

Force Fitness Instructor Course Exercise Guidebook

The Martial Arts and Fitness Center of Excellence

PLANK

The plank is more than just a core exercise; it's a game-changer for building strength and stability in real-world scenarios. Whether you're carrying heavy gear, bracing for impact during a tactical maneuver, or maintaining posture during prolonged operations, planks target your core, shoulders, and glutes, reinforcing the muscles necessary for efficient movement and injury prevention. By training the plank, you enhance your ability to perform dynamic tasks with improved posture, balance, and endurance. This foundational move ensures you have the strength to tackle physically demanding situations while minimizing the risk of fatigue or injury.

FARMER CARRY

Exercise Pattern: Plank

Preparation: Grasp two dumbbells (or other similar weight implement) with a neutral grip. Stand tall with a neutral spine. Weights held at the side.

Execution: While maintaining an active core and neutral spine, walk forward naturally without leaning to one side or the other..

Major Muscles: Core, Forearms.

Additional Info: Can be modified by using only one weight implement, a suitcase carry.

Alternative Exercises:



PLANK

Exercise Pattern: Plank

Preparation: Lay flat on the deck, face down, with forearms approximately shoulder width apart and palms flat on the deck or in a fist.

Execution: Lift and hold the torso up from the deck, creating a straight line from head to feet. Isometrically hold for prescribed duration..

Major Muscles: Abdominals, Core.

Additional Info:

Alternative Exercises: Side Plank, Sandbag

Lateral Bag Drag



SIDE PLANK

Exercise Pattern: Plank

Preparation: Lay on your left or right side, resting the same side forearm and hip on the deck.

Execution: Lift and hold the torso up from the deck, creating a straight line from head to feet. Isometrically hold for prescribed duration..

Major Muscles: Abdominals, Core.

Additional Info:

Alternative Exercises: Plank



SANDBAG LATERAL BAG DRAG

Exercise Pattern: Plank

Preparation: Assume a plank position, face down on the deck, with forearms approximately shoulder width apart and palms flat on the deck, creating a straight line from head to feet. The desired weighted bag under the left armpit, within reach of the right hand.

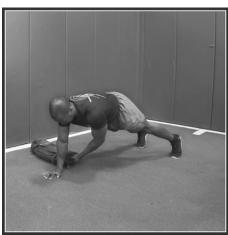
Execution: Lift the right arm off the deck, grab the bag and drag it to the opposite side. Swap hand positions, with the right arm on the deck, grab the bag with the left hand to return it to the starting position..

Major Muscles: Abdominals, Obliques, Core.

Additional Info: Do not let hips rotate or sag.

Alternative Exercises: Plank, Side Plank







TRX PLANK ON ELBOW

Exercise Pattern: Plank

Preparation: Set TRX handles to mid-shin height. Insert feet into TRX straps toes first. Assume a plank position with forearms directly under the shoulders.

Execution: Lift and hold the torso up from the deck, creating a straight line from head to feet. Isometrically hold for prescribed duration..

Major Muscles: Abdominals, Core.

Additional Info:

Alternative Exercises:





ROTATION

The rotate movement is essential for developing rotational strength and mobility, which are crucial in tasks that involve turning, twisting, or shifting weight. Whether you're swinging an axe, reaching to grab an object from the side, or reacting to unexpected movements in dynamic situations, rotational exercises target your core, hips, and shoulders, improving your ability to generate force across different planes of motion. Training the rotate motion enhances your agility, stability, and power, ensuring that you can handle activities requiring quick, controlled movements while minimizing strain on your body and reducing the risk of injury.

BAND STANDING TWIST

Exercise Pattern: Rotation

Preparation: Loop a band around an immovable object about chest height. Standing off at a 90 degree angle from the anchor point, arms extended, hold the band with both hands such that there is some tension.

Execution: With arms locked, rotate your core from one side horizontally across your body to the other side, pivoting on the foot closest to the anchor point. .

Major Muscles: Abdominals, Core.

Additional Info:

Alternative Exercises: Med Ball Russian

Twist





MED BALL RUSSIAN TWIST

Exercise Pattern: Rotation

Preparation: Sit on the deck holding a medicine ball with legs slightly bent and feet held 6 inches off the deck. Once balanced, pick up a medicine ball and hold it centered over the naval. Maintain a neutral spine throughout.

Execution: While holding the med ball, rotate the core and move the medicine ball to touch the deck on each side of your body. Keep the feet as steady as possible by rotating with control. .

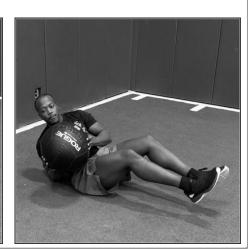
Major Muscles: Abdominals, Core.

Additional Info:

Alternative Exercises: Band Standing Twist







MED BALL WOOD CHOPPERS

Exercise Pattern: Rotation

Preparation: Stand with feet shoulder width apart, knees slightly bent, holding medicine ball in front of your chest.

Execution: Swing the medicine ball in a diagonal motion across the body, using the core muscles to decelerate the med ball at the end of it's path. The speed should be quick and powerful..

Major Muscles: Abdominals, Obliques, Core.

Additional Info:

Alternative Exercises: Med Ball Russian

Twist, Band Standing Twist







MED BALL STANDING SIDE TOSS

Exercise Pattern: Rotation

Preparation: Stand with your partner, with heels in line, about 5 feet away. Turn outboard to face opposite directions (such that the left shoulder of one is facing the left shoulder of the other). One partner will start holding the med ball.

Execution: The partner with the ball will rotate and pivot around their lead leg, to pass the ball in the air to their partner. The receiving partner will catch the ball stopping its momentum, and passing the ball back in the same manner..

Major Muscles: Abdominals, Obliques, Core.

Additional Info:

Alternative Exercises: Med Ball Russian Twist, Band Standing Twist







HANGING OBLIQUE KNEE RAISES

Exercise Pattern: Rotation

Preparation: Perform a "dead hang" on a

pull-up bar.

Execution: With straight arms, lift your knees up together bringing them above the waist towards on elbow at a time. Lower the knees back to a dead hang and repeat on the opposite side..

Major Muscles: Abdominals, Obliques, Core.

Additional Info:

Alternative Exercises: Hanging Leg Raises, Med Ball Russian Twist, Band Standing Twist





CORE

Whether you are lifting heavy loads overhead, stabilizing your body during physically demanding activities like hiking, or supporting a combat load and a heavy pack, core exercises are essential for developing the strength, stability, and muscular endurance required to perform these tasks.

ABDOMINAL CRUNCH

Exercise Pattern: Core

Preparation: Lay on your back, with knees bent, and feet flat on the deck. Arms crossed over the chest, hands grasping biceps. Head slightly off the deck.

Execution: Lift the torso off the deck until the forearms touch the thighs. Slowly lower back to the starting position and repeat the motion as prescribed..

Major Muscles: Abdominals.

Additional Info:

Alternative Exercises: Med Ball V-Up, Toe Touches, Flutterkicks, Buddy Leg Raise





PRONE SUPERMAN

Exercise Pattern: Core

Preparation: Lay on your stomach with forehead resting on the fist of one hand. The other hand is extended in a "thumbs-up" position.

Execution: Simultaneously, raise the extended arm and opposite leg into the air. Elbow and knee locked. Pause at the peak contraction before returning to the starting position.

Major Muscles: Erector Spinae.

Additional Info:

Alternative Exercises:





MED BALL V-UP

Exercise Pattern: Core

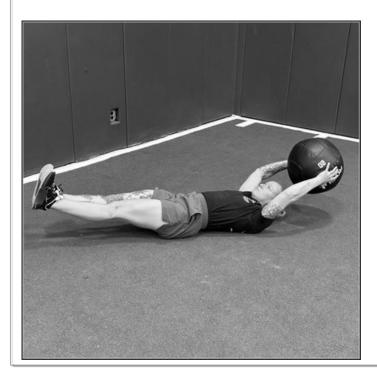
Preparation: Lay on your back grasping a medicine ball. Fully extend your arms and legs vertically, holding the med ball over your shoulders. Slightly lift the head off the deck.

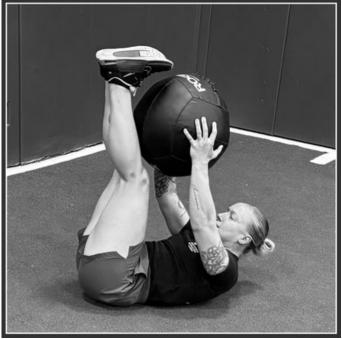
Execution: Simultaneously, raise both med ball and feet, as high as possible, until they meet at the apex above your body. Keep the knees locked throughout, rotating around the pelvis and glutes. Slowly lower the med ball and legs back to the starting position..

Major Muscles: Abdominals.

