



JCSO Pre-Academy Physical Training Guideline

In order to best prepare for the physical training program, and reduce the risk of injury, a suggested training guide is provided. The student should train for strength, endurance, speed and power. It is recommended that students do not limit their training to just one discipline (ie: weight room, aerobics, and so on). Consult your primary physician before beginning any exercise routine.

This guide is intended to assist you to prepare. It is not mandatory or required and is a sample program.

Training Principles

Warm-Up - Every workout should be preceded with a proper warm-up. Take 5-10 minutes to increase body temperature and blood flow to the muscles. Warm-ups should be dynamic exercises that involve multi-joint movements. This would include movements such as jogging, skipping, jumping jacks, lunges, and rotational movements involving the core.

Cool Down - Cooling the body down allows for the blood pressure to resume to normal levels, and for the blood flow to be redistributed throughout the body. Cool down simply involves slowing the activity level down before stopping.

Flexibility - Stretching should be a regular part of your exercise program. Stretching improves flexibility and overall physical fitness. Always stretch after muscles are warmed up (after a workout).

Intensity - Intensity is a measure of the effort you put into your workout or how demanding the workout is on the body. Intensity greatly influences the results you obtain from your workouts. Your level of intensity directly correlates to your level of performance on the PFT. On a scale of 1 to 10, with ten being the most difficult/exhaustive stage. You should begin your training between levels 4-5, and progress upwards as your fitness level increases.

Strength Training - Train to the point of momentary muscle failure, not just to the point of fatigue. Perform each repetition in a slow, controlled manner (i.e. eliminate momentum). Maintain constant tension on the muscles. Perform each exercise with good form and technique. If you achieve the prescribed number of repetitions before reaching failure, increase the weight load of upper body exercises by five pounds and lower body exercises by ten pounds. (If this is too much, you may increase by a lesser amount of weight.)

Cardiovascular - Mix hard running days (increased intensity) with easy running days. Cross- train using cardio equipment.

Recovery - It is very important to allow the body to recover from strenuous exercises. As the muscles are broken down, it must have time to heal and rebuild. Generally, muscles require 48-72 hours for recovery. For this reason, you should not train the same way, or the same muscle group on consecutive days. If you do not allow the muscles time to recover, they will stay fatigued, and



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greatly reduce muscle development. Training the same muscle group every day is detrimental to your development. Don't do it if you want to see progress.

Avoiding Injury

Prior to engaging in any physical exercises, you must be in adequate physical condition to commence training. Most injuries are preventable. However, once an injury occurs, there is little that can be done to speed up the healing process while maintaining the level of fitness attained prior to the injury. Some causative factors leading to injuries are:

Over training – when one pushes themselves too far beyond their current fitness level. This could lead to depressed metabolic symptoms. Even worse, repeated strenuous exertion can induce Exertional Rhabdomyolysis. This is a condition resulting when skeletal muscle membranes are damaged, releasing intracellular components into the blood stream. If not treated immediately, the individual could suffer grave medical complications including renal failure, cardiac dysrhythmias, and even death.

Improper method of training – increasing the intensity of the exercise too rapidly. If the body is not properly conditioned to perform the movement under stress, it will fail.

Congenital abnormality – structural abnormality of the body may place added stress on certain muscles, tendons, bones, joints, and ligaments.

Lack of flexibility – muscles that are tightened or compacted by exercise are more susceptible to injuries, especially of the pulling and tearing type.

Muscle imbalance – when one muscle overpowers another that performs an opposite function, muscles can become injured (pulled or tear).

Improper biomechanics – performing the movement in a fashion that places a joint, muscle, or structure at risk.

Improper foot wear for training - Wearing improper shoes can lead to a variety of adaptive stresses on lower leg ailments, namely shin splints, tendonitis of the knee, and strained ligaments. Running shoes are designed to correct for specific gaits: over/under pronator or neutral pronator. Visit your local running shoe specialty store to find the best pair for your particular style of running.



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Training Schedule

The following training guidelines can be used to prepare you for your PT program at the Academy. Keep in mind that everyone is different, and not everyone's development is the same. Therefore, the guide simply emphasizes the suggested elements which should be included in a training program. Those experienced in different exercises can adjust their training to meet their particular weakness and needs. Remember, the success of the training program is not based solely on the training schedule, but on your commitment and level of intensity.

