Core and Flexibility Booklet
Core Strengthening

**Exercise 1 Description:** The first step to training your core properly is learning how to activate the muscle that helps stabilize your pelvis, your transverse abdominis. A common way to activate this muscle is to go onto your knees and hands, and then try to round your back by using your stomach muscles to pull your hips up. Once you are able to activate this muscle, you can start doing exercises to strengthen your core muscles.

**To Do:** Strengthen your core muscles by activating this core muscle for 5 seconds at a time. Once you can keep it activated in the position above for 10 sets of 5 seconds, you can move on to Exercise 2.

**Exercise 2 Description:** To perform the plank, you would lay down on the ground and then come up onto your elbows and your knees (level 1) or toes (level 2). While doing this exercise, you would want to make sure to keep that same core muscle from the first exercise activated and strong to prevent your lower back from arching. You would try to hold this exercise for as long as you can, without feeling any back pain.

**To Do:** Hold a level 1 plank for as long as you can, take a break, and then attempt again for three sets in total. Once you can hold a level 1 plank for one minute you can start attempting the level 2 plank. If you can hold a level 2 plank for more than one minute and 30 seconds, than you can make this exercise tougher. To make it tougher, you can try holding a plank and raising one arm or leg off the ground for 5-10 seconds, and then alternating sides, to make it tougher.
Exercise 3 Description: Do not attempt this exercise until you can hold a Level 1 Plank for at least 30 seconds. When completing this exercise, start on your hands and knees, and keep your core activated. Slowly raise your left arm and right leg out, keeping your hips and shoulders level to the ground. Hold this position for 5 seconds and then return to the ground. Repeat on the opposite side and make sure you do not create any back pain in this exercise.

To Do: Try to do as many repetitions per side as you can. After your core tires out, take a break, and then repeat for 3 sets total. Once you can easily perform 10 repetitions per side, you can try keeping your toes off of the ground while performing this exercise for an added challenge.

Exercise 4 Description: Do not attempt this exercise until you can do Level 2 Plank for at least 30 seconds. The dead bug is performed on your back, and it is important to keep your transverse abdominis strong and prevent your hips from tilting open. Another way to think of this is to keep your lower back flat on the ground and not let it arch. Once you have activated your core, you will bring your arms and legs up into the air, as if you were sitting in a chair, into position 1 shown. You will then lower your left leg and right arm to just above the ground, as shown in position 2, and then return to position 1. You will continue to alternate sides until your core is too weak or you start to feel muscles other than your core take over. Just like in the plank, you never want to feel back pain.
To Do: Try to do as many repetitions per side as you can. After your core tires out, take a break, and then repeat for 3 sets total. If you are able to do 10 per side, you can try making this exercise tougher by lowering both legs and arms at the same time.
Flexibility Guide

Stretching is a very important, and often neglected, part of your fitness program. You should stretch 5-6 times a week for the rest of your life. If you don’t stretch properly, it can cause your muscles to get tight and can cause joint injuries. Luckily, stretching can take as little as 10 minutes and is easy to add to your everyday routine. Follow this stretching guide below to prevent yourself from getting tight!

Lower Body Flexibility

**Hip Flexor Stretch**- Make sure to keep your core engaged and feel the stretch in your hip flexor muscles, which run from the top of your quad to your stomach. Hold this stretch for 30-60 seconds on both legs.

**Quad Stretch**- Keep your core engaged and do not let your pelvis tilt forwards. You should feel the stretch in the quad muscle, which runs from your knee to your hip. Hold stretch for 30-60 seconds on each leg.

**Hamstring Stretch**- Keep your leg that is on the chair straight but do not lock the joint. Make sure to keep your back straight and do not round your back forward. You should feel the stretch down the back of the leg that is on the chair. You should feel the stretch in your hamstring, which runs from your knee to your hip. Hold stretch for 30-60 seconds on each leg.

**Hamstring Stretch**- Keep your legs straight but do not lock the knee joints. Put a towel around your feet and pull your body down to your legs. Make sure to keep your back straight while you do this. You should feel a stretch in the back of your legs from your hips to the back of your knees.
**Groin and Hamstring Stretch** - Spread your feet out as wide as you can, keeping your toes pointing forwards. Lean forward and put your hands against a wall, keeping your core strong and your back straight. Slowly work your way down the wall until you feel a gentle stretch in your hamstring and groin. Hold this stretch for 30-60 seconds.

**Glute Stretch** - Keep your back flat against the ground and slowly push your left knee away from you until you feel a stretch. To feel a deeper stretch you can move closer to the wall. Hold stretch for 30-60 seconds on each leg.

**Crossover Hip Stretch** - Start laying flat on the ground. Raise your right leg up off the ground towards you, bending it in a 90 degree angle. Use your left hand to gently pull your right leg over to the left of your body, feeling the stretch through your right hip and glute muscle. Keep your right shoulder on the ground and only go through a range of motion that is comfortable, you do not need to bring your right knee to the ground. Hold this stretch for 30-60 seconds and then repeat with the left leg.

**Calf Stretch** - Keep your toe against the wall with your foot in dorsiflexion. Lean forward and put pressure into your toe against the wall, keeping your back straight. Hold stretch for 30-60 seconds.
Upper Body Flexibility

**Back Stretch**- Keep your core engaged and relax back onto your legs. Try to let your hips sink towards the ground and lengthen your spine. Feel the stretch in your upper back and shoulders. Hold stretch for 30-60 seconds.

**Wrap-Around Back Stretch**- Sit in a chair, on the ground, or stand and cross your arms in front of your body, grabbing your opposite shoulders. Pull your arms apart without letting go of your shoulders to feel a stretch in your upper back. To get a deeper stretch you can lower your chin. Hold this stretch for 30-60 seconds, breathing deeply.

**Chest Stretch**- Keep your arms at 90 degrees, one foot in front of the other and slowly lean into a corner. You want to feel this stretch through your chest and front of your shoulders. Hold for 30-60 seconds.

**Lying Chest Stretch**- *This can be an advanced stretch, so do not do if it causes pain in your back or shoulders.* Lay over top of a bosu or foam roller, keeping your core engaged and feet planted firmly on the ground. Raise your hands over head and then back behind you, trying to touch the ground. Hold for 30-60 seconds, breathing deeply. You can change the position of your arms to feel a better stretch.
**Seated Twist**- Begin by sitting tall, extending both of your legs in front of you. Bend your right knee and cross it over the left thigh. Take your left elbow and place it on the outside of the right knee, then place right hand on the floor behind you, looking over your right shoulder. Make sure to keep your spine tall and your core strong. You want to feel a gentle stretch. Hold stretch for 30-60 second on each side.

**Shoulder/Chest Stretch**- Clasp your hands behind you and slowly raise your hands up until you feel a stretch in your chest and shoulders. Make sure to keep your shoulders back and prevent them from rounding forwards to get a proper stretch. Hold this stretch for 30-60 seconds.

**Wrist Stretch**- Put your hands together as if you were praying. Slowly move your hands down towards your belly button until you feel a stretch in your wrists. Hold this stretch for 30-60 seconds.

**Neck Stretch**- Hold onto a chair with both hands and slowly tilt your head to one side until you feel a stretch through your neck and shoulder. Make sure not to let your shoulders round forward to get the best stretch. Hold for 30-60 seconds on both sides.