Additional Info:

Alternative Exercises: Abdominal Crunch, Toe Touches, Flutterkicks, Buddy Leg Raise





Toe Touches

Exercise Pattern: Core

Preparation: Lay on your back with legs extended straight up in the air, bent 90 degrees at the hip. With the back still on the ground, arms outstretched towards the feet.

Execution: Curl the abdomen and torso as you reach and extend your arms to your toes. Shoulder blades should come off the deck and fingers should touch the toes at the top of the contraction. Lower the shoulder blades back to the deck to return to the starting position..

Major Muscles: Abdominals.

Additional Info: Head should remain off the deck the entire movement.

Alternative Exercises: Abdominal Crunch, Flutterkicks, Buddy Leg Raise





FLUTTERKICKS

Exercise Pattern: Core

Preparation: Lay on your back, with hands underneath the glutes and legs fully extended hovering 6 inches off the deck. The head should remain slightly off the deck the entire movement.

Execution: Alternating each leg, begin raising each leg approximately 18 inches up and down in a scissor fashion. The legs should be kept straight and ankles dorsiflexed..

Major Muscles: Abdominals.

Additional Info:

Alternative Exercises: Abdominal Crunch, Toe Touches, Flutterkicks, Buddy Leg Raise







MED BALL PARTNER TOSS

Exercise Pattern: Core

Preparation: Sit on the deck holding a medicine ball with legs slightly bent and feet held 6 inches off the deck. Your partner standing directly in front.

Execution: Continuously toss the med ball back and forth with your partner, maintaining the starting position.

Major Muscles: Abdominals.

Additional Info: Maintain a neutral spine and tall posture.

Alternative Exercises: Abdominal Crunch, Toe Touches, Flutterkicks, Buddy Leg Raise





BUDDY LEG RAISE

Exercise Pattern: Core

Preparation: Lay on your back with a partner standing over your head. Grasp your partner's ankles.

Execution: Curl the abdomen and raise both legs together upwards, bending at the waist. At the peak of the contraction, the partner will push the feet back down from the top. .

Major Muscles: Abdominals.

Additional Info: Partner may push off in diagonal directions to shift focus to obliques.

Alternative Exercises: Abdominal Crunch, Flutterkicks, Buddy Leg Raise, Toe Touches





Hanging Leg Raises

Exercise Pattern: Core

Preparation: Perform a "dead hang" on a

pull-up bar.

Execution: With locked knees, raise both legs straight up to form at least a 90 degree hip angle. Slowly lower the legs to return to the

start position..

Major Muscles: Abdominals.

Additional Info: Limit swaying motion.

Alternative Exercises: Abdominal Crunch, Flutterkicks, Buddy Leg Raise, Toe Touches





TRX ATOMIC PUSH-UPS

Exercise Pattern: Core

Preparation: Set TRX handles to knee height. Insert feet into TRX straps toes first. Assume a plank position with hands directly under the shoulders.

Execution: Perform a push-up. After completion, pull both knees up and under the body towards the chest (a reverse crunch). Extend legs back out to the plank position to return to the starting position..

Major Muscles: Abdominals, Chest, Triceps.

Additional Info: Limit sagging of the back.

Alternative Exercises: Abdominal Crunch, Flutterkicks, Buddy Leg Raise, Toe Touches, Hanging Leg Raises







TRX PIKE

Exercise Pattern: Core

Preparation: Set TRX handles to mid-shin height. Insert feet into TRX straps toes first. Assume a plank position with hands directly under the shoulders.

Execution: Lift the hips up and pull both feet under the body towards the hands, making sure the hips raise towards the sky while keeping the legs locked. Slowly lower the hips to return to the starting position..

Major Muscles: Abdominals.

Additional Info:

Alternative Exercises:





Push

Whether you're breaching a door, carrying heavy gear, pushing through rough terrain, or engaging in close combat, push exercises strengthen the chest, shoulders, and triceps; crucial muscle groups for power and endurance. Building strength in these areas ensures you can generate force efficiently, whether you're pressing up from the ground, driving through an obstacle, or maintaining control during high-intensity operations. Properly training the push movement enhances upper body stability, posture, and resilience, allowing Marines to perform physically demanding tasks with greater effectiveness and safety, even in unpredictable, high-stress environments.

BARBELL BENCH PRESS

Exercise Pattern: Push

Preparation: Lay flat on a bench with feet flat on the deck and head, shoulders, and butt in contact with the bench. Retract and depress the scapula during the entire movement. Grasp the bar at or just outside of shoulder width.

Execution: Extend the chest and maintain depressed and retracted scapula. Unrack the barbell with locked elbows, such that it rests directly over the shoulder joint. Lower the bar to the chest and gently touch the bottom of the sternum or top of the abdomen. At this position the forearms should be vertical. Return to the start position by pressing the bar upwards..

Major Muscles: Chest, Triceps, Shoulders.

Additional Info: Optimizing grip placement can be done by sliding the grip in/out, at the bottom of the lift (barbell on the chest) - looking for a 90-degree angle at the elbow. The bar path should NOT be vertical, it should follow a diagonal or "J" shaped path.

Alternative Exercises: Push-Up, Barbell Overhead Press, TRX Chest Press



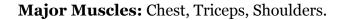


PUSH-UP

Exercise Pattern: Push

Preparation: Start in front leaning rest position. Feet hip width apart and neutral spine. Hands shoulder width apart, directly under the shoulders.

Execution: Lower the entire body to the deck at the same time. Once the chest touches the deck, push back up to the starting position with both arms locking out simultaneously..



Additional Info:

Alternative Exercises: TRX Chest Press, Barbell Bench Press





OVERHEAD DUMBBELL TRICEPS EXTENSION

Exercise Pattern: Push

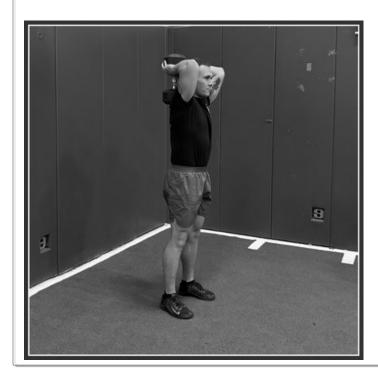
Preparation: May be seated or standing. Grasp a dumbbell with both hands, and extend it overhead, such that the elbows are fully extended and the palms towards the sky.

Execution: Bend at the elbows, allowing the dumbbell to travel behind the head. Lower the weight as far as possible, while the upper arm stays in a vertical position and spine remains neutral. Extend at the elbows to return to the starting position..

Major Muscles: Triceps.

Additional Info: Do not allow lower back to extend. A single arm variation can be done, with the unloaded hand supporting the elbow overhead.

Alternative Exercises: TRX Triceps Press





BARBELL OVERHEAD PRESS

Exercise Pattern: Push

Preparation: May be seated or standing. Grasp the barbell with a shoulder width (or slightly wider) grip. Assume the front-rack position, with the barbell resting in the hand and supported by the front of the shoulder. If standing, stance should be shoulder width apart. Core should be braced to maintain neutral spine throughout.

Execution: Retract the head rewards and press the barbell overhead. The forearms should maintain vertical position the entire movement. As the barbell passes the face the head can return forward. Once overhead the biceps should be next to the ears with the barbell, shoulders, hip, and feet in-line vertically. From the top, slowly reverse the movement to return to the start position..

Major Muscles: Triceps, Shoulders.

Additional Info: Cue to "squeeze the glutes" to maintain lumbar and pelvic control, reducing excessive spinal extension.

Alternative Exercises: Push-Up, Barbell Overhead Press, TRX Chest Press





TRX CHEST PRESS

Exercise Pattern: Push

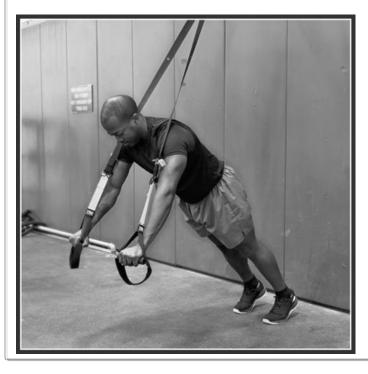
Preparation: Stand facing away from the anchor point. Grasp the handles with an overhand grip and fully extend the arms to shoulder height. Walk your feet backwards to achieve the desired working angle with the body.

Execution: Retract and depress the scapula during the entire movement. Lower the entire body at the same time, by bending at the elbows. Descend as far as possible or until the handles come in contact with the upper chest. Extend the arms to return to the starting position..

Major Muscles: Chest, Triceps, Shoulders.

Additional Info:

Alternative Exercises: Push-Up, Barbell Overhead Press, Barbell Bench Press





TRX TRICEPS PRESS

Exercise Pattern: Push

Preparation: Stand facing away from the anchor point. Grasp the handles with an overhand grip and fully extend the arms to shoulder height. Walk your feet backwards to achieve the desired working angle with the body.

