

Introduction to Physical Fitness

"If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health. -- Hippocrates



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Physical Fitness Standards

Minimum Physical Fitness Standards

<u>CLICK HERE</u> to watch a demonstration of the Coast Guard Fitness Test

Bent Knee Sit Ups

Minimum Qualification for Graduation

Male: 38 in one minute

Female: 32 in one minute

Push-Ups

Minimum Qualification for Graduation

Male: 29 in one minute

Female: 15 in one minute

1.5 Mile Run

Minimum Qualification for Graduation

Male: 12:51Female: 15:26

Swimming

Minimum Qualification for Graduation

Jump off a six-foot platform into the pool, swim 100 meters, and tread water for five-minutes.

*The above standards are for individuals under 30 years of age.

Physical fitness is an important component of the general health of the individual. Comprehensive fitness includes many aspects of a healthy lifestyle. At a minimum, it encompasses balanced nutrition and regular exercise.

Coast Guard members must possess the cardio-respiratory endurance, muscular strength and muscular endurance, together with desirable levels of body composition to successfully perform the mission.

During your first week of basic training, you will be required to perform a physical fitness exam. Recruits who cannot meet, or struggle to meet, our physical fitness standards are more likely to be required to spend additional weeks at basic training and undergo a remedial fitness program. Recruits who fail to meet our minimum entrance requirements may be sent home.

Your Recruiters will perform a voluntary in-office assessment consisting of push-ups and sit-ups prior to your departure. You should strive to arrive physically fit and able to exceed the minimum qualification standards for graduation prior to arrival to Training Center Cape May.

A balanced fitness program consisting of alternating strength training and cardio-respiratory endurance will ensure you arrive prepared. The information in this booklet will assist you.

Consult with your physician prior to beginning any physical fitness program.

"Nothing will work unless you do." -Maya Angelou

COMPONENTS OF A FITNESS PLAN

A well-balanced exercise program should include activities that address all of the health-related components of fitness.

A fitness plan should consist of these five components:

- 1. Cardio-Respiratory Endurance (CRE)
- 2. Muscular Strength (MS)
- 3. Muscular Endurance (ME)
- 4. Flexibility (F)
- 5. Body Composition (BC)

Components of a Fitness Plan

Cardio-Respiratory Endurance (CRE)

Cardio-Respiratory Endurance is the ability to perform prolonged, large-muscle, dynamic exercise at a moderate to high intensity. The word "aerobic" is often used to describe this type of activity. Examples of exercises would include: running, power walking, swimming, etc.

Muscular Strength (MS)

Muscular Strength is the amount of force a muscle can produce with a single maximum effort. Your muscular strength can be measured by the maximum bench press you are able to perform.

Muscular Endurance (ME)

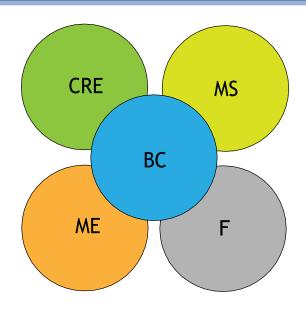
Muscular Endurance is the ability to perform many repetitions over a given period of time. Your muscular endurance can be measured by the maximum number of push-ups you can complete before failure.

Flexibility (F)

Flexibility is the ability to move your joints through their full range of motion. Lack of flexibility often causes injuries and undue strain on your joints and muscles.

Body Composition (BC)

Body Composition refers to the proportions of fat and fatfree mass (muscle, bone, and water) in the body. The best way to improve body composition is through a sensible diet and exercise.



"Whether you think you can, or you think you can't, you're right." - Henry Ford

FREQUENCY, INTENSITY, TYPE AND TIME (FITT)

The FITT Principle outlines the key elements or training guidelines, for an effective exercise program.

Frequency

How often you exercise.

Intensity

How hard you exercise.

Type

What kind of exercise.

Time

How long each exercise session lasts.







You can use the F.I.T.T principle when training for aerobic endurance:

- **Frequency** = 3-5 days/week
- **♦ Intensity** = 70-80% of max heartrate
- **Time** = 30-60 min/session
- **Type** = Running, cycling, stepping, etc.

Dynamic Warm-Up

DYNAMIC WARM-UP

Every work out should include time to stretch and warm-up muscles, ligaments, and tendons prior to exercise. Dynamic warm-up is a vital part of any fitness program as it serves to reduce and prevent injuries, or reduce the severity of injuries should they occur.