As applicants, you should already be training on a regular basis. If not, don't wait 30 days prior to arrival at the Academy to start. You should start your training program as soon as possible to condition the muscles, and to reduce the risk of injury.

****IMPORTANT NOTICE:** If you are a beginner, or are not in good physical condition, you need to concentrate your program on technique and the movement of muscles. Once, the body is accustomed to the mechanics of the exercise, start increasing the duration (ie: 15-30 minutes). When the body is capable to maintaining the increased time, increase the intensity and reduce your time. Remember, higher intensity results in better musculature development. But, increase intensity before your body is ready for it could result in an injury. Approach your training sensibly. For the following workouts, slowly build up to the times and intensity recommended.

Beginners should progress slowly. Train 2-3 days per week, using one of the options below (one per day). Moderate to Advance individual can train 4-5 days per week using one of the options below. Choose a different option on succeeding days. Always allow yourself a minimum of 2 days rest per week.

Option 1 (beginners circuit) - (complete all 5 exercise without stopping. Rest, repeat 2 cycles)

- 10 Jumping jacks
- 5 push ups
- 5 squats
- 10 sit ups
- 10 lunges

Option 2 (moderate/advance circuit) - (complete as many cycles in 6 minutes, rest, repeat)

- 15 squats
- 5 pull ups
- 15 push ups
- 20 sit ups
- 15 alternating lunges



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Option 3 (beginner anaerobic) – 50 meters.

Slowly begin a run, accelerating to about 50-60% of maximal speed over 50 meters.
Complete 2-3 runs with 1-2-minute rest between run.

Option 4 (moderate/advance anaerobic) – 100 meters

Begin a slow run, accelerating to 70-75% of maximal speed over 100 meters.
Complete 4-6 runs with 1-minute rest between run.

Option 5 (beginner core – complete 2-3 cycles)

10 crunches

10 cycles

10 bird dogs (get on your hands and knees on the floor, while supporting your weight, keeping your back level, slowly raise the opposite arm and leg straight out, and return.
Repeat with the other side for a total of 10 each side.

Option 6 (moderate to advance core – complete as many cycles in 6 minutes, rest, repeat)

15 sit-ups

10 supermans (lay flat on your front on the ground, raise both arms and feet off the ground several inches, return, repeat.)

10 toe touches (lay flat on your back, elevate both feet 45 degrees, crunch up to touch your toes)

20 cycles

Option 7 (beginner running)

Briskly walk ½ mile, easy jog ¼ mile. Continue for 3 weeks. Slowly transition to walking ¼ mile, easy jog ½ mile the next 3 weeks. After 6 weeks, slowly jog 1 – 1 ½ miles.

Option 8 (moderate/advance running)

Complete a 20-minute run at a comfortable intensity level. As you progress in the succeeding weeks, slowly increase the intensity level, keeping to 20 minutes.

Option 9 (beginner strength – complete each exercise 2-3 times with rest between before doing the next exercise)

5 Push ups

1-5 pull ups

10 sit ups

10 squats

Option 10 (moderate/advance strength)

Sit-ups: 3 sets of 1-minute sit-ups.

Push-ups: 3 sets of maximum push ups

Pull-ups: 3 sets of maximum pull ups



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(Note): If you are experiencing lower leg pain (indicative of overuse injury), consider using one of the lower impact cardiovascular training machines available in the gyms (ie: elliptical cross-trainer, stair-climbers, cycles, rowing machine).

If weight training is used to supplement strength training, consider using 60-75% RM at 8-15 reps for 1-3 sets.

A Word on Flexibility training

Stretching can be done on any day of the week, and as often as you would like. However, it should be done when the muscles are warm (after a workout). Warming the muscles helps increase the blood circulation and temperature of the muscle group, which in turn, increases pliability. You should never stretch cold muscles. A variety of techniques is available, but the best static stretch is the active isolated technique. The sequence is as follows: hold a stretch position for 2 seconds, relax, and repeat (for 10 repetitions). The stretch should be only to the point of mild discomfort. A rope or elastic band can be used to assist in the hold position.