Execution: Bend at the elbows until the arms reach approximately 90-degrees, with the hands at the bridge of the nose and wrists straight. Extend the elbows to return to the starting position..

Major Muscles: Triceps, Shoulders.

Additional Info:

Alternative Exercises: Overhead Dumbbell Triceps Extension, TRX Chest Press, Barbell Bench Press





PULL

Whether you're scaling a wall, hauling heavy equipment, dragging your buddy off the X, or handling weapons in combat, pull exercises target the back, biceps, and forearms; key muscle groups for generating strength and control. Strengthening these muscles is vital for actions that require gripping, lifting, and pulling in intense, dynamic environments. Properly training the pull movement enhances posture, stability, and endurance, enabling Marines to execute physically demanding tasks with precision and efficiency, especially when navigating obstacles, handling heavy loads, or performing rescue operations under pressure.

BARBELL BENT OVER ROW

Exercise Pattern: Pull

Preparation: Grasp a barbell with an overhand grip, hands just outside shoulder width. While maintaining a neutral spine, hinge at the hips until the chest is parallel to the deck.

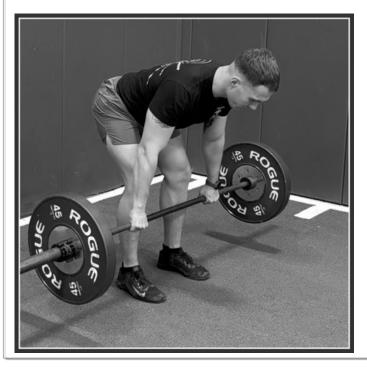
Execution: Without moving the torso or legs, pull the barbell upwards and touch the bottom of the rib cage or top of the abdomen. The forearm should remain vertical throughout. Lower the bar, with control, to return to the starting position..

Major Muscles: Back, Biceps.

Additional Info:

Alternative Exercises: Inverted Row, Pull-

Up





INVERTED ROW

Exercise Pattern: Pull

Preparation: Position a barbell waist high in an immovable rack. Lie underneath the barbell and grab it with an overhand grip, slightly wider than shoulder width. Hang from the bar, such that the shoulder joint is directly under the barbell. From this inverted and modified plank position, the core should be contracted to maintain rigidity with only the heels touching the deck.

Execution: Flex at the elbows and retract the scapula to pull the entire torso up to the barbell. Pause at the peak of the contraction and slowly lower yourself back to the starting position..

Major Muscles: Back, Biceps.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row





BARBELL SHRUG

Exercise Pattern: Pull

Preparation: Grasp a barbell with an overhand grip, hands shoulder width. Unrack the barbell such that it hangs from fully extended arms at mid-thigh height.

Execution: Pull the barbell upwards towards the ears, keeping the elbows locked out. Pause briefly at the peak of the contraction and lower the barbell back down to the starting position with control..

Major Muscles: Trapezius, Back.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row





BENT OVER RAISES

Exercise Pattern: Pull

Preparation: Grasp two dumbbells or light weights, one in each hand, with an overhand grip. While maintaining a neutral spine, hinge at the hips until the chest is parallel to the deck.

Execution: While maintaining a slight bend in the elbow, lift both arms rearwards towards the sky by pinching the scapulae together. Pause at the peak of the contraction and slowly lower the weight to the starting position..

Major Muscles: Shoulder.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row, Inverted Row





PULL-UP

Exercise Pattern: Pull

Preparation: Hang from a bar with overhand grip, hands slightly wider than shoulder width.

Execution: Pull the entire body upwards, initiating the movement from the scapula. Continue pulling until the chin comes over the bar, then return to the starting position with control..

Major Muscles: Back, Biceps.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row, Inverted Row





BICEP CURL

Exercise Pattern: Pull

Preparation: Grasp a dumbbell in each hand, palms facing forward. Stand tall with the weights down at your side, arms fully extended.

Execution: Bend at the elbow and curl the dumbbells simultaneously towards the chest, keeping the upper arm next to the rib cage. From the top, reverse the movement under control to return to the starting position..

Major Muscles: Biceps.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row, Inverted Row





TRX Low Row

Exercise Pattern: Pull

Preparation: Stand facing the anchor point and grasp the handles with a neutral grip. Lean backwards and extend the arms to hang from the TRX. The heels should remain in contact with the deck and core engaged to maintain rigidity in this semi-reclined plank position.

Execution: Flex at the elbows and retract the scapula to pull the entire torso up until the knuckles become even with the rib cage. Pause at the peak of the contraction and slowly lower yourself back to the starting position..

Major Muscles: Back, Biceps.

Additional Info:

Alternative Exercises: Barbell Bent Over

Row, Inverted Row





SQUAT

Whether you are performing a fireman's carry, carrying heavy equipment across rugged terrain, climbing up a steep incline with full gear, or lifting and positioning heavy engine parts during maintenance, squat exercises help to develop the strength in your legs, core, and lower body, which is essential for maintaining stability, power, and endurance during these demanding tasks.

BARBELL BACK SQUAT

Exercise Pattern: Squat

Preparation: Step under the bar, placing it across the top of the shoulder blades. Stand to unrack and take a step away from the rack. Stand with feet hip to shoulder width apart, and toes slightly out.

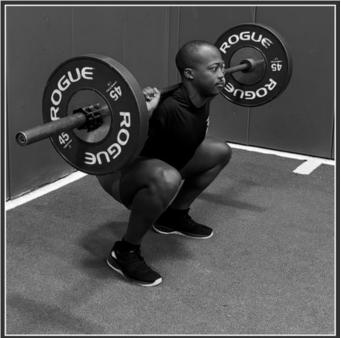
Execution: Break at the knees and hips simultaneously, lowering the weight and maintaining even pressure on the feet. Descend as far as possible while keeping the heels on the ground, knees tracking in line with the feet, and torso parallel to the shins. At the bottom, drive into the ground until standing straight.

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: For most people, at the bottom of the hole, shin and back angles should be roughly similar. Small plates can be used under the heels to artificially increase dorsiflexion (potential fix if the back angle is too horizontal in above scenario).

Alternative Exercises: Goblet Squat, Front Squat, Sandbag Shoulder Squat





BARBELL FRONT SQUAT

Exercise Pattern: Squat

Preparation: Unrack the bar so the hands are under the bar, palms up, elbows raised as high as possible. The bulk of the weight is supported on the front of the shoulders. Stand with feet hip to shoulder width apart, and toes slightly out.

Execution: Break at the knees and hips simultaneously, lowering the weight and maintaining even pressure on the feet. Descend as far as possible while keeping the heels on the ground, elbows raised as high as possible, and knees tracking in line with the feet. At the bottom, drive into the ground until standing straight.

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: If traditional Front rack grip is uncomfortable or inadequate, a cross-grip approach can be used.

Alternative Exercises: Goblet Squat, Barbell Back Squat, Sandbag Shoulder Squat





BARBELL OVERHEAD SQUAT

Exercise Pattern: Squat

Preparation: Grasp the bar with an overhand grip and press it overhead. The bar, when arms are locked out, should be six inches from the top of the head. When viewed from the side, a vertical line should drop straight down and pass through the shoulder, hip, knee, ankle, and mid foot.

Execution: Break at the knees and hips simultaneously, lowering the weight and maintaining even pressure on the feet. Descend as far as possible while keeping the heels on the ground, barbell above the center of balance, and knees tracking in line with the feet. At the bottom, drive into the ground until standing straight.

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: For most people, the perceived lack of overhead stability is actually lack of dorsiflexion. If the lift appears unstable (or barbell drifting too far forwards), place plates under the heels to artificially increase dorsiflexion.

Alternative Exercises: Plate Overhead Squat, Goblet Squat, Front Squat









PLATE STEP UP

Exercise Pattern: Squat

Preparation: Start facing a box or bench, grasping the weight in both hands.

Execution: Place one foot on top of the box and ascend to the top, while keeping the chest up, until standing fully on top of the box. Once atop, step back down to the starting position..

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: Alternate legs to ensure an even stimulus is applied bilaterally. Dumbbells, Kettlebells, and/or other weight implements can be utilized instead of plates.

Alternative Exercises: Dumbbell Split Squat, Goblet Squat, Front Squat



Step-Up With Dumbbells - Start



Step-Up With Dumbbells - Finish

TRX PISTOL SQUAT

Exercise Pattern: Squat

Preparation: Stand facing the anchor point with feet hip-width apart and TRX at midlength. Hold handles with a neutral grip and elbows bent at the side. Place tension on the TRX by slightly leaning backwards.

Execution: Pick one foot off the deck and squat straight down. Descend as far as possible while keeping the knee tracking in line with the foot, chest up, and heel on the ground. During the movement the TRX will provide tension and support to aid in balance. At the bottom, drive into the ground until standing and repeat on the opposite side..

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: Applying rearward tension on the TRX will act to counter-balance the squat and assist with the movement.

