, the athlete lands softly, using a forefoot-to-heel landing. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Lunge jump	The athlete takes the starting position of the front lunge with 1 leg positioned in 90° of flexion (jump leg) and the other straight back (support leg). Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise, during both take-off and landing. The athlete performs a maximal vertical jump, keeping the same leg for support and for jumping. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Lateral jump	The athlete performs a lateral jump and hold. However, upon landing on the opposite side, the athlete immediately attains the starting position and jumps back to the other side of the line. This exercise should be repeated as quickly as possible in the given time. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.

Figure 5. Single tuck-jump, soft landing

Month 1, Week 4	
Squat	Lowering in squatting position (athletic position): The athlete stands with the feet shoulder-width apart, the knees slightly bent, and the toes pointing straight ahead. During the lowering of the body, the weight on the heels should be maintained, and the knees should never be placed in front of the toes. Physiologic curvature of the trunk must be maintained during the exercise. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.
Lateral jump	The athlete performs a lateral jump and hold. However, upon landing on the opposite side, the athlete immediately resumes the starting position and jumps back to the other side of the line. This exercise should be repeated as quickly as possible in the given time. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.

Double tuck-jump	The athlete performs a single tuck-jump with an additional jump performed immediately after the first jump. Contact time between the jumps should be minimized. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Broad jump (Figure 6)	The athlete starts in the athletic position and continues by performing a maximal forward jump. On landing, the athlete lands softly, using a forefoot-to-heel landing and maintains the athletic position for 7 s. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Scissor jump	The athlete performs a lunge jump, but instead of maintaining the position of the jump and support legs, the athlete performs a maximal vertical jump, alternating the position of the legs at maximal height. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.

Figure 6. Broad jump

Month 2, Week 1	
Core stability	The athlete lies on a mat and relaxes. For 7 s, the athlete contracts the transversus abdominus muscle by pulling the stomach in without elevating his chest. After that, the athlete tries to push the lower back into the mat, also for 7 s.
Pelvic bridge	The athlete lies supine with the knees flexed and the feet planted on the floor. The athlete pulls in the navel before elevating the hips and then extends the hips so that the trunk is aligned with the thighs. Excessive elevation of the hips should be avoided. This position should be held for 7 s.
Repeated tuck-jump	The athlete performs a single tuck-jump, with an additional jump performed immediately after the first jump. The additional jumps are performed continuously, and contact time between the jumps should be minimized. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Squat jump	Lowering in squatting position (athletic position). The athlete performs a jump, raising both arms overhead, landing in squatting position and touching both hands to the floor. During the lowering of the body, the weight on the heels should be maintained, and the knees should never be placed in front of the toes. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.
Jump, single-legged hold	The athlete begins this exercise in the athletic position. The athlete continues the exercise by jumping forward, landing and balancing for 7 seconds on one leg in a single leg athletic position. Sagittal alignment of the hip, knee, and ankle joint must be maintained during the squat.
Month 2, Week 2	
Single-legged pelvic bridge	The athlete performs a pelvic bridge but plants 1 foot on the floor and fully extends the other leg. The athlete pulls in the navel before elevating the hips and then extends the hips so that the trunk is aligned with the thighs. Excessive elevation of the hips should be avoided. This position should be held for 7 s.
Prone bridge (elbows and knees) hip extension, opposed shoulder flexion	The athlete starts in prone position with the elbows flexed and knees on the ground. The athlete elevates the contralateral arm and leg for 7 s. During this exercise, the athlete should pull the navel in and maintain normal physiologic curve of the trunk.
Side-to-side tuck-jump	The athlete performs repeated tuck-jumps but jumps from 1 side to the line and lands on the other side of the line. The additional jumps to the other side of the line are performed continuously, and contact time between jumps should be minimized.
One-legged lateral hop	The athlete stands on 1 foot with the knee slightly bent. The athlete jumps laterally over a line,

and hold (Figure 7)	keeping the knee slightly bent and landing on the other side of the line. During landing, the athlete immediately descends to the 1-legged athletic position. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.
Hop-hold	The athlete stands on 1 foot with the knee slightly bent. The athlete performs a forward hop, with the push-off leg being the landing leg. The athlete lands in a 1-legged athletic position.