These are a few Dynamic Warm-Up exercises you may complete prior to fitness training.

- Jumping Jacks
- Forward Lunge
- Arm circles
- Inchworm with push-ups

Jumping Jacks

Starting Position:

Start with arms at your sides, feet straight ahead and close together.

Procedure:

Bend knees and jump up while spreading arms and legs at the same time. Lift arms to ears and open your feet to just beyond shoulder width. As you return from jumping up, bring your arms back down to your sides and simultaneously bring your feet back together.

Coaching Key:

Perform basic jumping jacks using a 4-cadence count.

"The difference between the impossible and the possible lies in a person's determination." —Tommy Lasorda

Forward Lunge

Starting Position:

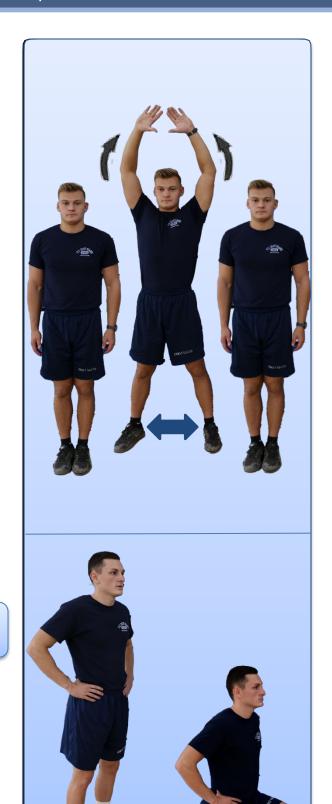
Start with feed hip width apart, with your hands on hips.

Procedure:

Take a long step forward with your left foot and slowly lower your back knee towards ground. Push with your front leg to return to standing. Alternate.

Coaching Key:

Keep your knees from protruding over your toes. Keep your torso upright. Bend both knees to 90 degrees.



Dynamic Warm-Up

Arm Circles

Starting Position:

Start by standing with your feet shoulder width apart and raise your hands up to shoulder height.

Procedure:

Rotate arms in a forward circular motion for 30s. Then rotate in reverse for another 30s.

Coaching Key:

While doing arm circles engage your core muscles, keep your back and your arms straight.

"Things may come to those who wait, but only the things left by those who hustle." – Abraham Lincoln

Inchworm with push-ups

Starting Position:

Start by standing with your feet hip width apart and your hands on your hips.

Procedure:

Bend at the hips and place your hands on the floor close to your feet. Slowly walk your hands out until your body is at a plank position. Complete 1 push-up. Walk your hands back to your feet and stand up returning to the starting position.

Coaching Key:

Keep your core engaged and make sure your body moves in one straight line. Do not sag your hips. If you are unable to complete a plank push-up, kneel on floor, extend arms and put hands shoulder width apart on the floor in front of you, lower your torso and then push your torso back up by straightening arms. Repeat.

"Our growing softness, our increasing lack of physical fitness, is a menace to our security." – John F. Kennedy



Fitness Routine

Exercise Routine

1. Complete Dynamic Warm Up

2. Exercise Routine

Beginner Level: Complete each exercise for 20s and rest for 40s followed by a 15-20 minute walk with a goal of at least 1 mile.

Intermediate Level: Complete each exercise for 30s and rest for 30s followed by a 10-13 minute run/walk with a goal of at least a 1 mile.

Advanced Level: Complete each exercise for 40s and rest for 20s followed by a 13-15 minute run with a goal of at least 1.5 miles.

Exercises (ME)

Push-ups - 02 rounds

Sit-ups - 02 rounds

Low Plank Hold - 02 rounds

Side Plank Hold - 02 rounds

Superman Hold - 02 rounds

Glute Bridge - 02 rounds

Squat - 02 rounds

3. Static Cool Down

Calf Stretch – 30s each calf
Hamstring Stretch – 30s each leg
Side Quad Stretch – 30s each leg
Forward Lunge Stretch – 30s each leg
Shoulder Stretch – 30s each arm

It is important to begin your physical activity safely to reduce your risk of injuries by choosing physical activities that are appropriate for your current fitness level.

Increase your physical activity gradually over time to meet your fitness goals. You should "start low and go slow" and gradually increase over time.

Each workout routine is tailored for individuals with different abilities: a beginner routine, an intermediate routine, and an advanced routine.

You should strive to work out on Monday, Wednesday, and Friday. Tuesdays and Thursdays are recovery days dedicated to flexibility. Saturday or Sunday is reserved for physical activities that you enjoy with an alternate day of rest.

These fitness routines are recommendations. If one routine is too difficult, move to an easier level. Conversely, if one level is becoming too easy, move to a more difficult level.

Remember to start with the Dynamic Warm-Up prior to beginning the routines.

"The secret of getting ahead is getting started"

Mark Twain





Sample Routine-Beginner Level:

- ✓ Complete Dynamic Warm-Up
- ✓ Complete all exercises 2 rounds each
- ✓ Walk for 1 mile within 15-20 minutes
- ✓ Complete Static Cool Down

Static Cool Down

STATIC COOL-DOWN

The purpose of cooling down after exercising is to allow your breathing and heart rate to return to their normal levels. While we exercise most of our blood flow is directed towards the muscles. A cool down helps maintain the blood flow to the heart while the body redirects blood from your muscles to other parts of the body. This helps to prevent a large drop in blood pressure which could lead to dizziness.

It is important to practice safe stretching. Stretch to the point of mild discomfort. Do not stretch to the point of pain. Do not bounce when you stretch. If you bounce, it contracts the very muscle you are trying to stretch. Hold each stretch for 30s.

These are a few static stretches you may complete after your fitness training.

- Calf stretch
- Hamstring stretch
- Side Quad stretch
- Forward Lunge stretch
- Shoulder stretch

"Some people want it to happen, some wish it to happen, others make it happen." –Michael Jordan

Calf Stretch

Starting Position:

Start in the plank position and place your left foot behind your right.

Procedure:

Lift your hips toward the ceiling while slowly lowering your heel towards the floor and your calf starts to stretch. Switch and continue with the other calf.

Coaching Key:

Your body should form an upside-down V and your knees and elbows should be straight.



Static Cool Down

Hamstring Stretch

Starting Position:

Start by lying flat on your back with your toes towards the ceiling.

Procedure:

Lift your left leg up grabbing behind the knee. Pull your leg toward you and hold. Switch to the other leg and repeat.

Coaching Key:

Keep your back as flat as possible to ensure you don't strain your lower back.

Side Quad Stretch

Starting Position:

Begin on your left side with your feet pointing straight ahead.

Procedure:

Bend your right knee backwards towards your back while grabbing your right ankle and stretching your quadriceps. Repeat on either side.

Coaching Key: If you are having trouble staying steady, bend your bottom knee.

Forward Lunge Stretch

Starting Position:

Stand with your feet hip width apart.

Procedure:

Slowly lift your right foot off the floor. Step forward ensuring your heel strikes the floor first. Slowly shift your body weight onto the forward foot placed firmly on the floor. Lower your body and put both hands on the floor while driving your hip down and forward. Switch legs and repeat.

Coaching Key:

While in the lunge position maintain a flat back.



Static Cool Down

Shoulder Stretch

Starting Position:

Begin with your feet hip width apart.

Procedure:

Bring your left arm across your body with your right forearm, pull your left arm towards your body. Switch arms and repeat.

Coaching Key: While stretching shoulder continue to face forward.

"Exercise is king. Nutrition is queen. Put them together and you've got a kingdom." —Jack LaLanne

Hydration

Maintaining a healthy lifestyle through diet, exercise, and proper nutrition is important to your success in the Coast Guard. Hydration falls into this category.

We lose water when we urinate, sweat, and when we breathe. If you do not replace this water, you will become dehydrated.

Becoming dehydrated can be a serious condition if not identified properly. You should know some basic symptoms of dehydration.

- > Little or no urine output
- Urine is darker than usual
- > Extreme thirst
- Dizziness/light headed
- Confusion
- Headache

You should drink water before, during, and after exercise even when the weather is warm or cold. As a rule of thumb, drink at least 2 cups of water before exercise to match fluids lost in sweat. Drink 1 cup of water every 20-30 minutes during exercise.

While staying hydrated during exercise is important, consuming too much water may lead to water poisoning. Water poisoning occurs when your kidneys can't process and rid your body of excess water. If your urine is clear you may be drinking too much.



Fitness Log

	Dynamic Warm-Up	Workout Level	Exercises Completed	Run/Walk Time & Distance
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				

References

CIM 16114.33D U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II

CIM 6200.1E Coast Guard Health Promotion Manual

Physical Activity Guidelines for Americans, 2nd edition 2018, U.S. Department of Health and Human Services

American College of Sports Medicine, https://www.acsm.org

YouTube video on CG Physical Fitness Exam: Exam Link