Alternative Exercises: Dumbbell Split Squat, Goblet Squat, Front Squat, Plate Step Up





DUMBBELL SPLIT SQUAT

Exercise Pattern: Squat

Preparation: Stand in a staggered stance with the heel of the rear foot off the deck. Grasp dumbbells in each hand, hanging at the side, in a neutral grip.

Execution: Break at the knees and hips simultaneously, lowering the weight while maintaining most of the pressure on the front foot. Descend as far as possible while keeping the heel of the front foot on the ground, chest up, and knees tracking in line with the feet. At the bottom, gently tap the back knee to the ground (or stop just before touching) and drive into the ground until returning to the start position. .

Major Muscles: Quadriceps, Hamstrings, Glutes.

Additional Info: Ensure the staggered stance is not too narrow, this can lead to instability.

Alternative Exercises: Dumbbell Split Squat, Goblet Squat, Front Squat, Plate Step Up, TRX Pistol Squat



Split Squat With Dumbbells - Start



Split Squat With Dumbbells - Bottom







Split Squat With Barbell - Bottom

KETTLEBELL GOBLET LATERAL SQUAT

Exercise Pattern: Squat

Preparation: Stand with feet wider than shoulder width apart, toes pointed forward. Grasp a kettlebell like a goblet, keeping the weight close to your chest.

Execution: Break at the knees and hips simultaneously, descending over one foot, the majority of your weight should be supported by that same foot. Descend as far as possible while keeping both feet flat on the ground and chest up. The opposite side leg will be fully extended with the foot flat on the deck and toes pointing forward. At the bottom, drive into the ground until standing upright in the starting position.

Major Muscles: Quadriceps, Adductors, Hamstrings, Glutes.

Additional Info: Rotating the opposite (unloaded) leg, such that the toes flare up to the sky can be a useful modification to challenge the hamstrings and adductors.

Alternative Exercises: Lateral Lunge, Dumbbell Split Squat, Goblet Squat, Front Squat, Plate Step Up, TRX Pistol Squat





HINGE

Whether you are lifting a heavy ladder, picking up bulky equipment from the ground, swinging a sledgehammer, or maintaining a proper lifting posture during rescue operations, hinge exercises build strength in the posterior chain your hamstrings, glutes, and lower back. This is crucial for ensuring safe, efficient lifting mechanics, preventing injury, and enhancing explosive power. Properly training the hinge movement helps you perform physically demanding tasks with better posture, stability, and endurance, especially when dealing with heavy, awkward loads in dynamic environments.

BARBELL DEADLIFT

Exercise Pattern: Hinge

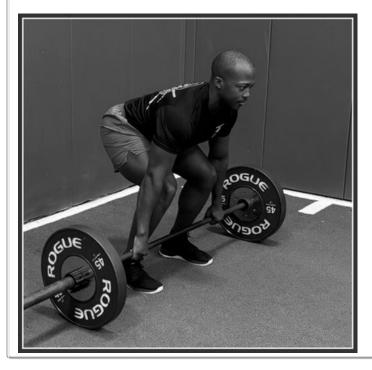
Preparation: Stand facing the barbell, the middle of the foot directly under the barbell and stance hip width apart. Unlock the knees and bend over while maintaining a straight back and grasp the barbell with an overhand grip. The grip should be slightly wider than foot stance. From this position the hips should lowered such that the shins just touch the resting barbell and tension can be felt on the hamstrings and glutes.

Execution: While maintaining a neutral spine, extend at the hips and drive the feet into the ground, to stand upright. The bar should gently brush the thighs on the way up, minimizing the distance between the body and the barbell. Once complete, the motion should be reversed, first unlocking the hips and "bowing" forwards to load the hamstrings and glutes, then bending at the knees to return to the start position..

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info: Scraped shins are often a biproduct of poor start position, either too far or too close to the bar, causing uneven foot pressure and a pendulum effect on the barbell once lifted off the floor. "Packing the Lats" and extending the arms, by depressing and protracting the scapula, is key to maximizing leverage off the floor (do the opposite of a shrug).

Alternative Exercises: Hexbar Deadlift, Barbell Romanian Deadlift, Tire Flips





HEXBAR DEADLIFT

Exercise Pattern: Hinge

Preparation: Step into the center of the hexagon with feet hip width apart. Unlock the knees and bend over while maintaining a neutral spine and grasp the bar with a neutral grip.

Execution: While maintaining a neutral spine, extend at the hips and drive the feet into the ground, to stand upright. Once complete, the motion should be reversed, first unlocking the hips and "bowing" forward to load the hamstrings and glutes, then bending at the knees to return to the start position..

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info: Middle finger knuckle inline with the pivot point.

Alternative Exercises: Barbell Deadlift, Barbell Romanian Deadlift, Tire Flips





BARBELL ROMANIAN DEADLIFT

Exercise Pattern: Hinge

Preparation: Grasp the barbell shoulder width apart with an overhand grip. Stand tall while maintaining a neutral spine, making sure the bar is held mid-thigh.

Execution: Unlock the knees sightly and hinge at the hips keeping the bar close to the body. Continue lowering the bar by bending at the hip, until max tension can be felt in the hamstrings and glutes. From the bottom position, extend at the hip to reverse the motion and return to the starting position.

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info: Emphasizing "Hips back" as far as they will go to maximize the stretch on the hamstrings.

Alternative Exercises: Dumbbell Single Leg Romanian Deadlift, Barbell Deadlift, Hexbar Deadlift, Tire Flips





DUMBBELL SINGLE LEG ROMANIAN DEADLIFT

Exercise Pattern: Hinge

Preparation: Grasp two dumbbells with an overhand grip. Stand tall with a neutral spine. Dumbbells held at mid-thigh.

Execution: While maintaining a neutral spine, slightly bend both knees and lift one leg off the deck. Then bend forward at the hip, lowering the dumbbells toward the deck, while raising the lifted leg backwards and horizontal to the deck. Once max tension is felt in the hamstring and glute, reverse the movement by standing up right to the start position..

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info:

Alternative Exercises: Barbell Romanian Deadlift, Barbell Deadlift, Hexbar Deadlift, Tire Flips





BARBELL GOODMORNING

Exercise Pattern: Hinge

Preparation: Stand under the barbell so that it runs across the back of the shoulders. Stand feet hip or shoulder width apart. Gently bend the knees.

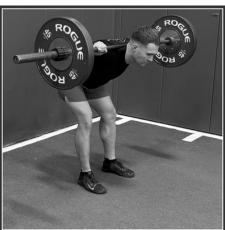
Execution: Break at the hips by pushing them backwards and maintaining a neutral spine. Maintain tension in the upper back and "bow" forward until max tension is felt on the hamstrings and glutes, then reverse the movement, driving the hips forwards and returning to the start position..

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info: Pins or safety arms can be placed at the bottom position within a squat rack (around hip or belly height), conducting good mornings "from the pins" is often an easier way to build confidence in beginners.

Alternative Exercises: Barbell Romanian Deadlift, Barbell Deadlift, Hexbar Deadlift







TIRE FLIPS

Exercise Pattern: Hinge

Preparation: Stand facing the tire approximately 1 to 1.5 feet away. Stand with feet shoulder width apart. Squat down, while maintaining a neutral spine, and grasp the bottom of the tire with both hands, palms up. Lean forward into the tire such that the front of the biceps and/or front of the shoulders contact the side of the tire. The heels may raise slightly and center of pressure is on the balls of the feet.

Execution: Extend at the hips to lift the tire off the floor. If the tire is too large to flip in one motion, one of the feet may take a small step forward to a modified front lunge position to arrest the tire, allowing it to rest atop the knee. From this modified position, the grip can be changed to push the tire over completely..

Major Muscles: Hamstrings, Glutes, Lower Back.

Additional Info: Initial starting position should "feel" like a tripod sprint start - with much of the balance on the forefoot. Height/size of the tire will dictate, but forward pressure and contact on the tire wall should be achieved by the biceps or front delts.

Alternative Exercises: Barbell Deadlift, Barbell Romanian Deadlift, Hexbar Deadlift







Lunge

Lunge exercises build single leg strength and stability and can be used to address imbalances by training each leg individually. Rarely in combat do we find ourselves in a bi-lateral stance or position. Lunge replicates the demands of taking a kneeling firing position and then standing up and maneuvering elsewhere, as well as mimics hiking and improves lower body strength.

FORWARD LUNGE

Exercise Pattern: Lunge

Preparation: When using a barbell, unrack with the weight across the back of the shoulders. Stand with feet hip width apart.

Execution: Step forward with one foot and lower the hips until the rear knee is close to the deck. Keep the front foot flat on the deck and chest up, to maintain a neutral spine. At the bottom, drive back up to the starting position..

Major Muscles: Quadriceps, Glutes, Hamstrings.