Figure 7. Lateral hop and hold

Month 2, Week 3	
Single-legged pelvic bridge (Figure 8)[a]	The athlete lies supine with 1 knee flexed and the foot planted on the mat; the other leg is fully extended. The athlete pulls in the navel before elevating the hips and then extends the hips so that the trunk is aligned with the thighs. Excessive elevation of the hips should be avoided. This position should be held for 7 s.
Prone bridge hip extension	The athlete starts in prone position with the elbows flexed and toes on the ground. The athlete elevates the contralateral arm and leg for 7 seconds. During this exercise, the athlete should pull the navel in and maintain normal physiologic curve of the trunk.
Side-to-side tuck jumps	The athlete performs repeated tuck-jumps but jumps from 1 side to the line and lands on the other side of the line. The additional jumps to the other side of the line are performed continuously, and contact time between jumps should be minimized.
Lateral hops	The athlete stands on 1 foot in athletic position. The athlete jumps laterally over a line, keeping the knee slightly bent and landing on the other side of the line. During landing, the athlete should immediately perform the next lateral hop over the line. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. Jump height is not important during this exercise.
Double-legged 90° hop-hold	The athlete descends to athletic position and continues by performing a maximal-height jump. During the maximal jump, the athlete should rotate 90°. During landing, the athlete should immediately descend to athletic position and remain in this position for 7 s. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.

Figure 8. Single-legged pelvic bridge

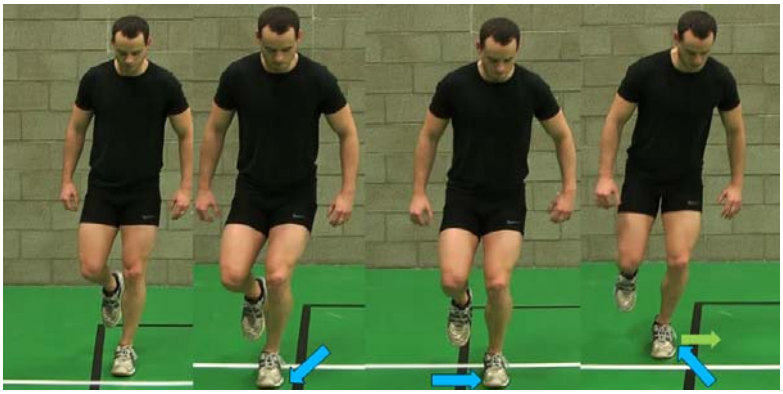
Month 2, Week 4	
Single-legged pelvic bridge with ball (Figure 8)	The athlete performs a single-legged pelvic bridge, holding a ball directly above the hands. The athlete contracts the transversus abdominus muscle by pulling in his stomach in, prior to elevating his hips and then extends the hips so that the trunk is aligned with the thighs. Excessive elevation of the hips should be avoided. This position should be held for 7 s.
Prone bridge (elbows and knees) hip extension, opposed shoulder flexion[a] (Figure 9)	The athlete performs a prone bridge hip extension but with the elbows flexed on a mat and with the knees on the ground. The athlete elevates the contralateral arm and leg for 7 s. During this exercise, the athlete should pull the navel in and maintain normal physiologic curve of the trunk.
Lateral hops with ball	The athlete performs lateral hops but upon landing needs to catch and return a thrown ball. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the performance of the exercise. Hop height is not important during this exercise.
Single-legged lateral hop-hold[a]	The athlete stands on 1 foot with the knee slightly bent. The athlete performs a lateral hop onto the mat, landing in 1-legged athletic position. The athlete then hops off the same side of the mat onto the ground, landing again in 1-legged athletic position and repeats the exercise.
Single-legged 90° hop-hold	The athlete stands on 1 foot and descends to athletic position. The athlete continues by performing a maximal-height jump while rotating 90°. During landing, the athlete immediately descends to the 1-legged athletic position and remains in this position for 7 s. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.