Additional Info:

Alternative Exercises: Reverse Lunge, Dumbbell Split Squat, Front Squat, Plate Step Up, TRX Pistol Squat





REVERSE LUNGE

Exercise Pattern: Lunge

Preparation: When using a barbell, unrack with the weight across the back of the shoulders. Stand with feet hip width apart.

Execution: Step backwards with one foot and lower the hips until the rear knee is close to the deck. Keep the front foot flat on the deck and chest up, to maintain a neutral spine. At the bottom, drive back up to the starting position..

Major Muscles: Quadriceps, Glutes, Hamstrings.

Additional Info:

Alternative Exercises: Forward Lunge, Dumbbell Split Squat, Front Squat, Plate Step Up, TRX Pistol Squat





LATERAL LUNGE

Exercise Pattern: Lunge

Preparation: When using a barbell, unrack with the weight across the back of the shoulders. Stand with feet hip width apart.

Execution: Step laterally with one foot, to a stance wider then shoulder width and lower the hips. Keep both feet flat on the deck and chest up, to maintain a neutral spine. The opposite leg will be fully extended with toes pointing forward. At the bottom, push off the lateral foot to stand up to the starting position..

Major Muscles: Quadriceps, Glutes, Adductors, Hamstrings.

Additional Info:

Alternative Exercises: Kettlebell Goblet Lateral Squat, Dumbbell Split Squat



Barbell Lateral Lunge starting position



Barbell Lateral Lunge bottom position







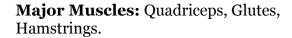
Goblet Lateral Lunge bottom position

OVERHEAD LUNGE

Exercise Pattern: Lunge

Preparation: Stand with feet hip width apart and the weight extended overhead. If using a barbell, the grip should be wide enough that approximately 6 inches of space are between the bar and top of the head.

Execution: With the weight overhead, step forward with one foot and lower the hips until the rear knee is close to the deck. Keep the front foot flat on the deck and chest up, to maintain a neutral spine. At the bottom, drive back up to the starting position..



Additional Info: Cue to "pull the weight apart" to engage the upper back and shoulders for stability. Ensure the weight maintains its position over the base of support. A wider grip on the weight implement (ie., barbell) can help improve overhead stability by reducing the flexibility demands (thoracic extension and Lats/Triceps)

Alternative Exercises: Forward Lunge, Reverse Lunge, Dumbbell Split Squat, Front Squat, Plate Step Up, TRX Pistol Squat





SANDBAG ROTATION LUNGE

Exercise Pattern: Lunge

Preparation: Execute a squat, and grasp the sandbag with a neutral grip. Stand up tall with feet hip width apart and sandbag held at midthigh.

Execution: Step backwards with one foot and lower the hips, simultaneously swing the bag to the outside of the forward leg and continue lowering until the rear knee is close to the deck. Keep the front foot flat on the deck and chest up, to maintain a neutral spine. At the bottom, drive back up to the starting position, using momentum to swing the bag in front to chest height. Immediately and seamlessly execute the same motion on the opposite side..

Major Muscles: Quadriceps, Glutes, Hamstrings.

Additional Info: Cue to "extend at the hips" to drive the sandbag up in-between transitions.

Alternative Exercises: Forward Lunge, Reverse Lunge, Dumbbell Split Squat







UPPER BODY POWER

Power exercises are designed to enhance your ability to move fast and explosively, combining strength and speed to produce maximum force in a short amount of time. Whether you're sprinting, jumping, lifting a heavy object with quick intensity, or executing high impact maneuvers in a fast paced environment, power training develops your muscles' ability to generate explosive force. These exercises target your legs, hips, core, and upper body, improving your speed, agility, and overall athletic performance. By incorporating power movements, you enhance your capacity to perform dynamic tasks with greater force, reducing reaction times and boosting endurance while minimizing the risk of injury from sudden movements.

MED BALL SLAM

Exercise Pattern: Upper Body Power

Preparation: Stand with feet together holding a medicine ball.

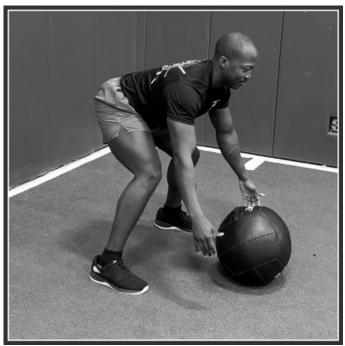
Execution: Raise the med ball above overhead and in one swift motion shuffle the feet off the deck to a shoulder width stance, drop the hips to the deck, and slam the med ball into the ground. Catch the med ball on the rebound and return to the starting position to repeat the motion as prescribed..

Major Muscles: Lats, Core.

Additional Info: Often programmed as "Power" but students do not execute with maximal output, and this turns into a pseudoconditioning exercise (this is fine - just be clear with coaches intent).

Alternative Exercises: Med Ball Wall Ball, Med Ball Chest Throw Against Wall





MED BALL CHEST THROW AGAINST WALL

Exercise Pattern: Upper Body Power

Preparation: Stand with feet together holding a medicine ball at chest height, in front of a target/wall.

Execution: Throw the med ball at chest height at the target wall. Throw with enough force to ensure it's return after contacting the wall, return to the starting position and repeat the motion as prescribed..

Major Muscles: Chest, Triceps, Shoulders.

Additional Info: Often programmed as "Power" but students do not execute with maximal output, and this turns into a pseudoconditioning exercise (this is fine - just be clear with coaches intent).

Alternative Exercises: Med Ball Wall Ball, Med Ball Slam

MED BALL WALL BALL

Exercise Pattern: Upper Body Power

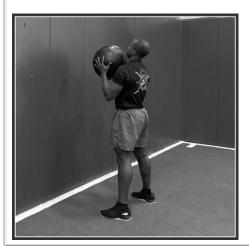
Preparation: Stand with feet together holding a medicine ball at chest height, in front of a target/wall.

Execution: Squat down holding the med ball at chest height. Explosively stand up from the squat and launch the med ball as high as possible onto the target wall. Catch the ball, return to the starting position and repeat the motion as prescribed..

Major Muscles: Chest, Triceps, Shoulders.

Additional Info: Often programmed as "Power" but students do not execute with maximal output, and this turns into a pseudoconditioning exercise (this is fine - just be clear with coaches intent).

Alternative Exercises: Med Ball Chest Throw Against Wall







CLAP PUSH-UP

Exercise Pattern: Upper Body Power

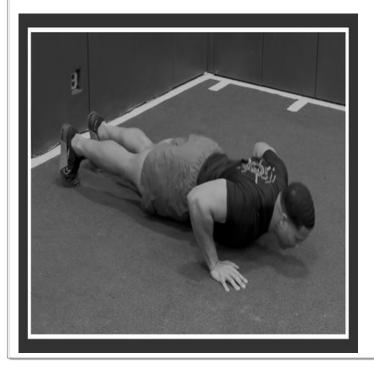
Preparation: Lay flat on the deck, face down, with hands just outside of the chest.

Execution: Explosively push up from the deck with both hands, at the apex, lift both hands off the deck and clap them in-front of the chest, quickly returning them to start position before upward momentum ceases. Lower the entire body back to the starting position to repeat the motion as prescribed..

Major Muscles: Chest, Triceps, Shoulders.

Additional Info:

Alternative Exercises: Barbell Push Press, Barbell Bench Press, TRX Chest Press





BARBELL PUSH PRESS

Exercise Pattern: Upper Body Power

Preparation: Unrack the bar so the hands are under the bar, palms up, elbows raised as high as possible. The bulk of the weight is supported on the front of the shoulders. Stand with feet hip to shoulder width apart, and toes slightly out.

Execution: While maintaining a rigid core, smoothly descend into a quarter squat. Quickly reverse this motion to create upward momentum on the barbell. Continue driving the barbell vertically through the full extension of the ankles, knees, and hip. Drive the barbell overhead, with the biceps near the ears. Lower the barbell to the starting position to repeat the motion as prescribed..

Major Muscles: Triceps, Shoulders.

Additional Info: This is a Lower body power exercise disguised as an upper body one - the majority of force comes from the legs! Cue to "squeeze the glutes" to maintain lumbar and pelvic control, reducing excessive spinal extension. Limit hip flexion to ensure bar path is vertical. Knees should NOT re-bend - that is a push jerk.

Alternative Exercises: Barbell Push Jerk, Med Ball Wall Ball







BARBELL PUSH JERK

Exercise Pattern: Upper Body Power

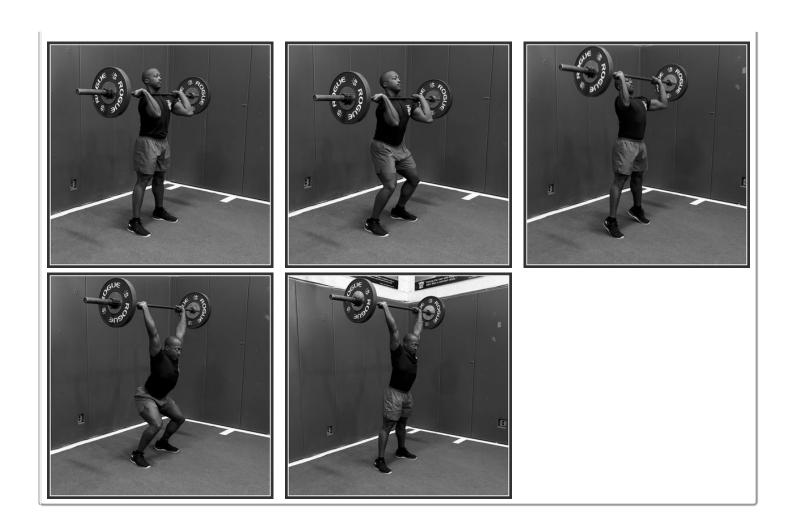
Preparation: Unrack the bar so the hands are under the bar, palms up, elbows raised as high as possible. The bulk of the weight is supported on the front of the shoulders. Stand with feet hip to shoulder width apart, and toes slightly out.

Execution: While maintaining a rigid core, smoothly descend into a quarter squat. Quickly reverse this motion to create upward momentum on the barbell. Continue driving the barbell vertically through the full extension of the ankles, knees, and hip. As the barbell becomes weightless, lift the feet off the deck and shuffle them wider, to shoulder or slightly wider than shoulder width. Catch the load of the barbell in the position, with arms locked overhead. Drive the barbell overhead, with the biceps near the ears, and stand tall. Lower the barbell to the starting position to repeat the motion as prescribed..

Major Muscles: Triceps, Shoulders.

Additional Info: This is a Lower body power exercise disguised as an upper body one - the majority of force comes from the legs! Cue to "squeeze the glutes" to maintain lumbar and pelvic control, reducing excessive spinal extension. Limit hip flexion to ensure bar path is vertical. Subtle "Stomping" is okay but should not be overtly coached often, as this typically cues athletes to cut their upward leg drive too soon.

Alternative Exercises: Barbell Push Press, Med Ball Wall Ball



LOWER BODY POWER

Power exercises are designed to enhance your ability to move fast and explosively, combining strength and speed to produce maximum force in a short amount of time. Whether you're sprinting, jumping, lifting a heavy object with quick intensity, or executing high-impact maneuvers in a fast-paced environment, power training develops your muscles' ability to generate explosive force. These exercises target your legs, hips, core, and upper body, improving your speed, agility, and overall athletic performance. By incorporating power movements, you enhance your capacity to perform dynamic tasks with greater force, reducing reaction times and boosting endurance while minimizing the risk of injury from sudden movements.

Pogo Hops

Exercise Pattern: Lower Body Power

Preparation: Start in standing position, feet hip width apart.

Execution: Hop in place, ensuring ground contact time is minimal. Arm swing should be natural, but not excessive to the point ground contact time is increased. The heels should not contact the deck during the exercise..

Major Muscles: Quadriceps, Calves.

Additional Info: Do not land on locked-out knees. Find a smooth rhythm that minimizes ground contact time.

Alternative Exercises: Hands Free Squat Jump, Box Jump

HANDS FREE SQUAT JUMP

Exercise Pattern: Lower Body Power

Preparation: Start in standing position, feet hip width apart, and hands on hips. Squat down slightly.

Execution: Execute a jump as high as possible, without using arm momentum. Land softly, breaking at the hips and knees..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info:

Alternative Exercises: Hands Free Squat Jump, Box Jump, Pogo Hops





Broad Jump

Exercise Pattern: Lower Body Power

Preparation: Start in standing position with feet hip width apart.

Execution: Use the arms to counter movement by swinging them to the rear while descending into a partial squat. Once the legs are maximally loaded, swing the arms aggressively upwards to generate momentum while jumping forwards with max intent. Land squarely, feet hip width apart, breaking at hips and knees to absorb the landing force..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info:

Alternative Exercises: Box Jump, Hands Free Squat Jump, Box Jump, Pogo Hops







Box Jump

Exercise Pattern: Lower Body Power

Preparation: Start in standing position with feet hip width apart, facing a box, and approximately 4-6 inches away from the front edge.

Execution: Use the arms to counter movement by swinging them to the rear while descending into a partial squat. Once the legs are maximally loaded, swing the arms aggressively upwards to generate momentum while jumping atop the box. Land squarely on top of the box, feet hip width apart, breaking at hips and knees to absorb the landing force. Step back down off the box and return to the start position..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info: Boxes can be good constraints-based challenges, but even a relatively small box can be used for max-intent jumps, by limiting the amount of knee and hip flexion that is needed when landing on-top of the box.

Alternative Exercises: Broad Jump, Hands Free Squat Jump, Box Jump, Pogo Hops







LATERAL SQUAT JUMPS

Exercise Pattern: Lower Body Power

Preparation: Start in standing position with feet hip width apart.

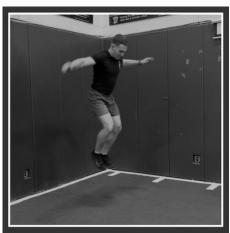
Execution: Jump as far to the right or left as possible, keeping the hips and shoulders square to the direction you are facing. Land squarely, feet hip width apart, breaking at hips and knees to absorb the landing force and immediately jump back to the starting position..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info:

Alternative Exercises: Broad Jump, Hands Free Squat Jump, Box Jump, Pogo Hops







KETTLEBELL SWING

Exercise Pattern: Lower Body Power

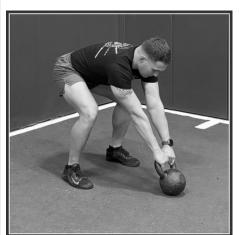
Preparation: Start in standing position with feet hip width apart, kettlebell 6 inches in front. Squat down and grasp the kettlebell with both hands.

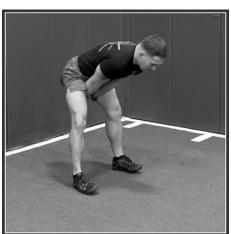
Execution: While maintaining a neutral spine and straight arms, fully extend at the hip and knee to lift the kettlebell to shoulder height. Allow the kettlebell to descend between the legs and repeat the motion for the prescribed number of repetitions..

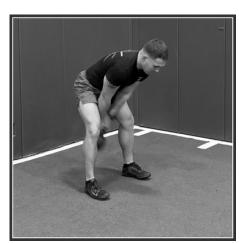
Major Muscles: Glutes, Hamstrings.

Additional Info: Ensure smooth, constant, tension is observed in the swing. Poor coordination or drive from the glutes can cause an awkward swing that appears to be two-distinct phases.

Alternative Exercises: Goblet Squat, Front Squat, Barbell Deadlift











SPLIT SQUAT JUMP

Exercise Pattern: Lower Body Power

Preparation: Start in standing position with feet hip width apart.

Execution: Jump as high as possible and land in the split squat position. Descend as far as possible while keeping the heel of the front foot on the ground, chest up, and knees tracking in line with the feet. At the bottom, stop just before touching the ground, and drive up into another jump. Repeat the motion on the opposite side..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info:

Alternative Exercises: Dumbbell Split Squat, Box Jump, Hands Free Squat Jump, Box Jump, Goblet Squat







DIAGONAL BOUND

Exercise Pattern: Lower Body Power

Preparation: Start in standing position with feet hip width apart.

Execution: Jump at a 45-degree angle as far as possible on one leg, land softly. While the rear foot is still off the deck, drive to the opposite side, at a 45-degree angle, jumping and landing in the same manner. Repeat these motions seamlessly for prescribed time or distance..

Major Muscles: Quadriceps, Glutes, Hamstrings, Calves.

Additional Info: The tempo of the bounds can be altered to provide a stability and balance challenge by going slower, balancing and controlling on one leg before bounding to the next (useful for NATO Course Prep).

Alternative Exercises: Broad Jump, Hands Free Squat Jump, Box Jump, Pogo Hops

GENERAL MOBILITY

HEEL/TOE RAISES

Exercise Pattern: General Mobility

Preparation: Stand tall with your hands on your hips and feet hip width apart.

Execution: Press up onto the balls of your feet and then pull your toes up, so you are on your heels. Repeat these movements..

Major Muscles: Gastrocnemius, Soleus, Anterior Tibialis.

Additional Info: Do not excessively stick out your hips while pulling up your toes.

Alternative Exercises:

STATIONARY SQUAT

Exercise Pattern: General Mobility

Preparation: Stand with feet hip to shoulder width apart, and toes slightly out.

Execution: Break at the knees and hips simultaneously, lowering your body weight and maintaining even pressure on the feet. Decend as far as possible while keeping the heels on the ground, knees tracking in line with the feet, and torso parallel to the shins. At the bottom, drive into the ground until standing straight.

Major Muscles: Quadriceps, Glutes, Hamstrings.