Figure 9. Prone bridge (elbows and knees) hip extension, opposed shoulder flexion[a]

Month 3, Week 1	
X Hops (Figure 10)	The athlete stands on 1 foot with the knee slightly bent and faces a cross (+) formed on the ground. The athlete jumps diagonally forward over the cross. During landing, the athlete immediately descends to 1-legged athletic position and remains in this position for 7 s. The athlete continues the exercise by performing another hop laterally over the line and then back to the starting position. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the performance of the exercise. Jump height is not important during this exercise.
Hop-hop-hold	The athlete stands on 1 foot with the knee slightly bent. The athlete performs 2 forward hops and lands in 1-legged athletic position.
Mattress jumps	The athlete stands on a mat and performs 2-footed jumps on the mat in an X format.
Single-legged 90° hop-hold[a]	The athlete performs a single-legged 90° hop-hold on a mat. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.

Maximum squat-jump hold	The athlete performs a squat jump but gains maximal height. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.

Figure 10. X Hops



Month 3, Week 2

Crossover hop-hop-hold (Figure 11)	The athlete stands on 1 foot with the knee slightly bent. The athlete performs 2 forward hops on alternating legs and lands in 1-legged athletic position.
Single leg 4 way hop-hold[a]	The athlete stand behind a mat on 1 foot with the knee slightly bent. The athlete hops forward onto the mat in 1-legged athletic position and remains in this position for 7 s. The athlete proceeds by laterally hopping off the mat. The athlete continues by performing hops on and off the mat in a cross format. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.
Single leg 90° hop-hold ball* (Figure 12)	The athlete performs a single-legged 90° hop-hold on a mat but catches a ball during landing. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.
Jump, jump, jump, vertical	The athlete starts in the athletic position, continues by performing 3 maximal forward jumps, and immediately performs a maximal-height jump. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Maximum squat jumps hold	The athlete performs a squat jump but gains maximal height. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the squat.

Figure 11. Crossover hop-hop-hold

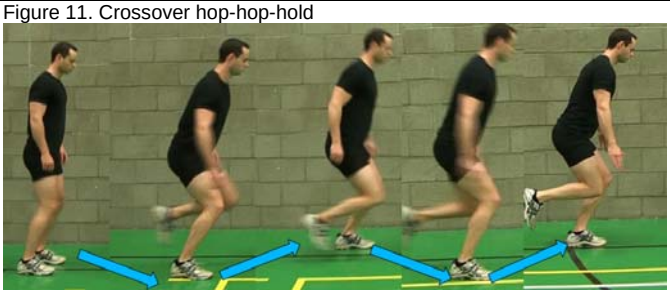


Figure 12. Single-legged 90° hop-hold ball[a]

Month 3, Week 3

Single-legged 4-way hop-hold ball[a]	The athlete performs a single-legged 4-way hop-hold but catches a ball during each landing. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise.
Single-legged 180° hop-hold	The athlete performs a single-legged hop-hold but rotates 180°.
Jump, jump, jump, vertical	The athlete starts in athletic position, continues by performing 3 maximal forward jumps, and immediately performs a maximal-height jump. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Mattress jump	The athlete stands on a mat and performs 2-footed jumps on the mat in a cross format.
Running, jump down on 1 leg, jump (Figure 13)	The athlete runs in place on a bench for several seconds. The athlete jumps down on 1 leg and immediately performs a 1-legged jump over a ball or bench, landing again on the same leg.

Figure 13. Running, jump down on 1 leg, jump

Month 3, Week 4	
Single leg 180° hop-hold	The athlete performs a single-legged hop-hold but rotates 180°.
Jump, jump, jump, vertical	The athlete starts in athletic position, continues by performing 3 maximal forward jumps, and immediately performs a maximal-height jump. Sagittal alignment of the hip, knee, and ankle joints must be maintained during the exercise. When the athlete cannot maintain the alignment during landing, a jump at submaximal height should be performed.
Running, jump down 1 leg, jump (Figure 13)	The athlete runs in place on a bench for several seconds. The athlete jumps down on a single leg and immediately performs a 1-legged jump over a ball or bench, landing again on the same leg.
Lay up	The athlete starts in athletic position and jumps up to the ring. Upon landing, the athlete lands in squatting position.
Height jump	Jump and reach: After the maximal jump, the athlete lands at the take-off spot but in deeper position.

[a] Exercise on a mattress.