Additional Info: For most people, at the bottom of the hole, shin and back angles should be roughly similar

Alternative Exercises:

STATIONARY FORWARD LUNGE

Exercise Pattern: General Mobility

Preparation: Stand with feet hip width apart.

Execution: Step forward with one foot and lower the hips until the rear knee is close to the deck. Keep the front foot flat on the deck and chest up, to maintain a neutral spine. At the bottom, drive back up to the starting position..

Major Muscles: Quadriceps, Glutes,

Hamstrings.

Additional Info:

Supine Leg Overs

Exercise Pattern: General Mobility

Preparation: Lie on your back with your head on the deck. Your feet should be together, and your arms extended out to the sides, palms down.

Execution: Try to touch your foot to the opposite hand while keeping your shoulders flat on the deck..

Major Muscles: Hamstrings, Lumbar Spine, T-Spine.

Additional Info: Do not allow the leg being raised to bend at the knee.

Alternative Exercises:

SCORPIONS

Exercise Pattern: General Mobility

Preparation: Start in the quadruped position.

Execution: Bring one leg as high as possible, keeping a 90-degree bend in your knee. Ensure that your back remains flat and shoulders and

hips remain square to the deck..

Major Muscles: Glutes, Hamstrings.

Additional Info:

Alternative Exercises:

KNEE TO ELBOW PUSH UP

Exercise Pattern: General Mobility

Preparation: Assume a high plank position

Execution: Lower the entire body to the deck at the same time. Simultaneously, bring one knee to the same side elbow, keeping that foot off of the deck. While returning to the starting posisiton, extend that leg back..

Major Muscles: Pectoralis, Triceps,

Abductors, Hip Flexor.

Additional Info:

SAGITTAL LEG SWINGS

Exercise Pattern: General Mobility

Preparation: Stand tall with one hand on a wall or stable surface.

Execution: Swing one leg as high forward as you can. In a fluid motion, swing the leg back behind you. Keep the torso still and the leg straight throughout the movement. .

Major Muscles: Hip Flexor, Glutes, Hamtrings.

Additional Info: Get the swing heel as far behind as possible rather than trying to get it high.

Alternative Exercises:

FRONTAL LEG SWINGS

Exercise Pattern: General Mobility

Preparation: Stand tall with one hand on a wall or stable surface.

Execution: Swing one leg as high laterally as you can. In a fluid motion, swing the leg back in front of you. Keep the torso still and the leg straight throughout the movement. .

Major Muscles: Adductors, Abductors.

Additional Info: Focus on keeping the toes pointed straight ahead, and sweeping the foot across.

Alternative Exercises:

TRUNK TWISTS

Exercise Pattern: General Mobility

Preparation: Stand tall with the feet hip width apart and the arms extended out to the side, palms up.

Execution: Rotate the trunk, pivoting on the foot you are twisting away from. Rotate in the opposite direction, pivoting on the opposite foot..

Major Muscles: T-Spine.

Additional Info:

SIDE STRADDLE HOPS

Exercise Pattern: General Mobility

Preparation: Stand with your feet together

and arms at your side.

Execution: Hop and bring your feet outside of hip width, crossing your left hand over the right. Return to the starting position and repeat the first step, this time crossing your right hand over your left..

Major Muscles: Deltoids, Abductors,

Adductors.

Additional Info:

Alternative Exercises:

ARM CIRCLES

Exercise Pattern: General Mobility

Preparation: Stand with your arms extended

and palms facing up.

Execution: Rotate your arms in a clockwise direction, increasing the size of the circle as you

go. Repeat in the opposite direction..

Major Muscles: Deltoids.

Additional Info:

Alternative Exercises:

Long Strider

Exercise Pattern: General Mobility

Preparation: Stand tall with your feet hip

width apart.

Execution: Hop and extend your opposite arm and leg forward. Scissior switch your arms

and legs while staying in place..

Major Muscles: Deltoids, Glutes,

Hamstrings, Quadriceps.

Additional Info:

SPLIT JACK FORWARD

Exercise Pattern: General Mobility

Preparation: Stand tall with your feet hip

width apart.

Execution: Hop and move one foot backward and one forward while crossing your arms over

your head like a side straddle hop..

Major Muscles: Deltoids, Glutes,

Hamstrings, Quadriceps.

Additional Info:

Alternative Exercises:

HIGHLAND FLING

Exercise Pattern: General Mobility

Preparation: Stand tall with your feet hip width apart and arms extended to the side, palms facing up.

Execution: Hop and cross your left arm and leg over your right arm and leg. Hop again and return to the starting position. Repeat the first step with the opposite arm and leg..

Major Muscles: Deltoids, Adductors, Abductors.

Additional Info:

MUSCLE ACTIVATION

WALKING LUNGE W/ SIDE REACH

Exercise Pattern: Muscle Activation

Preparation: Stand with feet hip width apart.

Execution: Step out with one leg and drop the hips toward the deck, keeping the rear leg straight, front knee behind the toe, front foot flat and the chest up. At the bottom of the lunge, reach up with the opposite hand of the forward leg as high as you can and then over. step up on the forward leg and repeat on the other side...

Major Muscles: Lats, Hip Flexor, Glutes, Quadriceps, Hamstrings.

Additional Info:

Alternative Exercises:

WALKING LUNGE W/ TWIST

Exercise Pattern: Muscle Activation

Preparation: Start in the standing position

with feet hip width apart.

Execution: Step out with one leg and drop the hips toward the deck, keeping the rear leg straight, front knee behind the toe, front foot flat and the chest up. At the bottom of the lunge, twist toward the leg that is in front. Twist back to the center, stand up on the forward leg, and repeat on the other side..

Major Muscles: T-Spine, Hip Flexor, Glutes, Quadriceps, Hamstrings.

Additional Info:

WALKING LUNGE-ELBOW TO INSTEP

Exercise Pattern: Muscle Activation

Preparation: Start in the standing position

with feet hip width apart.

Execution: Step out with one leg and drop the hips toward the deck, keeping the rear leg straight, front knee behind the toe, and the front foot flat. Place the opposite hand of the leg going forward flat on the deck. Bring the other elbow inside of the lunged knee. Return to the starting position then repeat with the opposite leg..

Major Muscles: Hip Flexor, Glutes,

Quadriceps, Hamstrings.

Additional Info:

Alternative Exercises:

WALKING KNEE HUG

Exercise Pattern: Muscle Activation

Preparation: Start in the standing position

with feet hip width apart.

Execution: Bring one knee up and grasp it with both hands, pulling it up to the chest while keeping the foot of the standing leg flat on the deck. Lower the raised leg and step onto that leg. Bring the opposite knee up to the chest..

Major Muscles: Glutes, Hamstrings.

Additional Info:

Alternative Exercises:

WALKING QUAD STRETCH

Exercise Pattern: Muscle Activation

Preparation: Start in the standing position

with feet hip width apart.

Execution: Bring one leg up in front of them, grasp the ankle, and pull the foot back behind you. Keep the chest up, the knees together, and hold for a 1 count. Lower the foot, step forward, and repeat on the opposite side..

Major Muscles: Quadriceps.

Additional Info:

WALKING LEG CRADLE

Exercise Pattern: Muscle Activation

Preparation: Start in the standing position

with feet hip width apart.

Execution: Bring one leg up, holding the ankle with one hand and placing the other on the knee. Slightly pull up at the ankle and push down on the knee while at the same time keeping the foot of the standing leg flat on the deck. Lower the raised leg and step onto that leg. Bring the other leg up and repeat the exercise..

Major Muscles: Hip External Rotation.

Additional Info:

Alternative Exercises:

FRANKENSTEIN

Exercise Pattern: Muscle Activation

Preparation: Start standing tall with arms

extended out front.

Execution: Take a step forward and lift the non-stepping leg straight up as high as you can while keeping the hips level with the deck. Lower the leg back to the deck in a quick and powerful manner, stopping just short of contact, step forward with that leg, and repeat with the opposite leg..

Major Muscles: Hamstrings, Glutes.

Additional Info:

Monster Walk

Exercise Pattern: Muscle Activation

Preparation: Start standing tall with hands

behind your ears.

Execution: Take a step forward and flex at the hip with horizontal abduction, the knee should be at hip height. Horizontally adduct the lifted leg with the knee remaining above the hip. Return the lifted leg to the deck, step forward with that leg, and repeat the movement on the opposite side..

Major Muscles: Glutes, Abductors,

Adductors.

Additional Info:

Alternative Exercises:

BEAR CRAWL

Exercise Pattern: Muscle Activation

Preparation: Start on all fours with your hands and toes on the deck. The knees should be directly under the hips and bent 90 degrees.

Execution: Reach forward with the right arm and step forward with the left foot. Take another step by reaching forward with the left arm and stepping forward with the right foot. The back should be flat and the butt down throughout the movement..

Major Muscles: Core.

Additional Info:

INCHWORM

Exercise Pattern: Muscle Activation

Preparation: Start standing tall with hands by their sides

by their sides.

Execution: Bend at the hips and place the hands flat on the deck, keeping the legs as straight as possible. Walk the hands out while their hips go up. Then walk the feet towards the hands until you reach them, or the knees start to bend while keeping the hands flat on the deck. Repeat the movement until they reach the designated distance..

Major Muscles: Hamstrings, Lumbar Spine.

Additional Info:

Alternative Exercises:

LATERAL SQUAT WAVE

Exercise Pattern: Muscle Activation

Preparation: Start standing with feet shoulder width apart. Stand sideways to travel from cone to cone.

Execution: Squat and then step out laterally, maintaining your bodyweight over the trailing leg. As the lead leg extends, will transition their body weight from the trailing leg to the lead leg. The shoulders and toes will face forward throughout the movement. Once transitioned, bring the trailing leg back into the squat position and repeat the movement..

Major Muscles: Glutes, Quadriceps, Hamstrings, Adductors.

Additional Info:

CROSS-OVER LUNGE

Exercise Pattern: Muscle Activation

Preparation: Start standing tall with feet shoulder width apart and hands by your sides.

Execution: Cross your left foot over your right. Squat down, putting the right knee behind your left heel. The left foot should be flat on the deck and the left knee over the ankle. Stand back up to the starting position..

Major Muscles: Glutes, Quadriceps,

Hamstrings.

Additional Info:

Alternative Exercises:

SINGLE LEG BALANCE

Exercise Pattern: Muscle Activation

Preparation: Start standing tall with arms

extended in front of chest.

Execution: Hinge forward at the hip, keeping one foot on the ground and allowing the other to rise straight back. The extended leg should be in line with the hips and the shoulders squared to the deck. Lower the leg, step forward, and repeat on the other side..

Major Muscles: Glutes, Hamstrings.

Additional Info:

TRANSIT MOBILITY

HIGH KNEES

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Alternate raising one knee at a time to hip height, maintaining 90-degrees at the ankle, knee, and hip. The arms will be moving in opposition with the legs and the torso will remain erect. Repeat this motion, trying to accumulate as many ground contacts as possible..

Major Muscles: Hip Flexors, Glutes, Hamstrings, Quadriceps.

8,4

Additional Info:

Alternative Exercises:

BUTT-KICKERS

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Trace the stance leg with your opposite ankle bone while flexing at the knee and the hip. Attempt to get the heel to the glute. Alternate this movement attempting to accumulate as many repetitions as possible...

Major Muscles: Hip Flexors, Glutes, Hamstrings, Quadriceps.

Additional Info:

STRAIGHT LEG SHUFFLE

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Begin the drill by lightly jogging forward while keeping the leg straight with an unlocked knee and ankles dorsiflexed. Pull the foot under the hips and swing the arms at the shoulder. Repeat using a continuous turnover on each side..

Major Muscles: Hip Flexors, Glutes,

Hamstrings.

Additional Info:

Alternative Exercises:

LATERAL SHUFFLE

Exercise Pattern: Transit Mobility

Preparation: Start in an athletic position with the hips low and the chest up. Stand facing towards the side and cover prescribed distance.

Execution: Maintain the athletic position while traveling laterally, pushing off the back foot trying to keep your feet the same distance apart the whole time..

Major Muscles: Glutes, Quadriceps, Hamstrings, Adductors, Abductors.

Additional Info:

Alternative Exercises:

SIDE SLIDE W/ARM SWING

Exercise Pattern: Transit Mobility

Preparation: Start in an athletic position with the hips low and the chest up. Stand facing towards the side and cover prescribed distance.

Execution: Side shuffle, letting your arms swing free and cross over in front of you and overhead. Keep your arms loose throughout the movement..

Major Muscles: Glutes, Quadriceps, Hamstrings, Adductors, Abductors, Pectoralis, Deltoids.

Additional Info:

CARIOCA

Exercise Pattern: Transit Mobility

Preparation: Start standing tall with your arms extended out the sides and the palms facing up. Stand facing towards the side and cover prescribed distance.

Execution: Take a quick step with the left foot behind the right foot. Bring the right foot over parallel to the left foot, and then cross the left foot over the right foot, repeating for a designated distance. The movement comes from the hips; the upper body should not rotate..

Major Muscles: T-Spine, Lumbar Spine.

Additional Info:

Alternative Exercises:

Power Skip (Distance)

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position with feet hip width apart.

Execution: Skip forward, staying close to the ground and trying to cover as much distance as possible. Drive opposite knee and arm while

dorsiflexing the foot that is driving..

Major Muscles: Glutes, Hamstrings,

Quadriceps.

Additional Info:

Alternative Exercises:

Power Skip (Height)

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position with feet hip width apart.

Execution: Skip forward, trying to get as high as possible with each movement. Drive opposite knee and arm while dorsiflexing the foot that is driving..

Major Muscles: Glutes, Hamstrings,

Quadriceps.

Additional Info:

STRIDES/BUILD UP SERIES

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Run at progressive efforts (50%, 75%, 100%) for 25yds each with slight rest

between efforts..

Major Muscles: Glutes, Hamstrings,

Quadriceps.

Additional Info:

Alternative Exercises:

BACK PEDDLE REACH

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Take a step backward, reaching the leg back as far as you can and making ground contact as far behind the hip as possible. While back peddling, lean forward slightly..

Major Muscles: Glutes, Hamstrings, Quadriceps.

Additional Info:

Alternative Exercises:

A-SKIP

Exercise Pattern: Transit Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Raise your left knee to hip height with the hip, knee, and ankle at 90 degrees. Drive your left leg down contacting the ground under the hip. When the left foot makes contact the right knee will raise up while hopping off the ground with the left foot. Alternate these steps with each side for the prescribed distance..

Major Muscles: Glutes, Hamstrings,

Quadriceps.

Additional Info:

DYNAMIC MOBILITY

MOUNTAIN CLIMBERS

Exercise Pattern: Dynamic Mobility

Major Muscles: Core.

Preparation: Start in the high plank poisiton.

Additional Info:

Execution: Bring one knee up to your chest, hovering the foot over the deck, and then return it to the starting position. Continue to

alternate sides, keeping the back flat while

performing the movement..

Alternative Exercises:

GROINERS

Exercise Pattern: Dynamic Mobility

Major Muscles: Core.

Preparation: Start in the high plank poisiton.

Additional Info:

Execution: Bring one foot to the outside of the same side hand. Kick that foot back and then bring the other foot up to the outside of

the opposite hand...

Alternative Exercises:

Jump Thrust

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position

with feet hip width apart.

Major Muscles: Core, Glutes, Hamstrings,

Quadriceps.

Additional Info:

Alternative Exercises:

Execution: Squat down, placing your hands flat on the deck in front of your toes, and kick your legs back into a push-up position. Then bring both feet back behind the palms and jump as high as possible. When you land, drop into a squat and repeat..

FROG THRUST W/JUMP

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position

with feet hip width apart.

Execution: Squat down, placing your hands flat on the deck between your legs, and kick your legs back into a push-up position. Then bring both feet back outside the palms and jump as high as possible. When you land, drop into a squat and repeat..

Major Muscles: Core, Glutes, Hamstrings, Quadriceps.

Additional Info:

Alternative Exercises:

BURPEE

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position with feet hip width apart.

Execution: Bend down so that your hands and feet are flat on the deck, placing the hands inside of the feet. Kick the legs back into the push-up position and perform a push-up. Return the feet back to the outside of the hands, keeping the hands flat on the deck, and jump straight up...

Major Muscles: Core, Glutes, Hamstrings, Quadriceps, Pectoralis, Deltoids, Triceps.

Additional Info:

Alternative Exercises:

SQUAT DROPS

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position

with feet together.

Execution: Triple extend up on the toes reaching up towards the sky then quickly drop into a squat. From the bottom, stand up and return to the starting position...

Major Muscles: Glutes, Hamstrings, Quadriceps.

Additional Info:

SPLIT SQUAT DROPS

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position

with feet together.

Execution: Triple extend up on the toes reaching up towards the sky and drop into a lunge, keeping the knee over the ankle, the front foot flat, and the rear knee off the deck. In one motion, jump back to the starting position and repeat the movement on the other side..

Major Muscles: Glutes, Hamstrings, Quadriceps.

Additional Info:

Alternative Exercises:

SPEED SKATERS

Exercise Pattern: Dynamic Mobility

Preparation: Start in the standing position with feet hip width apart.

Execution: Bend at the knees and lean slightly forward with a straight back. Bound to the right, landing on the right leg. The left leg will come near their right ankle, but the left foot should not touch the deck. Then bound to the left, landing on the left leg, and bringing the right leg near the left ankle while prevent the right foot from touching the deck. Swing the arms while performing this movement to help maintain balance..

Major Muscles: Glutes, Hamstrings, Quadriceps, Abductors, Adductors.

Additional Info: