

FiTOUR® DOUBLE BOOK
Turn it Over - Two in One!

Book 1

Book 2



FiTOUR®

Bootcamp Certification



2nd Edition

Boot Camp Certification Course



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* **Certification:** We encourage registrants to study the material, complete the chapter review worksheets, and prepare to take the examination within 90 days of registration. You have **one full year from date of purchase to access the Certification Exam**.

* **Certification Study Materials** *The online study manual and the online video* are located in your account with *FiTOUR®* in your Study Center. The video follows along with the manual.

* **Certification Timed Exam** When you have completed the study materials and are prepared to take the **online exam**, log into your *Fitour®* account, click on “Exam Center” and choose the correct exam. This is a **timed 3 hour exam** that you must complete within the timed 3 hours. You cannot start and stop the exam. Link to the *FiTOUR®* Online Exam User Guide: <https://www.fitour.com/inhome-cert-user-guide>

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* **Certification Exam Failed** If you do not pass the exam with a 75% or higher you can purchase a **Retest for \$25.00** at www.fitour.com/retest

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INTRODUCTION TO BOOT CAMP PROGRAMS

- **What is Boot Camp Training?**
 - Indoor or outdoor fitness program that implements body weight exercises, calisthenics, agility drills, obstacle courses and running.
 - Based on military training techniques, Boot Camp programs are generally more intense than traditional group fitness classes.
- **History of Boot Camp Training**
 - Boot Camps are originally associated with the type of indoctrination training as used by branches of the military.
 - Fitness Boot Camps first hit the fitness scene as high intensity programs designed for advanced and athletic fitness enthusiasts.
 - Presently, fitness Boot Camps can be found that not only focus on military-style training but are also centered around weight loss, preparation for specific athletic or sports events and/or self-improvement programs.
 - Fitness Boot Camps are typically run by personal trainers who have the ability to motivate large groups.
 - Fitness Boot Camps are typically based upon the below training modalities. Each training session will typically include several or all of the following types of exercise techniques:
 - Running
 - Interval Training
 - Field Drills
 - Resistance Training
 - Weights
 - Rubberized Resistance
 - Body Weight
 - Calisthenics
- **Benefits of Boot Camp Training**
 - Decreases body fat.
 - Increases cardio efficiency.
 - Increases muscular strength and endurance.
 - Provides individuals with the extra push to commit to a regular exercise program.
 - Gives social support.
 - Provides an approach to exercise that may help to offset boredom.
- **Creating A Successful Boot Camp Training Program**
 - **Boot Camp = Fat Loss + Camaraderie + Team Effort.**
 - Everyone works at their own pace as individuals toward their goals.
 - Many of the exercises and drills require a team effort to reach goals.
 - The large group dynamic of a Boot Camp can provide additional motivation.

THE BUSINESS OF BOOT CAMP

To build a successful Boot Camp business, a professional fitness trainer not only needs to have the practical skills and knowledge to design and implement a comprehensive fitness program, but also must have the business skills to effectively create and implement a budget and marketing plan that will result in a good solid client base.

There are many factors to take into account when making the decision to start a Boot Camp business.

SETTING UP YOUR BOOT CAMP BUSINESS:

Before embarking on a Boot Camp business, it may be helpful to examine the following topics and determine if you are interested in having your own Boot Camp business. After a review of the below topics, you may decide that you are better suited to teaching Boot Camp classes for a fitness center, local community center or church. Only you know how much time to devote and money to invest in starting a business of your own.

- Warmer climates are ideal for year-round boot camps. Cooler climates may provide ideal conditions for outdoor training in the spring, summer and early fall but may require indoor training during the winter months.
- A city park can be an ideal location to hold Boot Camp trainings. However, check with your city park before scheduling a Boot Camp to determine if a contract and/or rental fee is required. Some cities may also require that you include the city on your liability insurance policy.
- Fitness clubs, churches, dance studios and roller skating rinks may allow you to rent space to conduct indoor Boot Camp programs. Generally, the professional trainer will enter into a contract with the facility and will pay a lump sum for the month or a percentage of total fee per session.
- The 3 L's of a successful business: "Location, Location, Location".
- Check list when looking for a location:
 - Is the location convenient and easy to find?
 - Is the space in the location adequate for participant movement, equipment storage needs, rest rooms/showers, childcare?
 - Will you have to invest in improving the facility?
 - Is flooring safe for the type of activities which will be performed during training sessions?
 - What businesses surround the facility?
 - Will your neighbors support and appreciate the type of business you conduct? (i.e., jumping jacks performed in a studio situated above a massage therapy salon may cause problems with the owner of the massage therapy business).
- Return on Investment
 - Will the costs involved in renting, renovating or purchasing appropriate flooring, mirrors, etc., outweigh the revenue generated from Boot Camp fees?

CHOOSING EQUIPMENT AND SITE

There are many factors to consider when selecting a location for a Boot Camp program.

- **Fitness Club**
 - If you rent space from a fitness club you may be able to use the equipment which is owned by the fitness club.
 - If you are not able to use the fitness club's equipment, you will want to choose lightweight, versatile and portable equipment.

- **Dance Studio, Church or Community Center**
 - Before purchasing equipment, you will first want to determine if adequate storage is available.
 - If storage space is available, choose equipment that will fit in the assigned storage space.
 - To maintain the integrity of the equipment, you may want to consider having a rule that the equipment is for your use only and not for the use of the facility.
 - If you determine you do not want to share the equipment with the facility, you may want to purchase a storage cabinet that is equipped with a lock and key.
 - When considering using one of these types of facilities, be certain that the schedule of the facility allows you to hold training sessions during times which will produce the most income. For example, some dance studios may only rent their space during "down times" and reserve "peak times" for dance class sessions.

- **Opening Your Own Facility**
 - Opening your own facility has many positives, such as control over the times available for training and plenty of room for storage of equipment.
 - On the downside, if you purchase a building or enter into a lease for a studio space, you must be certain you will generate enough income to cover the overhead such as rent, utilities, paper items, equipment purchases, liability insurance, any upgrades to the property, etc.
 - If you do open your own facility, you will need determine the space available for storage and create an equipment budget before purchasing equipment.

- **Outdoor Venues**
 - Using an outdoor venue to conduct Boot Camp is the most cost effective choice. However, your Boot Camp success can be dependent upon favorable weather conditions. You may find it necessary to implement a severe weather policy in the event of unfavorable weather.

TYPES OF EQUIPMENT SUGGESTED FOR BOOT CAMP TRAINING

- **Portable Equipment:** Portable equipment is ideal for Boot Camps that are conducted outdoors or at indoor facilities that have little or no storage space. Because equipment will need to be transported, it is best to use equipment that will easily fit into your vehicle and is easy to pack and light-weight. In addition to being versatile, the following equipment is relatively inexpensive.

- Tubing/Rubber Resistance
- Medicine Balls
- Cones
- Yoga Mats
- Hurdles
- Agility Ladders
- Jump Ropes

- **Fitness Club Equipment:** If you are going to conduct your Boot Camp Training sessions in a space that has generous storage available and you have access to equipment typically found in a Health Club, the following equipment will be ideal for Indoor Boot Camps:

- All of the portable equipment listed above and the following items:
- Barbells
- Steps
- Dumbbells

- **No Equipment Necessary:** If you have a limited budget and are going to conduct your Boot Camp Training either indoors or outdoors, you can opt not to use any equipment at all. Merely perform body weight exercises, use the terrain or space around you, and be creative.

- **Determining How Much to Invest in Equipment:** After determining what equipment will best suit the needs of the type of Boot Camp you will conduct, you need to decide how much money you will invest in equipment. Prior to making an investment, it is best to create a budget based on the number of participants who will be enrolled in the Boot Camp.

- Below is an example of how much money should budgeted for an Outdoor Boot Camp Program with 10 participants.

EQUIPMENT	Quantity	Cost Per Item	Total
Medium Resistance Rubber Tubing	10	\$5.00	\$50.00
Jump Ropes	10	\$2.50	\$25.00
Medicine Balls 4 lbs.	10	\$17.00	\$170.00
Yoga Mats	10	\$25.00	\$250.00
Hurdles (set of 6, 6 inch)	1	\$70.00	\$70.00
Agility Ladder	1	\$48.00	\$48.00
Cones (9 inch)	5	\$3.00	\$15.00
TOTAL COST			\$628.00

*Equipment prices were obtained from Fitness Wholesale www.fwonline.com

- **Additional Costs to Consider:** If you will be transporting equipment, you will need to also purchase storage containers to hold the equipment. The cost of these containers needs to be taken into consideration when creating your budget.

STORAGE CONTAINERS	Qty	Item	Total
Cinch Pack	2	\$2.50	\$5.00
Footlockers	2	\$20.00	\$40.00
TOTAL COST			\$45.00



Footlockers with wheels are ideal for storing and transporting hurdles, cones, agility ladder, medicine balls and yoga mats

Cinch Packs are ideal for storing tubing and jump ropes



- **Suggestions for Start-Up Equipment:** The equipment FiTOUR® recommends in this manual may assist you in keeping start-up overhead low when you first begin your Boot Camp business. You can use the equipment suggestions as a guide when deciding what equipment will work best for your training technique, budget, and the needs of your participants. It is advisable that you investigate the cost of shipping and handling when ordering equipment on-line. After factoring in shipping & handling expenses, you may find it to be more cost efficient to purchase equipment from a local sporting goods store or fitness equipment center.



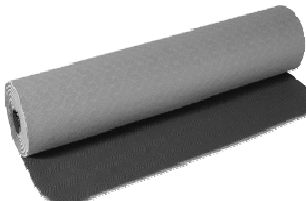
Medium Rubber Resistance Tubing is the best choice if you have a limited budget because the Medium Resistance will be challenging to most participants. If you will have men participating in your Boot Camp programs, you may want to invest in heavier tubing. Rubber tubing is much lighter to transport than dumbbells.



When purchasing **Jump Ropes**, be sure to take into account the various heights of your participant. Purchase ropes that will accommodate 5'2" participant up to over 6 feet. Jumping rope is an ideal way to raise the heart rate and develop participants' agility and quickness.



Medicine Balls are very versatile and can be used for a number of exercises including upper body, abdominal, lower body, agility and power drills as well as partner drills. If you have a limited budget, you may want to purchase one medicine ball for every two people and have participants share a ball.



Yoga Mats are a good choice for Boot Camp training sessions because they are lightweight and less bulky than traditional fitness mats which makes them easy to transport. A suggestion is to fold the mat in half for performing sit-ups, crunches, push-ups on the knees and other exercises that may require cushioning.



Hurdles can be set up in many configurations to create obstacle courses and are excellent tools for practicing agility drills. There are different types of hurdles available. Cone hurdles can play double-duty as hurdles or the cones can be used to set boundaries.



An **Agility Ladder** is an ideal tool to use to help develop agility and balance. It is very versatile and can be used for lateral and linear drills. When working with an agility ladder on grass, be sure that the grass is low to avoid participants tripping over the rungs of the ladder.



Cones are ideal for setting up obstacle courses, setting boundaries, performing field drills and various other activities. In addition, cones are lightweight, easily transportable, inexpensive and can be found at many discount stores.

- **Recouping Equipment Costs** - When using the equipment lists on the previous pages, the total estimated start-up cost for equipment to accommodate 10 participants in a Boot Camp Program will be \$673.00 (\$628 [equipment total] + \$45 [storage]). There are several approaches you could take to recoup the expenses:
 - **Depreciation Method:** With this method, you will depreciate the cost of the equipment over the year and work into program fees. (i.e., $\$673 \div 12 \text{ months} = \$56 \div 10 \text{ participants} = \5.60 equipment fee per participant.)
 - This is calculated under the premise that you will hold Boot Camp Programs 12 months of the year with a minimum of 10 participants per month.
 - By using this method of recouping the cost of equipment, the additional fee charged to participants is nominal and will not greatly impact the cost of the program for participants.
 - **Equipment Rental:** Many Boot Camp Programs have found that equipment rental is an ideal way to approach covering the expenses incurred in the necessary equipment.
 - Participants are charged a nominal rental fee for equipment in addition to the program fee.
 - With the rental program, participants have the option of purchasing their own equipment or renting from the trainer.
 - The rental program may also offer an opportunity to generate additional revenue.



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #1

1. In your own words, provide a brief history and description of Boot Camp Fitness Training.
2. What modes of training are typically included during a typical Boot Camp Training session?
3. What are factors to be taken into consideration when deciding on a site location to hold Boot Camp Training?
4. List the suggested types of equipment for Boot Camp Training and explain why portable equipment may be the best choice for Boot Camp Training.
5. True or False? Is it necessary to have equipment for a successful Boot Camp Training program?
6. What is a versatile piece of equipment that can be used for upper and lower body exercises, abdominal exercises, agility drills and partner drills?

DETERMINING TARGET POPULATION

Because Boot Camp programs require that the trainer provide maximum motivation to their participants, it is important that the trainer train populations which he/she enjoys training and feels comfortable training. The sky is the limit on target populations for Boot Camp Programs. Programs that are currently seen across the country include:

- **Stay-At-Home Moms**
 - Because most Boot Camps are held outdoors, providing childcare may not be affordable and convenient so it is best to schedule training programs when children are in school or when childcare is available.
 - Immediately after morning drop-off for school. Keep in mind that mothers of pre-school age children will generally drop their children at school later than mothers who have school-age children.
 - Early mornings might be ideal for the Stay-At-Home Mom whose spouse is willing to get the children ready for school before he leaves for work. The Mom is able to work out while children are sleeping and then return home before Dad leaves for work.

- **Business Professionals**
 - Many business professionals enjoy Boot Camps because of the opportunity to face physical and mental challenges. Boot Camps are also appealing to the business professional because they do not require the thought and attention that may be required during a choreographed fitness class.
 - Early morning is an ideal time to schedule training for business professionals because by the end of the day, they quite often do not have the energy to exercise. Beginning the day with exercise will increase their energy throughout the day. You may want to consider a site that is equipped with locker rooms and showers for early morning training to be successful.
 - Lunch hour is an ideal time for the business professional to participate in Boot Camp. When planning the program, you will want to make sure there are plenty of businesses located near the venue. As with early morning training, you will want to have locker rooms and shower facilities available because lunch time workouts will definitely require a shower afterward. You may consider offering a shorter session (i.e. 45 minutes) to allow for travel, clothing changes and other factors to be considered during lunch hour.
 - Early evening Boot Camp allows participants to come straight from work rather than going home before coming to the program site. If participants have time to go home after work, they very well might find distractions at home which can lead to non-attendance. While early evening training will not require having showers, you will need to be able to provide a rest room or changing room to allow participants to change into training clothes.

MARKETING YOUR PROGRAM

Understanding how to strategically market is critical in creating a successful Boot Camp business. It is not necessary to spend large sums of money on marketing your program.

- **E-mail** is an ideal marketing tool. There are many commercial e-mail companies with web sites on which you can create professional e-mail newsletters, set up e-mail address lists, create surveys, and many other marketing features for a nominal monthly fee.
- **Creating a Web Site** is very inexpensive and easy to do. It is not necessary to hire someone to set up your web site if you have the knowledge, time and patience to set up a web site. You can also consider contracting with a “web master” to set up your web site.
- **Social Networking** is an inexpensive way to market your services through “word of mouth”. Social networking web sites offer this service for free.
- **Flyers/Posters** are also a good way to spread the word about the services you offer. You can create your own flyers, visit a self-service copy center, and distribute the flyers. Below is a list of locations you may want to consider when you are distributing flyers:
 - Health Food Stores and Exercise Equipment/Clothing Retail Centers.
 - Community Bulletin Board at Grocery and Drug Stores.
 - Hair and Nail Salons.
 - Schools – best to call first to get approval. Then find out how many teachers and staff are at the school. Deliver flyers to the school and ask the office staff to distribute to the teachers. Some schools will allow you to send enough flyers for all of the children to take home with them.
 - City Parks/Recreation Facilities.
- **Press Releases** to local radio and television news stations, newspapers and magazines. Local area directories may offer free listings of upcoming community events.
- **Word-of-Mouth** is one of the best and most effective methods of advertising your Boot Camp. If participants are getting good results, they are going to tell their friends.

- **Creating a Marketing Time-Line**
 - **60-days prior** to Boot Camp choose dates for Boot Camp.
 - Check local events calendars to make certain no other events will interfere with attendance and registration. (i.e., races, sporting events, festivals, etc.)
 - Check local school schedules to make certain your Boot Camp will not coincide with a school holiday.
 - **45-days prior** to Boot Camp, distribute promotional and marketing materials.
 - E-mails and/or Flyers.
 - Include all critical information on e-mails, flyers/promotional materials.
 - Location, Time, Dates.
 - For whom is it appropriate?
 - What to expect.
 - Costs involved.
 - Registration Deadline—Set 30 days prior to Boot Camp start date.
 - Contact information including phone number and e-mail address.
 - Provide your professional credentials.
 - **30-days prior** to 30-day Registration Deadline.
 - Send reminder e-mails and/or distribute flyers.
 - **14-days prior** to 30-day Registration Deadline.
 - Send reminder e-mails and/or distribute flyers.
 - Submit a press release to local TV, radio stations and newspapers.
 - **7-days prior** to 30-day Registration Deadline.
 - Send reminder e-mails and/or distribute flyers.
 - Submit a press release to local TV, radio stations and newspapers.
 - **5-days prior** and again **2-days prior** to 30-day Registration Deadline.
 - Send reminder e-mails.
 - **2-weeks** prior to actual start date for Boot Camp.
 - Send e-mail to all registered participants with the following information:
 - Where, When, Time.
 - What to Expect, Bring and Wear.
 - **1-week prior** to actual start date for Boot Camp.
 - Send encouraging e-mail to all registered participants designed to create anticipation and excitement.
 - Repeat information provided in the “2-week prior” e-mail.
 - Print and copy documents.
 - Registration Form and Goal Setting Questionnaire.
 - Testing and Assessment Score Sheet.

DETERMINING A FEE

When determining a fee for your Boot Camp, you will need to look at the demographics in your area. There are many factors to consider that can have an effect on how much you charge for your program and can impact the success of the program:

- What are other trainers charging in the area for similar programs?
 - You may want to examine the fees for yoga sessions, group personal training and other training when determining a reasonable fee.
 - Set a fee that you know your target market will feel comfortable paying.
- **Setting Guidelines for Payment and Attendance**
 - Boot Camps are different from traditional fitness classes in that one of the driving factors for participants is the promise Boot Camp offer of reaching specific goals. In order to guide participants to successful completion of a Boot Camp, it is important that an attendance policy be set in place that will strongly encourage compliance with the attendance guidelines.
 - Below are suggested attendance and fee systems which may assist you in your decision regarding an attendance and payment policy:
 - **Advance Payment Method:** Need to have “Use It or Lose It” policy.
 - Participant pays program fee in advance which will encourage attendance and compliance with the program guidelines.
 - May offer a slight discount to Advance Pay clients to encourage up-front payment in full.
 - **Installment Payment Method:**
 - Weekly
 - Monthly
 - Quarterly
 - **10-Session Punch Card:**
 - Create 10-Session Punch Cards using standard business card template in your word processing program and print on blank business cards which can be purchased at your local office supplies store..
 - Consider having an expiration date.
 - **Sign-In and Pay Per Session:**
 - Participants sign-in on designated “Sign-In” sheet prior to the training session.
 - Participants pay a fee for each session attended.
 - Consider charging a higher fee for this type of payment plan, which may encourage the individual to sign up for Advance or Installment Method or Punch card, thus increasing their adherence to the program.

- **Setting Guidelines for Payment and Attendance**
 - **Electronic Check-In System:**
 - Participants are issued a “Client Card” with a computer generated barcode. The participant scans the card prior to training session.
 - The Electronic Check-In System may be the least cost-effective system and may not be feasible for an outdoor Boot Camp.
 - This method might be used if your program is performed in a facility where a Check-In system is already in place. The center would pay you per swipe. However, this method is can be very challenging to monitor and cross-reference.
- **Cancellation and Refund Policy**
 - **Have a clearly set Refund or Credit Policy:**
 - If a participant becomes sick or is injured, it may be necessary to provide a refund.
 - A cancellation fee policy may be appropriate to avoid total loss of income.
 - Advance Pay Methods: Need to have an expiration date policy (30 day, 60 day or 90 day is suggested).



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #2

1. Why is it important for a Boot Camp Trainer to closely consider his/her target population when deciding what type of Boot Camp Program to market and conduct?
2. List five (5) ways to market a Boot Camp Program.
3. When creating a marketing timeline for a Boot Camp Training Program, it is important to begin early for the best success. Briefly list and explain the suggested steps to take for each of the following listed timelines:
 - 60 days prior to Registration Deadline:
 - 45 days prior to Registration Deadline:
 - 14 days prior to actual start date:
4. Be familiar with the various types of suggested payment plans. What payment plan will work best for your Boot Camp? Why?

REGISTRATION FORM

It is important to have each participant complete a Registration Form with contact information, emergency contact information and general health history so that you are familiar with the Boot Camp participants. The Registration Form provided in this manual contains a brief Health and Exercise history to allow the you to make an informed decision on whether to allow the individual to participate in your Boot Camp. The Registration Form also contains a signed Informed Consent and Waiver of Liability section.

In addition to providing important health and emergency contact information, the personal contact information obtained will play an integral part in marketing future programs and maintaining contact with the participant after completion of the Boot Camp.

- Name
- Address
- Phone
- E-mail
- Emergency Contact Information
- Health & History Questionnaire—May consider requiring a physician’s release for participants who answer “yes” to any questions.
- Informed Consent and Waiver of Liability

HEALTH SCREENINGS

To ensure that participants are ready to participate in the rigorous training of a Boot Camp, it is very important to screen the health status of each participant. Including health status questions on the Registration Form is an ideal way to gather this information.

Until recently, it was recommended that all participants have medical clearance prior to participating in a physical fitness program. However, there have been recent modifications of those standards based on the following factors:

- Being active is healthier than being inactive.
- Research shows that beginning a fitness program poses low risk of health problems to the vast majority of people.
- Requiring that all participants undergo medical screening and examination prior to beginning a physical fitness program is too costly and time consuming.

INTERPRETING THE HEALTH/MEDICAL HISTORY QUESTIONNAIRE

According to American College of Sports Medicine (ACSM) guidelines, a fitness trainer should rely on his/her professional experience and academic knowledge when making a decision on whether to allow someone to participate in a Boot Camp.

The Boot Camp trainer should perform a thorough review of the Registration Form of each participant. Participants who present with orthopedic or medical issues as indicated in the form should be encouraged to perform the appropriate modifications during a training session.

If the information contained in a completed Health & Exercise History indicates that the participant has current or past medical history or orthopedic issues, the Boot Camp trainer should perform a further interview to determine if participation in a Boot Camp is appropriate for the individual. This interview can be conducted face-to-face or over the phone. The trainer should ask questions that will provide insight into the participant's current state of health and also what, if any, modifications would be appropriate should the participant be allowed into the Boot Camp.

Because Boot Camps are based on high-intensity cardio-respiratory and muscular endurance training, it is imperative that the Boot Camp trainer follow the appropriate guidelines when allowing individuals to participate in the program. Fitness trainers should always protect the health and safety of participants first and foremost. It would be better to turn a participant away than to have a participant suffer a serious health issue or injury due to ignoring the warning signs provided in the initial screening process.

FiTOUR® highly recommends that fitness professionals who will conduct/design Boot Camps complete the FiTOUR® Boot Camp Certification, the FiTOUR® Primary Personal Trainer Certification Program and the FiTOUR® Primary Group Exercise Instructor Certification Program. Successful completion of these three Certification Programs will ensure that the fitness profession has the necessary tools needed to adequately perform health & medical screening necessary to conduct a safe and successful Boot Camp.

BOOT CAMP REGISTRATION FORM

Please complete the following information accurately.
All information will be kept strictly confidential and will be used only to enhance the safety of the exercises you perform during the Boot Camp Program.

(Please print legibly)

Name: _____ Nickname: _____
Address: _____ City _____ ST _____ Zip _____
Home Phone: _____ Work: _____ Cell: _____
Email Address: _____ Date of Birth: _____
Emergency Contact Name: _____ Phone No. _____

What type of fitness activities do you regularly perform? Please list number of days per week and duration of activity(ies). _____

Please check any of the following conditions that apply to you:

Have you ever been told by a physician that you have or have had any of the following?

- Heart attack Cancer Seizure Stroke
 Diabetes Lung Problems High cholesterol (>200)
 High blood pressure Arthritis Osteoporosis Exercise Induced Asthma

If you are currently taking any prescription(s) or over-the-counter medications, please list them:

Do you smoke? Yes No

Do you have any past injuries, or currently experience problems with, any of the following?

- Cramping Low Back Chest Pain Shin Splints Middle Back Neck
 Shoulders Hands Feet/Ankles Hips Calves Knees
 Fainting Dizziness Loss of Coordination Irregular heart beat Heat Intolerance
 Asthma Migraines Amenorrhea Fibromyalgia

List any recent surgeries:

Are there any additional issues or concerns you would like to disclose prior to beginning Boot Camp?

I realize that there are risks to all exercise, including injury and possible death, although every effort will be made to decrease any risk of injury. I take full responsibility for my participation in the Boot Camp Training Program. Knowing that I participate at my own pace, and that I am free to discontinue participation at any time, I will inform the Boot Camp Trainer of any problems immediately.

Signature: _____ Date: _____



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #3

1. List why it is important to have all participants complete a Boot Camp Registration Form prior to participating in a Boot Camp Training Program.
2. List components that need to be included on a Boot Camp Training Registration Form.
3. What is the importance of including health status screening on the Boot Camp Registration Form?
4. Until recent years, it was recommended that all participants provide medical clearance to participate in a fitness program. Why have these standards been changed and it is no longer necessary to obtain a medical clearance from each participant?
5. What steps should be taken by the Boot Camp Trainer prior to allowing a participant to participate in Boot Camp Training if that participant indicates a past medical history or orthopedic issues in the Health Screening portion of the Boot Camp Registration Form?

MOTIVATING THROUGH GOAL SETTING

Because Boot Camp incorporates the *overload training principle**, participants are often asked to perform skills, drills and repetitions that may place them in physically and mentally stressful situations. It is up to the Boot Camp trainer to motivate participants to reach their goals by providing assistance in setting short-term goals and long-term goals.

Long Term Goal Setting

In order for participants to feel successful upon completion of Boot Camp, you need to provide methods of assisting them in setting their own personal goals which they can expect to reach by the end of the program. The majority of participants will share the same general goals but each will have their own personal motivation for signing up for the Boot Camp and will have their own individual goals they wish to achieve.

You can create your own Boot Camp Goal Setting Questionnaire or use the Boot Camp Goal Setting Questionnaire provided in this manual.

Prior to setting goals, it is good for participants to examine and identify each of the three factors which are included in the Boot Camp Goal Setting Questionnaire:

- Degree of Satisfaction with Current Level of Fitness.
- Areas of Improvement.
- Plan of Change.

The information obtained through completion of the Goal Setting Questionnaire will provide participants with tangible information that they can compare to the results they experienced at the conclusion of the Boot Camp.

The Goal Setting Questionnaire will allow participants to examine their own personal reasons for participating in the Boot Camp and will help them to stay focused on their own goals throughout the duration of the program.

- **Degree of Satisfaction with Current Level of Fitness**
 - Many times, participants will focus on weight loss, which is generally the primary reason why individuals participate in fitness programs.
 - The Degree of Satisfaction section provides participants with the opportunity to examine aspects of fitness that are much more vast than mere weight loss and will improve their overall quality of life and well-being.

**The overload training principle occurs when greater than usual demands are placed on the body through systematically manipulating the number of sets and reps and amount of time spent performing an activity.*

- **Areas of Improvement**
 - Completion of the Areas of Improvement section of the Questionnaire will allow participants to identify the areas of their life that may require improvement before they can actually begin working on their specific goals.
 - Oftentimes, habit patterns are formed which keep participants from reaching goals. Through identification and recognition, these roadblocks can be removed, allowing participants to reach their goals more quickly and easily.
- **Plan of Change**
 - After Areas of Improvement have been identified, the final step is to guide participants to create a plan which will lead them to change.
 - By examining the roadblocks participants have encountered in the past, as well as successful tactics used which helped them reach their goals, participants can create a Plan of Action to create an unencumbered path that will help them successfully attain established goals.
 - Oftentimes, new habit patterns need to be created in order to dispose of old habit patterns.

IDENTIFYING HABIT PATTERNS AND MAKING CHANGES

Suzy is an avid runner and is a “health food junky”. She exercises 60 minutes every day and follows a very strict and health conscious diet.

Even with her current level of physical activity and healthy eating habits, Suzy has attempted to successfully lose 5 pounds since she had her last child five years ago.

While she has experienced a 5 pound weight loss and has reached her goal weight numerous times during the past five years, she has never been able to maintain the weight loss.

An examination of habit patterns reveals that many evenings before going to bed Suzy eats a sweet treat as a reward for exercising and maintaining healthy eating habits throughout the day.

Once Suzy realistically acknowledges that no matter how healthy she eats during the day or how much exercise she participates in, she is creating a roadblock to her success by eating a high-calorie snack in the evenings before bed, she can strategically plan to change.

Initially, change will be difficult because of the habit pattern of eating a sweet prior to bed but once she creates a habit of not eating sweets before bed, she will find it difficult to fall back into the old habit.

Short-Term Goal Setting

Actual training sessions are ideal for setting short-term goals. Successful achievement of goals during training sessions will provide participants with the positive reinforcement that will help them to maintain their motivation as they strive toward their long-term goals.

- Set specific and realistic goals which need to be achieved throughout the training session. Usually, a reference of time is included in short term goals.
- Below are some examples of short term goals which could be set during a single training session:
 - Push-ups for a specified amount of time (i.e., 60 seconds).
 - Run a specified distance for a specified number of reps (i.e., run $\frac{1}{8}$ mile x 8 = 1 mile).
 - Perform field drills for a specified number of reps for a specified amount of time (i.e., side shuffle right 10x + side shuffle left 10x for 1 minute).
 - Enjoy the daily experience of positive motivation that Boot Camp provides.
- Set specific short term goals to be achieved by the end of each week.
 - Perform cardio-respiratory exercise on the days when no Boot Camp training takes place (i.e., Boot Camp is Monday, Wednesday & Friday. Participants perform cardio-respiratory on their own on Tuesdays, Thursdays & Saturdays).
 - Feel better and congratulate oneself for attending and actively participating in each session.
 - If participating in Boot Camp is for weight loss, lose 1-2 lbs. per week due to exercise adherence and proper eating habits.

BOOT CAMP GOAL SETTING QUESITONNAIRE

The following tables may be copied or adapted for distribution to Boot Camp Participants.

DEGREE of SATISFACTION with Current Level of Fitness <i>Check the best number for each aspect of your current fitness level, using this scale 4 = Very Satisfied 3 = Satisfied 2 = Dissatisfied 1 = Very Dissatisfied</i>	4	3	2	1
Amount of Energy				
Cardiovascular Endurance				
Muscular Strength & Endurance				
Flexibility of Hamstrings and Low Back				
Ability to cope with tension & stress				
Ability to relax				
Ability to get a good night's rest				
Low-back function				
Physical appearance/Body Weight				

AREAS OF IMPROVEMENT Take a few moments to think about the areas of your life which you feel need improvement. Briefly list areas of improvement below.
1. Specific Physical Problem:
2. Appearance of Particular Part of Body:
3. Ability to Participate in a Specific Sports (i.e. tennis, skiing, running, etc.)
4. Risk of a Health Problem:
5. Other:

PLAN OF CHANGE
IDENTIFY HABIT PATTERNS THAT CREATE ROADBLOCKS

1. Food Choices

2. Exercise Choices

3. Unhealthy or Negative Thoughts

4. Unhealthy or Negative Behavior (smoking, alcohol, drug abuse, caffeine, diet sodas, etc.)

5. Daily Activities/Habits: Briefly examine the activities of a typical day. List each activity and the time you generally participate in that activity.

AM:

Mid-AM:

Noon:

Mid-Afternoon:

Early PM:

Late PM:

BEHAVIORAL CONTRACT

Once a Plan of Change is in place, it needs to be understood that changes in behavior will not automatically occur. Behavioral change generally consists of five stages:

1. Pre-contemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance

Boot Camps have found great success in assisting participants with making lifelong changes in behavior that may be detrimental to their health and may ultimately keep them from reaching their fitness goals. While total change may not fully occur during a Boot Camp Program, the foundation for change can be set.

Having participants complete a Behavioral Contract after Goals have been set is an ideal method of encouraging compliance with the Program guidelines to lead participants to successful completion of the Boot Camp Program.

On the following page is a sample Behavioral Contract which can be copied or adapted for use by Boot Camp Program participants.

BOOT CAMP FORMS

The Boot Camp forms mentioned in this manual can be found in the Appendix—Boot Camp Forms Section in the back of this manual. Permission is granted to copy the Boot Camp Forms for use in Boot Camps.

Boot Camp Weekly Design and Workout Plan
Boot Camp Registration Form
Boot Camp Goal Setting Questionnaire
Boot Camp Behavioral Change Contract
Boot Camp Test Results

BOOT CAMP BEHAVIORAL CHANGE CONTRACT

I _____ do agree that I will adhere to the suggested exercise and diet guidelines as set forth by _____
Boot Camp Program:

1. I will attend all Boot Camp Training Sessions at _____ am/pm on _____ (day(s)) for _____ weeks beginning on _____, 20__ and ending on _____, 20__.
2. I will keep a daily journal in which I record daily exercise activities.
3. I will keep a daily journal in which I record food and calorie consumption.
4. I commit to having positive thoughts and engaging in positive behavior throughout the duration of _____ Boot Camp Program.
5. Throughout the duration of the _____ Boot Camp Program, I commit to letting go of habit patterns that are unhealthy and negative and that have kept me from successfully reaching my goals in the past.
6. Throughout the duration of the _____ Boot Camp Program, I commit to forming new habit patterns that are healthy and positive to replace the old habit patterns in a constant effort to improve the areas of my life that I identified as needing improvement.
7. I commit to advising the _____ Boot Camp Program Trainer of any injury or illness I experience during the _____ Boot Camp Program.
8. I commit to performing modified exercises if the execution an exercise being performed during any of the _____ Boot Camp Program Training sessions results in pain or feels as if it could cause injury.
9. I commit to taking each day one at a time and to making positive changes every day for the duration of the _____ Boot Camp Program.
10. At the conclusion of the _____ Boot Camp Program, I commit to adopting and maintaining all of the positive changes and new habit patterns formed during the Boot Camp Program.

Signed _____ Date _____



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #4

1. Explain the meaning of the term “*overload training principle*” and the relevance of the overload training principle to Boot Camp Training.
2. What are the three areas it is good for participants to examine and identify when setting their long term goals they wish to accomplish by the conclusion of the Boot Camp Training Program?
3. After completion of the Degree of Satisfaction portion of the Goal Setting Questionnaire, participants will have a good understanding of what other goals in addition to weight loss that may be necessary for them to achieve health & fitness and good quality of life?
4. What will completion of the Areas of Improvement section on the Goal Setting Questionnaire assist participants in identifying?
5. What is important for participants to individually identify and remove from their lives in order to form new habit patterns and successfully reach their goals?

ASSESSMENT AND TESTING

Fitness Testing & Assessments provide participants with a starting point/base line and will chart their positive progress achieved during the Boot Camp.

Conducting additional Testing and Assessments mid-way through a Boot Camp will provide positive reinforcement during a critical time in the program when participants can often feel exhausted and close to defeat. Final Testing conducted at the conclusion of the Boot Camp Program provides participants with tangible results in which they can see improvements in fitness and performance levels from start to finish.

Benefits of Testing & Assessing

- Establishes a method of tracking progress for both the trainer and Boot Camp participant.
- Establishes a method of evaluating program success for both the trainer and the Boot Camp participant.
- Establishes goals and expectations of the trainer and Boot Camp participant.
- Provides trainer with valuable insight into level of fitness for each Boot Camp participant.
- Provides trainer with information needed to provide exercise modifications that may be necessary for individual Boot Camp participants.

Recommended Tests

One of the best methods of conducting Testing and Assessments is to have participants perform fitness testing simultaneously. The tests recommended below can easily be conducted with a group of individuals who are various fitness levels.

Initial testing is conducted to establish a base level at the beginning of the program. Rather than comparing the scores to research-based norms and criteria as seen in traditional fitness testing and assessments, the tests and assessments performed for Boot Camp are to be used to as motivating factors to encourage adherence to and attendance during Boot Camp.

- **1 Mile Jog/Run:** Use a ¼ mile track or map out a mile on a flat surface. Use a stop-watch to time participants for the duration of the one-mile jog/run. *Participants can walk if jogging/running is not appropriate due to physical restrictions or limitations.*
- **Sit-Ups :** Have participants perform as many sit-ups as possible without stopping and with good form. Test stops when form is lost or participant stops. *Participants can perform crunches if Sit-Ups are not appropriate due to physical restrictions or limitations.*
- **Push-Ups:** Have participants perform as many push-ups as possible without stopping and with good form. Test stops when form is lost or participant stops. *Participants can perform on the knees if full Push-Ups are not appropriate due to physical restrictions or limitations.*

Example Fitness Testing & Score Sheet Below is an example of recorded fitness testing for a 30-year-old female who participated in an 8-week Boot Camp Program. The testing was performed and recorded on the first day of Boot Camp followed by re-testing on Week 4. Week 4 testing allows participants three weeks to improve their stamina and endurance. Re-testing is performed and results recorded on Week 6 and Week 8.

Week/Date	One-Mile Jog/Walk	Sit-Ups	Push-Ups
Week #1/January 4, 2020	14:25	10 (held on to back of thighs)	8 (on knees)
Week #4/January 18, 2020	13:45	14 (hands across chest)	12 (on knees)
Improvement from Week 1-4	- 1:20	+4 (no longer holding onto thighs!)	+4
Week #6/February 1, 2020	13:00	18 (hands across chest)	16 (on knees)
Improvement from Week 4-6	- 0:45	+4	+4
Week #8/February 15, 2020	12:25	23 (hands across chest)	20! (on knees)
Improvement from Week 6-8	-0:45	+5	+4
TOTAL IMPROVEMENT	-2:00!	+13!	+12!

- **Weigh-Ins:** If you market your Boot Camp Program to provide weight loss, you may elect to conduct Weigh-Ins at the beginning of the Boot Camp Program and at various intervals throughout the Program. Weigh-Ins will require that you have a reliable scale which you will need to transport if your Boot Camp Program is held at an outdoor venue.
- **Girth Measurements:** Girth Measurements are an excellent alternative to Weigh-Ins because the need to transport a scale will be eliminated. A measuring tape is inexpensive and easily transported.

Example Girth Measurements Below is an example of recorded Girth Measurements for the same 30 year old female who participated in an 8-week Boot Camp Program. You will note that the measurements were taken and recorded when the testing was performed in the example above. It is recommended that Girth Measurements be taken *prior* to testing to avoid swelling of the tissues from the increased core body temperature.

Week/Date	Chest	Navel	Hips	Right Thigh	Left Thigh	Total Inches Lost
Week #1/January 4, 2020	40	32	42	24	24	
Week #4/January 18, 2020	38	29.5	39.5	23.5	23.5	
Improvement from Week 1-4	-2	-1.5	-2.5	-0.5	-0.5	-7
Week #6/February 1, 2020	37.5	29	39	23	23	
Improvement from Week 4-6	-0.5	-0.5	-0.5	-0.5	-0.5	-2.50
Week #8/February 15, 2020	37.5	28.5	38.5	22.75	22.75	
Improvement from Week 6-8	-0	-0.5	-0.5	-0.25	-0.25	-1.5
TOTAL IMPROVEMENT	-2.5	-3.5	-3.5	-1.25	-1.25	-12 inches!



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REVIEW #5

1. What is the main objective for conducting Fitness Testing and Assessments at the beginning and end of a Boot Camp Training Program?
2. Why is it important to conduct Fitness Testing and Assessment at the mid-way point of a Boot Camp Training Program?
3. List and explain the benefits of conducting Fitness Testing and Assessments during a Boot Camp Training Program.
4. Is it recommended to conduct Fitness Testing and Assessment with each participant individually or simultaneously?
5. Briefly list and explain how to conduct the three recommended Fitness Assessments.

SAFETY AND GUIDELINES

The following guidelines and safety tips are recommended for Boot Camp trainers to ensure safety of all participants to avoid risk of injury.

- **Injury Prevention:**
 - Assess participants.
 - Know and be familiar with each client's/student's limitations and restrictions.
 - Modify movements for each participant as appropriate.
 - Adjust intensity levels.
 - Verbal and visual instructions need to be clear and concise. Avoid using 'Filler' words e.g. "Move It, Lift It,"
 - Outdoor classes require special consideration of the terrain, climate, and the various fitness levels of the participants.
 - Hold current Group Fitness Instructor Certification, CPR/AED, and First Aid Certification.
 - Obtain Liability Insurance which covers indoor and outdoor training sessions as appropriate.
 - Mentor under an experienced instructor who has undergone advanced training in providing sports conditioning or military-style training.

- **Modify and Adapt Exercises and/or Drills:**
 - Cue options based on level of fitness and skills.
 - Begin with basic movement and modify starting with least challenging to most challenging.
 - Use descriptive words such as "*hard, harder, hardest*" or "*challenging, more challenging, most challenging*" rather than "*easiest, less easy, least easy*".
 - Coach participants to develop a skill before adding speed or power. When using equipment they should choose a weight/resistance with which they can perform the exercise with precision, control, and good form.
 - Demonstrate modifications prior to beginning a drill.
 - Remind participants they are only in competition with themselves and to work at an appropriate pace.

- **Safety Tips:**
 - Set up equipment prior to training session.
 - Check equipment for stability and durability prior to each session.
 - Have a plan prior to training session.
 - Have first-aid kit on hand.
 - Carry cell-phone during outdoor training sessions.
 - If conducting outdoor training, physically walk through the course to make sure there are no holes or hazards in the terrain that could pose danger.
 - Outdoor Boot Camps should have an inclement weather policy with guidelines regarding temperature, thunder and lightning.
 - Use the "buddy system" when training outdoors.

- **Safe Voice Commands and Techniques:**
 - Use a loud voice and give concise directions.
 - Provide corrective cues throughout each exercise and drill to remind participants of proper and safe form and body alignment.
 - Direct participants on keeping safe distance from each other when performing drills which involve running, shuffling, or other speed & agility style drills.
 - Provide positive verbal and visual feedback.
 - Avoid using negative words such as “don’t”, “can’t”, “looks bad”, etc.
 - Use powerful, inspiring, and motivating phrases.

- **Injury Prevention and Care:**
 - If exercising outdoors, bring a can of bug spray to prevent the possibility of mosquito or other insect bites.
 - If exercising outdoors, avoid exercising during the hottest part of the day. Consume extra water during times of high heat indexes as well as take frequent breaks to avoid overheating or heat exhaustion.
 - If exercising outdoors, encourage the use of sunscreen, hats, and sunglasses.
 - If exercising outdoors, investigate the exercise terrain prior to each session.
 - If an injury occurs, assess the injury and administer RICE(MS).
 - Rest—immediately rest when the injury occurs.
 - Ice—immediately apply ice to reduce swelling at the injured site.
 - Compression—apply compression to reduce swelling at the injured site.
 - Elevation—elevate injured area to reduce swelling.
 - Modality—change the participant’s exercise routine (modality) so that cardio-respiratory and strength gains are not completely lost recovery period.
 - Stabilization—if injury is severe enough to break the bones or joint, splint the injured area (stabilize) reducing the likelihood of further injuring the area.

FiTOUR® recommends that all certified fitness professionals obtain and maintain current CPR and First Aid training through American Red Cross, American Heart Association or other organization.

COMMON INJURIES

Below is a list of injuries which are often seen in Boot Camp style training programs. Be familiar with preventative measures that can be taken to prevent an injury from occurring.

Sprained or Strained Ankle:

Causes:

- Tripping over a piece of equipment.
- Incorrect foot placement which results in a rolling of the ankle.

Avoidance:

- Place or store equipment at a safe distance.
- Provide well-timed cues for directional changes.

Low Back Pain:

Causes:

- Using a weight that is too heavy during lifting drills.
- Improper technique such as rounding through the upper back rather than hinging from the hips which performing exercises or drills.
- Performing rotational movement before body is conditioned to perform that type of movement.

Avoidance:

- Coach participants according to their fitness level.
- Provide modifications.
- Give safety and alignment cues.

Dehydration:

Causes:

- Body lacks enough water and electrolytes which are salts that the body uses in cellular activity – mainly muscle cells and blood cells.
- Exercise which results in perspiration can lead to dehydration if the exercise is strenuous, long-lasting or performed in hot, humid climate or if too many layers of clothing are worn.

Avoidance:

- Have participants drink water before, during and after a training session.
- If the training session is longer than an hour in duration, participants may want to consider drinking a sports drink to replace electrolytes.

Bruises, Scrapes and Cuts:

Causes:

- Limbs from branches or bushes along a path or sidewalk.
- Uneven ground on pathways or sidewalks can cause falls.
- Wet or damp leaves on pathways or sidewalks can cause slipping or sliding.

Avoidance:

- Keep an eye out for hazards and give verbal warnings.
- Take appropriate measures to eliminate and avoid hazards.
- Instruct participants to be aware of the terrain around them.

Overheating or Heat Exhaustion:

Causes:

- Exercise in hot, humid environment which can result in the loss of body fluids through perspiration which can cause overheating.
- Caution signs are headache, dizziness, and/or nausea.

Avoidance:

- Monitor participants for overexertion.
- Provide modifications of intensities.
- Remind participants to take water breaks.
- Schedule outdoor training sessions during the cooler portion of the day or in shaded areas.



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #6

1. List and explain five ways to prevent injuries during a Boot Camp Training session.
2. List and explain five ways to modify intensity and adapt exercises to meet various skill levels during a Boot Camp Training session.
3. List some steps that should be taken to insure the safety of participants during an outdoor Boot Camp Training session.
4. List the cause of each injury listed below and how to avoid such injury.

Sprained Ankle:

Low Back Pain:

Overheating/Heat Exhaustion:

BOOT CAMP TRAINING SESSION FORMAT

- **WARM-UP (5-10 minutes)**
 - Mimic activities that will be performed during the Workout.
 - Longer Warm-Up should be performed in morning sessions.
 - Shorter Warm-Up can be performed in afternoon/evening sessions.
 - Work in all 3 Planes of Movement.
 - Sagittal
 - Frontal
 - Transverse/Horizontal
 - Perform 10-20 repetitions or 15-30 seconds of each exercise for appropriate number of repetitions.
 - Jogging/Walking can be part of the Warm-Up.
- **CARDIO CONDITIONING (10-20 minutes)**
 - Choose activities that allow lateral movement in addition to linear movement to provide participants with a balanced workout.
 - Perform Cardio Conditioning 3-6 days a week.
 - Examples of Cardio Intervals:
 - Interval Running/Walking
 - Alternate Run/Walk Intervals:
 - 1:3 ratio (15 seconds to 45 seconds).
 - 2:2 ratio (30 seconds to 60 seconds).
 - 1:1 ratio (30 seconds to 30 seconds).
 - Perform Intervals using 4 Activities:
 - Run for a count of 10.
 - Football Shuffle Side to Side for a count of 10 in each direction.
 - Slap Kick for a count of 10.
 - Football Shuffle Side to Side for a count of 10 in each direction.
 - Linear and Lateral Movement Intervals:
 - Run/Walk for a specific amount of time or distance
 - Football Shuffles for 1-3 sets of 15-30 seconds with 60 second rest.
 - Run/Walk for a specific amount of time or distance
 - Football Shuffles for 1-3 sets of 15-30 seconds with 60 second rest.
- **CALISTHENICS (10-15 minutes)**
 - Choose 3-4 activities that work the body in a balanced manner by selecting exercises from each plane of movement.
 - Perform 3-4 days a week.
 - Perform 1-3 sets of 30-90 seconds of each activity.
 - Example of a Circuit of Calisthenics—Perform 1-3 circuits of each activity for 10-15 reps or 15-60 seconds.
 - Push-Ups
 - Jumping Jacks
 - Cross Country Ski
 - Lateral Lunges with Toe Touch
 - Jump Rope
 - Burpees

- **DRILLS (10-20 minutes)**
 - Choose 2-4 activities that will compliment the activities performed earlier in the Workout.
For example, if running (linear movement) was the main focus during Cardio, choose lateral movement Drills
 - Perform 3-5 days a week.
 - Perform 1-3 sets of 30-90 seconds of each activity.
 - Example of Straight Drills—perform each Drill for the specified amount of time and reps before proceeding to the next Drill:
 - Carioca
 - Goose Step
 - Hurdles
 - Skating
 - Example of an Obstacle Course or Circuit of Drills —set up a Circuit or Obstacle Course of Drills and have participants go from one station to the next in a Circuit fashion for specified amount of time:
 - Stop & Go
 - Hurdles
 - Agility Ladder

- **MUSCLE CONDITIONING (10-20 minutes)**
 - Choose activities that will work the muscle groups not worked during the other segments of the Workout.
For example, if Push-Ups and Dips were performed, one might choose Lat Pulldowns and Bicep Curls with the tubing or medicine ball.
 - Use time efficiently by performing Upper & Lower Body Exercises simultaneously.
 - Perform 3-4 days a week.
 - Perform 1-3 sets of 10-25 reps of each exercise.
 - Example of Upper/Lower Body Circuit—perform 1-3 circuits of each Exercise for 10-25 reps.
 - Lat Pullovers with Wide Stance Squats using Tubing or Medicine Ball.
 - Tricep Extensions Calf Raises using Tubing or Medicine Ball.
 - Lat Pulldowns with Squats using Tubing or Medicine Ball.
 - Bicep Curls with Rear Lunges using Tubing or Medicine Ball.
 - Example of Abs Circuit—perform 1-3 circuits of each Exercise for 10-25 reps.
 - Crunches
 - Torso Raises
 - Reverse Crunches
 - Oblique Crunches

- **COOL DOWN (2-5 minutes)**
 - Mimic activities used during the Cardio section of the workout at a lower intensity.
 - Walk or use the Muscle Conditioning portion as a Cool Down period.
 - Perform at the end of every training session to transition to the Flexibility portion.

- **FLEXIBILITY (5-10 minutes)**
 - Perform at the end of every training session.
 - Stretch all major muscle groups.
 - Hold each stretch for 15-30 seconds.

BOOT CAMP TRAINING SESSION TIPS

Suggested Time-Line for Boot Camp Training Session

- **Warm-Up/Introduction.....** 5-10 minutes
- **Workout** 35-45 minutes
- **Cool Down.....** 2-5 minutes
- **Flexibility** 5-10 minutes

Tips for Indoor Training Don't limit training sessions to the Group Fitness Studio. Look for other areas:

- Designated stretching/abdominal spaces.
- Indoor Track.
- Gymnasium/Basketball Court/Racquet Ball Court.
- Stairwells.

Tips for Outdoor Training Take advantage of the terrain around you.

- Flat grassy areas are ideal for performing Field Drills.
- Hills and Stairs are perfect for performing running/walking intervals.
- Playground equipment and park benches can be utilized to perform exercises such as pull-ups, push-ups, dips, and abdominals.

BOOT CAMP MUSIC SELECTION

Music used for Boot Camp needs to vary from music traditionally used in Step or dance aerobics style classes. Select music that has a “driving” beat and is full of energy. Keep in mind the age and gender of participants. Many fitness music companies compile selections of music that are compiled specifically for Boot Camp Training Sessions. Also keep in mind that Boot Camp training sessions do not necessarily need to be “choreographed” and movement does not need to be based upon the music as in traditional group exercise classes such as Step or Hi-Low. The music can be used in the background to motivate participants to move.

Boot Camps that are conducted as personal training sessions may not even require music which is mixed with a specific beats per minute. You may find that music that motivates your participants is the best music to use. When selecting music be certain not to infringe on copyrights to avoid possible legal action.

If you are planning to use fitness mixed music in your Boot Camp training sessions, below are suggested guidelines for beats per minute.

Beats Per Minute (BPM): 130-150 beats per minute are recommended for Boot Camp Workouts.

- Up to 130 BPM or Core Exercises.
- Up to 132 BPM for Drills.
- Up to 150 BPM for cardio such as running, jumping rope, jumping jacks, and other high impact and higher intensity activities.



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #7

1. What three Planes of Movement should be incorporated when selecting Warm-Up Exercises for a Boot Camp Training session?
2. List and describe examples of Cardio Intervals that can be incorporated during the Cardio Segment of the Workout portion of a Boot Camp Training session.
3. How many Calisthenics activities is it recommended to utilize during a Boot Camp Training session?
4. Explain how to conduct the following styles of Drills:

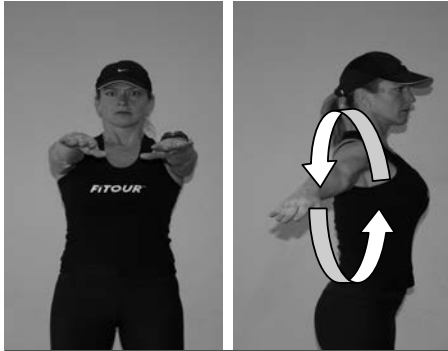
 Straight Drills:
 Circuit Drills:
5. What factors should be taken into consideration when deciding what muscle conditioning exercises to be used during a training session?

BOOT CAMP WARM-UP

The Warm-Up is the perfect time to set the mood for the training session. During the Warm-Up, you can set the short term goals for the training session so that all participants are given a goal that they are expected to achieve before the end of that day's training session.

- Below objectives of the Boot Camp Warm-Up are listed:
 - Introduction to Boot Camp Training: Set aside 5-10 minutes prior to session to give a thorough explanation of the following topics:
 - Various equipment to be utilized during the training session.
 - Proper technique involved with various exercises and equipment.
 - Options for exercise modifications.
 - Safety issues.
 - Purpose: Prepares the body for vigorous exercise and may reduce the risk of injury.
 - Time: 5-10 Minutes.
 - Guidelines: Perform limbering exercises that warm-up the entire body with a focus on all of the major muscle groups and torso/core musculature. The warm-up should be sufficient to increase the body's core temperature and should utilize movements that are performed in the same plane and incorporate the muscle groups to be targeted during the Workout.
 - Mimic activities that will be performed during the Workout.
 - Longer Warm-Up should be performed in morning sessions.
 - Shorter Warm-Up can be performed in afternoon/evening sessions.
 - Work in all 3 Planes of Movement.
 - Sagittal
 - Frontal
 - Transverse/Horizontal

WARM-UP EXERCISES AND ACTIVITIES



Full Range of Motion should be performed without discomfort or pain.

SMALL ARM CIRCLES—FRONT & SIDE

Muscles Targeted: Shoulders

Front Circles: Extend arms out to sides. Rotate arms in small circles forward & backward. Perform appropriate amount of time or for appropriate amount of repetitions.

Side Circles: Extend arms in front of you at shoulder level. Rotate arms inward and outward.

FULL RANGE OF MOTION ARM CIRCLES—FRONT & SIDE

Muscles Targeted: Rotator cuff muscles and trapezius
Perform in same manner and amount of reps/time as the Small Arm Circles with a Full Range of Motion.

NECK ROTATIONS— FORWARD ROLLS & SIDE TO SIDE

Muscles Targeted: Neck

Forward Rolls: Roll head slowly by lowering right ear toward right shoulder followed by rolling chin to sternum and finishing by rolling left ear toward left shoulder. Repeat in opposite direction.

Side to Side: Slowly lower ear to right shoulder followed by slowly bringing ear to left shoulder. Perform appropriate amount of reps/time.

To avoid stress to the cervical spine, avoid tilting head to the rear during neck exercises.



SHOULDER ROLLS—FORWARD & BACKWARD

Muscles Targeted: Shoulders and Trapezius

Forward Rolls: Stand with arms by sides. Slowly roll shoulders forward by elevating shoulders toward ears and rolling shoulders through a full circle from front to back to starting position.

Backward Rolls: Stand with arms by sides. Slowly roll shoulders backward by elevating shoulders toward ears and rolling shoulders through a full circle from back to front to starting position.



CHEST EXPANSIONS

Muscles Targeted: Chest, Shoulders and Upper Back

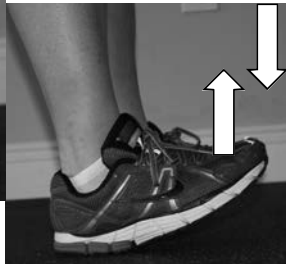
Stand with feet hip distance apart with arms extended at shoulder height out in a “T” formation. Keeping arms extended and with controlled motion press arms backward by pulling shoulder blades toward center of body. Then smoothly swing arms to the front by opening shoulder blades and bring arms together in front of chest. Arms can actually criss-cross as the movement is performed by alternating right arm over/left arm under and left arm over/right arm under.

TRUNK TWISTS

Muscles Targeted: Obliques and Low Back

Stand with feet slightly wider than hip distance apart with hands on hips or hands held in front of shoulders with elbows by sides. Gently twist the torso from right to left in a rhythmic fashion.

Avoid allowing less flexible participants to twist the knees during execution of the exercise.



HEEL RAISES & TOE TAPS

Muscles Targeted: Gastrocnemius, Soleus, Anterior Tibialis

Heel Raises: Stand with feet shoulder width apart with hands on hips. Slowly roll into the balls of the feet by raising heels off floor. Return to starting position.

Toe Taps: Stand with feet shoulder distance apart with hands on hips. Simultaneously tap the toes of both feet by lifting the front of the feet while keeping the heels on the floor.



This exercise can be performed in place, walking or skipping depending upon the amount of space and the age/fitness level of participants.

HIGH KNEES Stationary, Walking, or Skipping

Muscles Targeted: Gluteals and Hip Flexors

Lift right knee toward chest, hold back of thigh and gently pull the knee toward the chest. While pulling right knee toward chest, roll into the ball of the left foot. Alternate lifting knees .

KNEE/LEG EXTENSIONS

Muscles Targeted Hip Flexor and Quadriceps

Standing in place, lift right knee by flexing the hip at a 90 degree angle. With a controlled motion extend the knee until entire leg is horizontal to the floor. Return to starting position.

LATERAL SQUAT/SIDE LUNGES

Muscles Targeted Adductors and Hip ROM in Frontal Plane

Stand with feet approximately four feet apart (or wider than hip distance). Squat on right leg while keeping left leg extended. Press weight into right heel, extend right leg and squat on left leg. Repeat in a rhythmic fashion. *(Not featured in DVD)*



Hands can be placed on the hips or behind the head during performance of the exercise. EXERCISE VARIATION: Add the Trunk Twist to the Lateral Squat/Side Lunges to engage the core muscles of the trunk.



For exercise variation, alternate performing right and left leg extensions.



SUPERMANS

Muscles Targeted: Shoulders, Spinal Erectors, Low Back and Gluteals

Begin exercise in prone position with toes on the floor, chin tucked to collar bone and arms extended over head. Slowly bring hands down toward sides of hips while keeping arms fully extended. Return to starting position.



Toes can be on the floor to make this exercise less challenging.

SIDE STEPS/SKATING

Muscles Targeted: Abductors and Adductors

Stand with the feet together and the knees bent sinking the hips low. Using the lower body muscles step the right foot to the side with a skating motion and pull the left foot in to land next to right. Avoid tapping back. Alternate side to side skating motion.



Add power and speed to the Side Steps/Skating activity during the Workout Portion of the Boot Camp Training Session.

WALKING and/or JOGGING

The end of the Warm-Up Portion of the Boot Camp Training Session is a good time to utilize Walking and/or Jogging activities to prepare the body for more rigorous running activities that will be performed during the Workout Portion of the Training Session.

Walking and/or Jogging is also a good transition into the more intense Workout and to psychologically prepare the body to perform the Field Drills.

You may want to consider the following when making the decision of whether to walk or jog or when to transition from walk to jog:

- Age/Fitness Level of Participants.
- Time of Day (early morning requires longer warm-up than late afternoon/evening).
- Activities to be performed during the Workout Segment.



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #8

1. The Warm-Up is a good time to set _____-term goals to be achieved by the end of the training session.
2. Prior to each training session, it may be necessary to set aside _____ minutes to provide explanation of equipment use, proper technique, exercise modifications and safety issues.
3. Briefly list and explain purposes of conducting a Warm-Up prior to the Workout?
4. Explain how a Warm-Up of a late afternoon Boot Camp Training session would vary from an early morning Warm-Up of a Boot Camp Training session.
5. Briefly describe how to perform the following Warm-Up exercises:

Small Arm Circles Front:

Chest Expansions:

Trunk Twists:

High Knees:

WORKOUT

The Workout portion of a Boot Camp Training session is designed to provide cardio conditioning, strength and muscle endurance training, and exercises to improve coordination, speed, balance and agility.

- Suggested components to include in each Workout portion of a Boot Camp Training session and the amount of time which is suggested to be used during each segment of the Boot Camp Workout are listed below:
 - Purpose: The purpose for Workout portion of a Boot Camp Training session is to train with the purpose developing and improving overall fitness, coordination, muscular endurance and cardio-respiratory stamina. The Workout portion of each Boot Camp Training session should incorporate exercises that condition all major muscle groups and include cardio-respiratory activities and flexibility work.
 - Time: 35-45 minutes.
 - Guidelines: Start slowly and gradually increase the intensity. Include the following 4 components in the Workout portion of each Boot Camp Training session. The training session can contain 4 separate segments or the 4 components can be interspersed throughout the session.
 - Cardio Conditioning (10-20 minutes)
 - Calisthenics (10-15 minutes)
 - Drills (10-20 minutes)
 - Muscle Conditioning (10-20 minutes)

I. Cardio Conditioning Segment

RUNNING

Boot Camp Training is designed to be team oriented. Therefore, it is vital that the Boot Camp Trainer encourage participants to stay with the “pack”. You will most likely encounter a variety of cardio fitness and skill levels in your Boot Camp Training Sessions.

To motivate participants and to avoid discouraging participants who may have a difficult time running, you may want to allow the participants to break into packs based upon their skill and fitness level. It is likely that once you begin running, the participants will group themselves according to skill ability and fitness level without much effort on your part. To keep everyone in each group motivated, you may designate a leader for each group level to encourage their group to do the best they can with the running.

NOTE: Be certain to encourage the less experienced runners to take walking breaks during Boot Camp Training Sessions. The main goal is to motivate participants to improve during the course of the program.

Proper Running Technique

Running should engage the **heel-ball-toe contact** to open stride and decrease stress on knees and hips.

- Foot should strike the ground with the heel of the foot.
- Roll forward across ball of foot through the toe.
- Push off with toes

Heel of Foot Strikes Ground



Roll Across Ball of Foot



Push-Off with Toes



SPRINTING/FAST RUNNING

The key to keeping participants safe during Running Drills is to remember not to add speed and power until after the skill is accomplished.

The Boot Camp Trainer should encourage participants to work at their own pace and make them understand sprinting is not necessarily appropriate for all participants.

Encourage the participants who have good running skills and who have higher levels of fitness to engage in the sprinting activities, but always make sprinting an option for the less experienced or skilled runner.

Proper Sprinting Technique

- Full arm swing, no higher than shoulder height.
- Hands swing in straight line from hips to chest.
- Elbows are slightly bent with hands held loosely and unclenched.
- Breathing is even and rhythmic.
- Heel strike is less pronounced in a true sprint.



I. Cardio Conditioning Segment Continued

FOOTBALL RUN Stand with feet hip distance apart. Move feet as rapidly as possible and land on the balls of the feet.

Forward & Backward

Muscles Targeted: Quadriceps, Gastrocnemius, Tibialis Anterior

Side to Side

Muscles Targeted: Quadriceps, Adductors, Abductors, Gastrocnemius, Tibialis Anterior



Can be performed in place or moving forward/backward or side to side.



SLAP KICK Keeping the thighs perpendicular to the ground, flex the knee so that the heel comes toward the Gluteals.

Muscles Targeted: Hamstrings, Gastrocnemius and Gluteals

Can be performed in place, moving forward and backward or side to side.

I. Cardio Conditioning Segment Continued



STEP UPS Set up a 4-10 inch step depending on the age and fitness level of participants.

- Avoid allowing knee to bend past a 90 degree angle.
- When stepping on the step, make sure the heel comes in full contact with the step.
- Never jump or leap off the step.

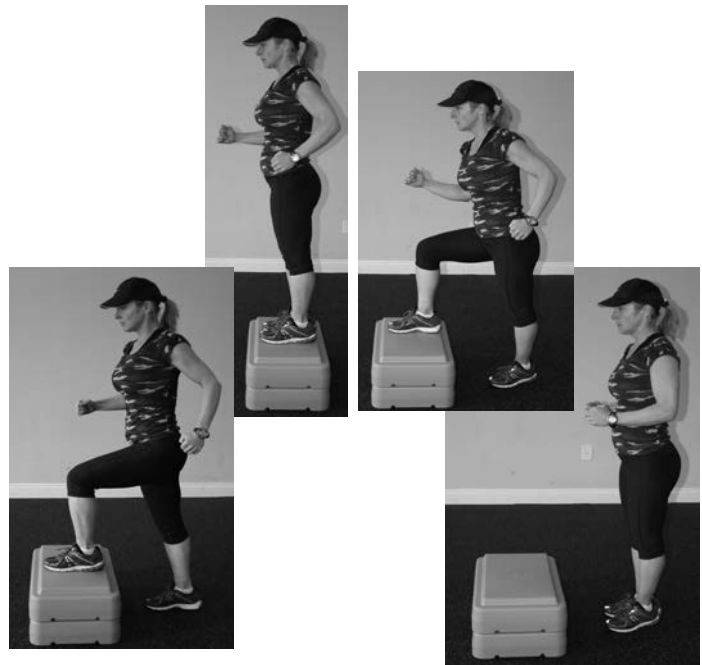
Up-Side/Down-Side: Standing with right leg beside step, step up with right foot, tap step with left foot (or lift left knee), step down left foot, tap right foot to floor. Repeat with left leg lead.

- To increase challenge, add a power leap to top of step.
- Do not leap off step to avoid impact stress when returning to starting position on the floor.

To avoid injury, do not perform stepping consecutively with one foot for more than one minute.

Up-Up/Down-Down: Alternating lead legs or performing right leg lead for specific amount of repetitions followed by left leg lead. *Can be performed Walking or Running.*

An alternative to using a step platform is to use a stairwell for an Indoor Boot Camp or stadium stairs for an Outdoor Boot Camp.



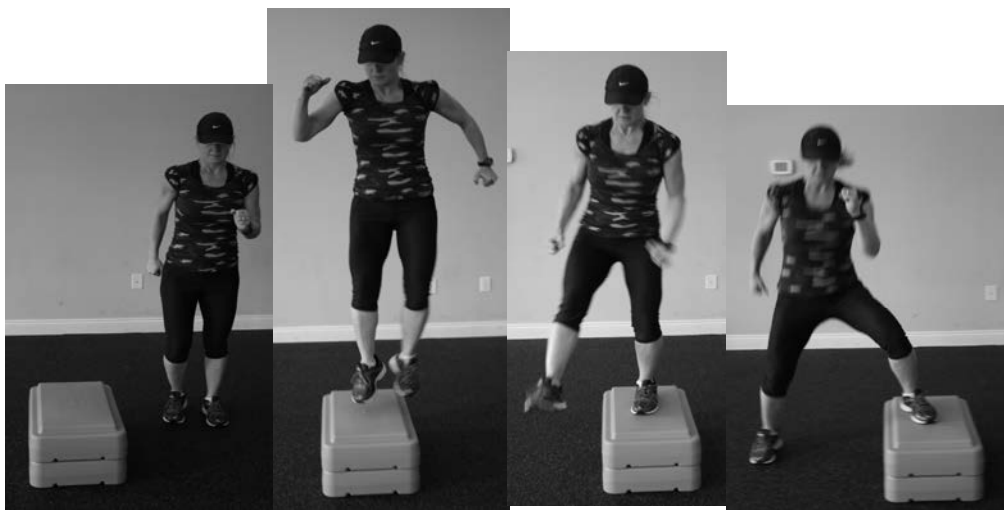
I. Cardio Conditioning Segment Continued



Up-and-Over: Stand with right leg beside step, step to center of step with right foot, bring left foot up to step beside right foot, step down to opposite side of step with right foot followed by left foot stepping down to floor. Repeat in opposite direction.

Focus on softly stepping up and softly landing when stepping down.

To increase challenge, perform any of the Steps Ups in a “bounding” manner.





The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #9

1. List and describe the four components of the Workout portion of a Boot Camp Training session.
2. What is the purpose of the Workout portion of a Boot Camp Training session?
3. What are some suggested strategies for keeping participants of various skills and fitness levels together when running in a “pack”?
4. Briefly describe proper running technique and proper sprinting technique.
5. Briefly explain how to cue and perform the following Cardio Conditioning activities:

Football Run:

Slap Kick:

II. CALISTHENICS SEGMENT

The Calisthenics Segment of the Workout portion of a Boot Camp Workout is designed to improve cardio-respiratory endurance, muscle endurance, core strength and coordination. Performing Calisthenics provides an anaerobic training effect due to the exercises which require large muscle groups to work together. This results in a great need for oxygenated blood to be sent to the working muscles.

- Choose 3-4 activities that work the body in a balanced manner by selecting exercises from each plane of movement.
- Perform 3-4 days a week.
- Perform 1-3 sets of 30-90 seconds of each activity.

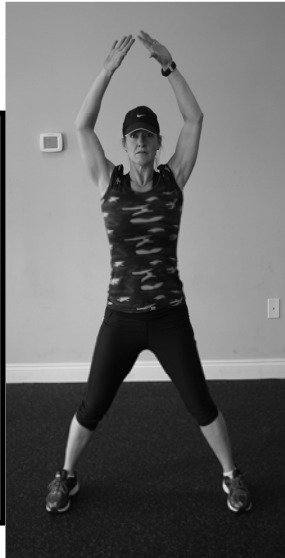
- Example of a Circuit of Calisthenics—Perform 1-3 circuits of each activity for 10-15 reps or 15-60 seconds.
 - Push-Ups
 - Jumping Jacks
 - Cross Country Ski
 - Lateral Lunges with Toe Touch
 - Jump Rope
 - Burpees

II. Calisthenics Segment

JUMPING JACKS Stand with hands by your side and feet together. Jump both feet slightly wider than hip distance apart while bringing both arms overhead.

Individuals with shoulder issues can modify Jumping Jacks by using shorter lever arms.

Low-Impact Variation can be performed by stepping one foot to side at a time.



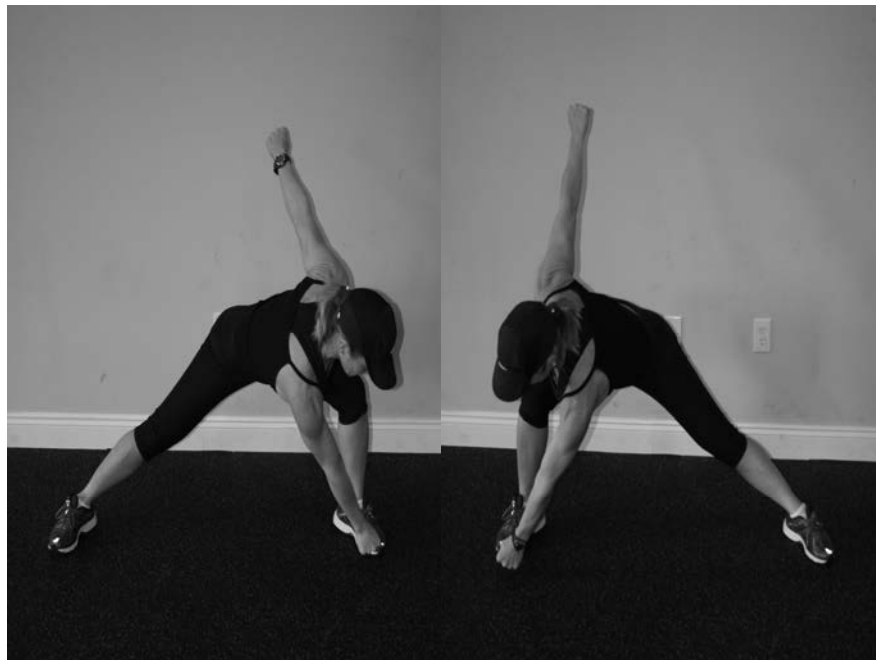
JUMP ROPE Stand with feet approximately hip distance apart with rope positioned behind the heels. Keeping hands by sides, turn rope overhead & hop with both feet over the rope as it passes under the front of the feet. Be careful to land on the balls of the feet to avoid high-impact stress to the knees that can be caused by landing on the heels.

Modify Jumping Rope by tucking elbows or "Air-Roping".



LATERAL LUNGES WITH TOE TOUCH

Exercise is performed as the Warm-Up Exercise **Lateral Squat Side Lunges** but slight forward flexion with opposite fingers reaching for opposite toes. Right hand reaches toward left toes as left leg performs side squat; Left hand reaches toward right toes as right leg performs side squat. Focus on the lunge portion first, adding rotation second.



II. Calisthenics Segment Continued

CROSS COUNTRY SKI

Perform alternating rear lunges with opposite arm reaching forward with shoulder flexion as leg performs hip extension. Right leg extends from hip as left arm performs forward flexion; Left leg extends from hip as right arm performs forward flexion.

To increase intensity perform with “double-time” speed. This exercise should not be performed at “double-time” speed by individuals with ankle, knee, hip or low back issues.



PLANK Begin with body in prone position on mat with fingers entwined and palms pressing together with forearms on mat and elbows close to rib cage. Press forearms and toes into ground while simultaneously lifting body parallel to ground. Press the heels back then hold position for up to 30 seconds per repetition.



II. Calisthenics Segment Continued

PUSH-UPS Begin lying on the ground with elbows bent, hands positioned under shoulders with palms pressing into ground and toes pressing into ground. Straighten arms while keeping back straight. Keep the 'Core' engaged during entire exercise.

- Regular—hands are placed shoulder width apart.
Emphasis on Shoulders, Chest & Arms.
- Wide—hands are placed wider than shoulder width.
Emphasis on Chest.
- Triceps—hands are placed directly under chest.
Emphasis on Triceps.



Perform on knees if regular push-ups are too challenging or contraindicated.



Regular



Wide



Triceps

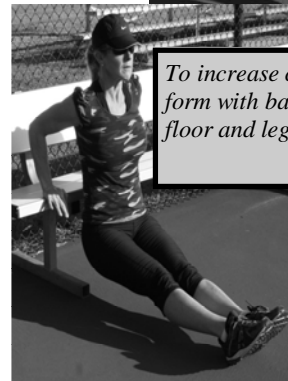


II. Calisthenics Segment Continued



BENCH DIPS

Begin exercise by sitting on bench or step platform. Place feet approximately 3 feet in front of step with hands on edge of step. Lift hips off step and lower by bending elbows. Return to starting position by straightening arms.



To increase challenge, perform with back of heels on floor and legs fully extended.

Regular Grip Emphasis on Lats



PULL UPS Begin by grabbing bar with hands approximately shoulder width apart. Pull body upward until chin is over the bar and return slowly to starting position.

Underhand or Reverse Grip Emphasis on Biceps & Back



Correct Grip: Thumbs next to fingers.



Incorrect Grip: Fingers and thumbs wrapped around the bar.

II. Calisthenics Segment Continued

BURPEES A full body activity that can be broken into four movements. Starting position is feet shoulder width apart. The four movements should be performed in quick succession.

1. Perform squat and place palms on floor.
2. Thrust legs back into Plank position with arms fully extended.
3. Leap both legs forward to land with feet between hands.
4. Return to starting position.



Individuals who need less challenging activity can perform Burpees by lunging right foot back followed by left foot back into plank position. Return to starting position by stepping right foot forward between hands followed by left foot forward between hands. Repeat by stepping back with left leg leading. Continuing alternating right and left leg lead for specified amount of time.



II. Calisthenics Segment Continued

BRIDGING Begin in prone position with knees bent and feet flat on floor. Raise hips, leading from the pubis, to create a straight line from hip to shoulder. Hold for 3-10 seconds. Return to starting position.



ARM HAULERS Begin in prone position with toes on floor and arms extended to sides at shoulder level. Slowly extend arms overhead by bringing elbows in toward ears. While keeping arms fully extended, slowly lower hands to hip level.





The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #10

1. Briefly list and describe the modification(s) to provide to a participant when Jumping Rope is not appropriate due to orthopedic or other health related issues.

2. Explain how to cue and perform Jumping Jacks for:
 - a. Individual who can perform high-impact version:

 - b. Individual who needs to perform low-impact version due to past knee injury; and

 - c. Individual with shoulder joint injury.

3. Briefly explain how to cue, perform and modify intensity of the Cross Country Ski activity for:
 - a. Individual with no limitations or restrictions due to orthopedic or health issues; and

 - b. Individual who needs to perform low-impact due to past ankle injury.

III. Drills Segment

The Drills Segment of the Workout is designed to enhance athletic performance and improve aerobic endurance with anaerobic style training techniques.

The five components of Athletic Performance are:

- Power
- Agility
- Balance
- Speed
- Coordination

Rule of Thumb for Athletic Performance

Progression: To avoid injury, always be certain that participants have developed a skill before adding speed and power.

Developing Athletic Performance

- Plyometrics Style Drills are excellent to use to develop Athletic Performance Components.
 - Begin with low impact drills that require landing lightly on toes.
 - As participants become more conditioned to Plyometrics Style Drills, increase volume and intensity.
- Plyometrics should be performed at the beginning or mid-way through the workout.
- Allow recovery time between sets to avoid injury due to fatigue.
- Examples of Plyometrics Style Drills:
 - Sprinting
 - Hopping
 - Skipping
 - Jumping

GOOSE STEP

Muscles Targeted: Hamstrings, Abdominals, Hip Flexors and Gastrocnemius

Hold arms straight out from the shoulders with arms parallel to ground. With left leg straight lift toes toward right hand while rolling into ball of right foot. Land on ball of left foot, lift straight right leg and bring left hand toward right toes



III. Drills Segment Continued

SKIPS

Skill Development: Agility, Speed and Power

Alternate skipping right knee with left arm swinging and left knee with right arm swinging.

Perform High-Knee Pulls for low-impact modification.



SKATING

Skill Development: Agility, Speed and Power

From standing position step to the front right diagonal by pushing off the left foot. Land on the right foot in a controlled manner. Alternate skating right to left and left to right.



Diagonal leaps can be performed while skating to provide participants with a high-impact exercise which will develop power.

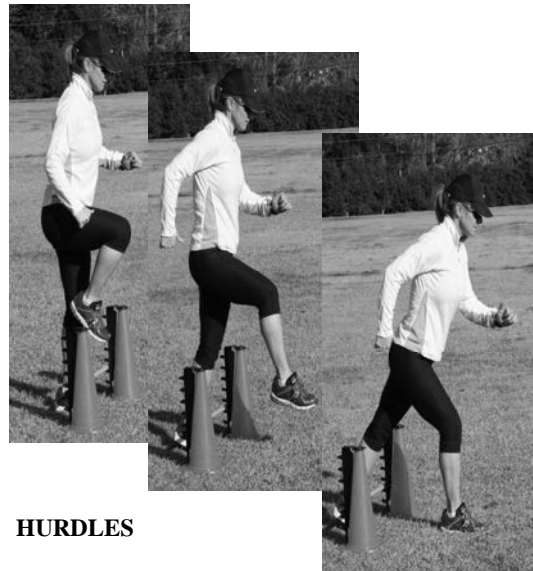
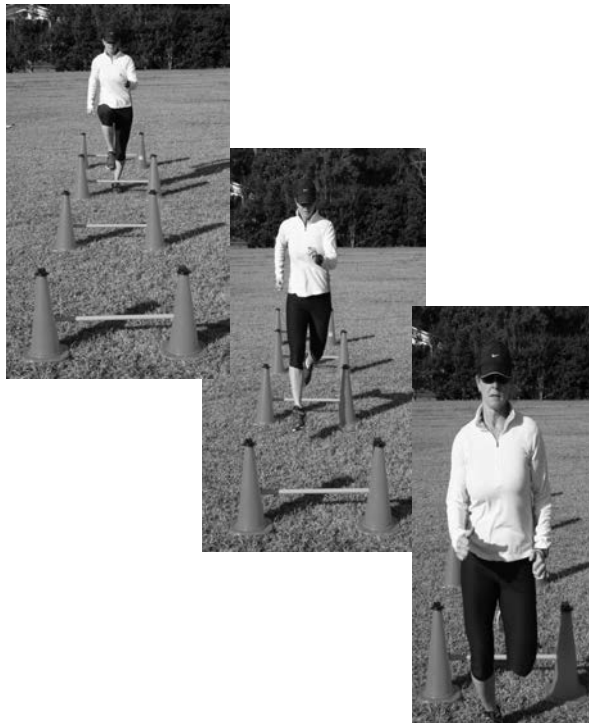
Low-impact "Walking" Skates will develop strength and endurance. These are ideal for individuals who do not need to perform powerful high-impact activities.

III. Drills Segment Continued

CARIOCA

Muscles Targeted: Abdominals/Obliques, Low Back, Hip Muscles and Adductors

Start with feet approximately shoulder width. Move laterally with the left leg crossing in front of right, followed by right leg stepping to side with left leg crossing behind right leg. Cover a specific amount of ground leading from left. Repeat leading from right.



HURDLES

Skill Development: Agility, Speed and Power

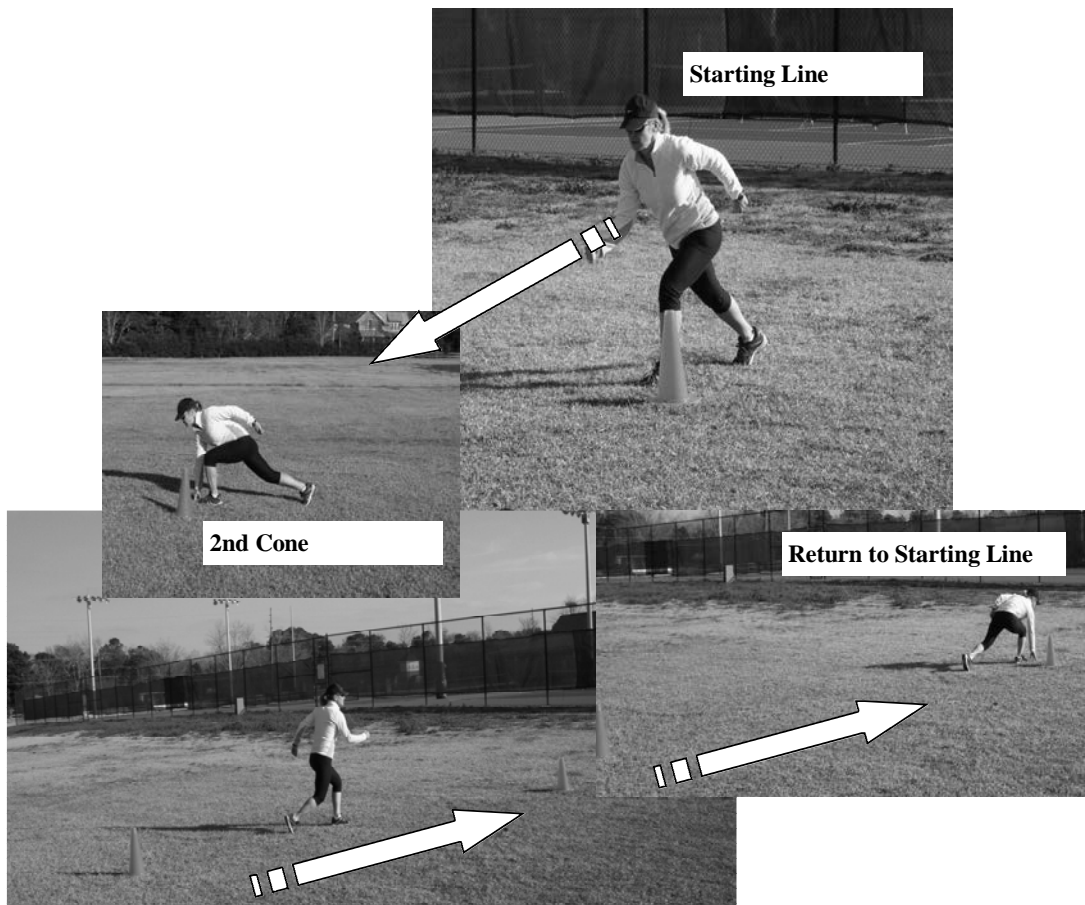
Set up three to six hurdles equal distance apart in a straight line. Run to and stride over each hurdle.

III. Drills Segment Continued

SUICIDE SPRINTS

Skill Development Agility, Speed and Power

Set up 4-6 cones equal distance apart in a straight line. The first cone is the “starting line”. Run to second cone, run back to first cone. Run to third cone, run back to first cone. Run to fourth cone, run back to first cone. Run to fifth cone, run back to first cone. Run to sixth cone. The sixth cone becomes the “starting line”. Repeat sequence by running to fifth cone, back to sixth, run to fourth cone, back to sixth, etc.



III. Drills Segment Continued

STOP & GO

Skill Development Agility, Speed and Power

Set up three to four cones equal distance apart in a straight line. Start at first cone, accelerate to next cone. Decelerate before reaching second cone. Pause for 2-3 seconds or for a count of 5 at second cone before accelerating to third cone. Repeat in opposite direction.

**1st Cone to
2nd Cone**



Individuals who need to walk during the Stop & Go Drill should pause for a shorter period of time than the runners. (i.e. step for a count of 2 instead of 5). This will help to maintain intensity of the activity while performing a lower impact version.

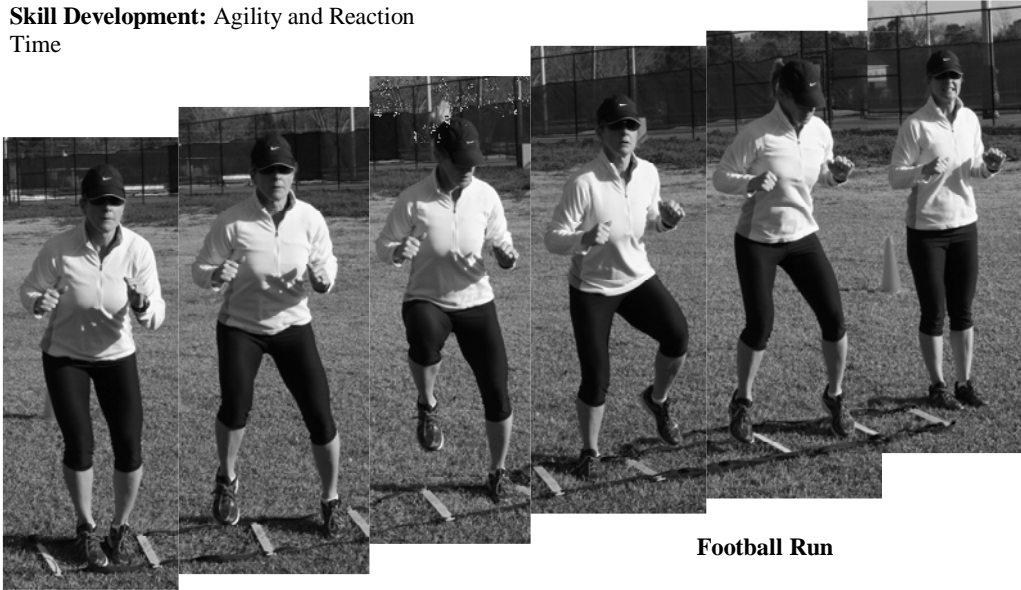
**2nd Cone to
3rd Cone**



III. Drills Segment Continued

AGILITY LADDER

Skill Development: Agility and Reaction
Time

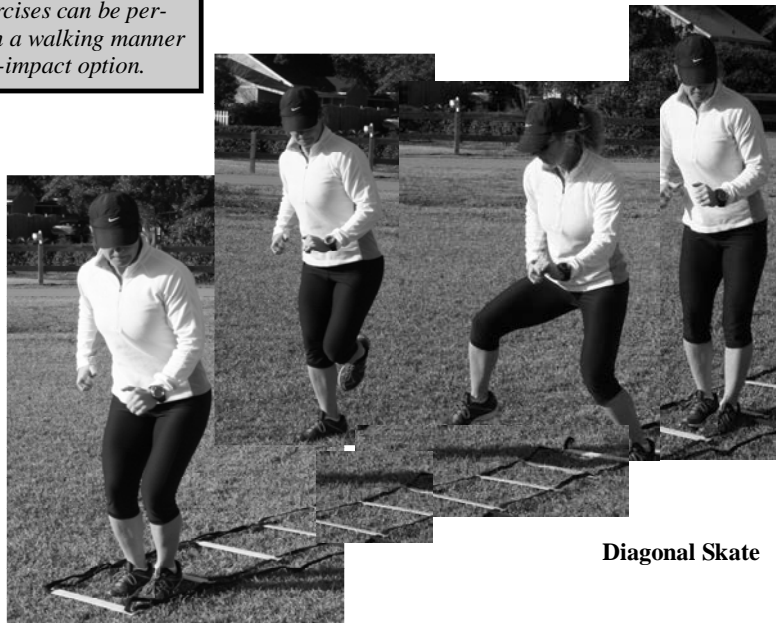


Football Run

Football Run forward/backward and sideways.

Diagonal Skate with right foot landing in ladder followed by left foot landing inside of ladder. Repeat with left foot landing outside of ladder followed by right foot landing inside of ladder.

Both exercises can be performed in a walking manner for a low-impact option.



Diagonal Skate



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #11

1. List the five components of Athletic Performance.
2. What is the Rule of Thumb for Athletic Performance Progression?
3. What type(s) of Drills help to develop Athletic Performance?
4. Provide cues, proper technique instructions and low-impact modifications for each of the following Drills:
 - Skips:
 - Skating:
 - Agility Ladder Football Run:

IV. Muscle Conditioning Segment

The Muscle Conditioning Segment of the Workout portion of a Boot Camp Training session is designed to “fill in the gaps” and provide balance strength training for muscle groups that were not targeted during the Calisthenics and Drills Segments of the Workout.

- Choose activities that will work the muscle groups not worked during the other segments of the Workout.
For example, if Push-Ups and Dips were performed, one might choose Lat Pulldowns and Bicep Curls with the tubing or medicine ball.
- Use time efficiently by performing Upper & Lower Body Exercises simultaneously.
- Perform 3-4 days a week.
- Perform 1-3 sets of 10-25 reps of each exercise.
 - Example of Upper/Lower Body Circuit—perform 1-3 circuits of each Exercise for 10-25 reps.
 - Lat Pullovers with Wide Stance Squats using Tubing or Medicine Ball.
 - Tricep Extensions Calf Raises using Tubing or Medicine Ball.
 - Lat Pulldowns with Squats using Tubing or Medicine Ball.
 - Bicep Curls with Rear Lunges using Tubing or Medicine Ball.
 - Example of Abs Circuit—perform 1-3 circuits of each Exercise for 10-25 reps.
 - Crunches
 - Torso Raises
 - Reverse Crunches
 - Oblique Crunches

IV. Muscle Conditioning Segment

LOWER BODY EXERCISES



STRAIGHT SQUATS

Muscles Targeted: Gluteals, Quadriceps and Hamstrings

Begin with feet shoulder width apart. Flex knees and hips and lower buttocks as if sitting in a chair. Return to starting position.

Explosive Squat—Pause at bottom of Squat movement. Perform explosive movement to return to starting position.



WIDE STANCE SQUATS

Muscles Targeted: Gluteals, Quadriceps, Hamstrings, Abductors

Begin with feet wider than shoulder width apart with toes turned out slightly. Flex knees and hips and lower buttocks. Return to starting position.



Posting Squat—Perform pulsing movements at bottom of Squat movement as if riding a horse.

IV. Muscle Conditioning Exercises Continued

LOWER BODY EXERCISES

REAR LUNGES

Muscles Targeted: Quadriceps, Hamstrings, Gluteals

Begin with feet shoulder distance apart. Extend right leg from hip by stepping back with right foot. Balance and lower extended right leg by flexing left knee. Return to starting position.

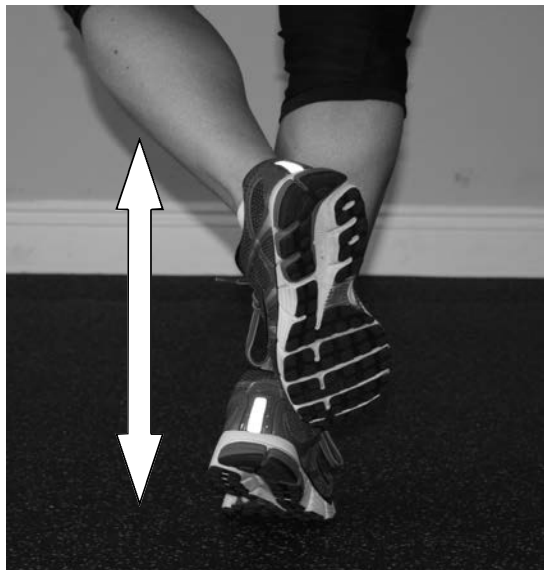


ONE-LEGGED CALF RAISES

Muscles Targeted: Gastrocnemius and Soleus

Perform one-legged calf raise by placing left foot behind right lower leg. Raise right heel and roll onto ball of foot. Return to starting position. Repeat on other leg.

Perform 2-legged calf raises for individuals who need less challenge or when performing simultaneously with upper body conditioning exercises.



IV. Muscle Conditioning Exercises Continued

LOWER BODY EXERCISES

WALKING LUNGES

Muscles Targeted: Gluteals, Quadriceps and Hamstrings

Begin with feet shoulder width apart. Take a long step forward with right foot and flex right knee to lower body toward ground. Pause and balance. Take a long step forward with left foot and flex left knee to lower body toward ground. Alternate lunging movements while “walking” forward.



For variety or if you have space restrictions you can perform Stationary Front Lunges.

IV. Muscle Conditioning Exercises Continued

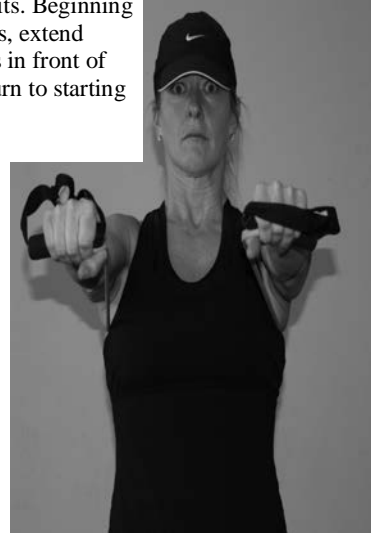
UPPER BODY EXERCISES

CHEST PRESS

Muscles Targeted: Pectorals, Shoulders and Triceps

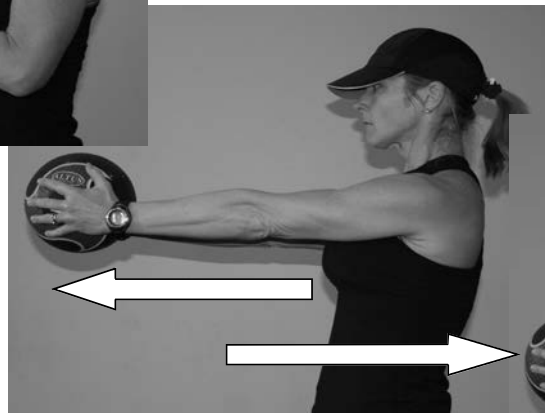
Tubing

Hold ends of tube in each hand. Place tubing behind back with tube positioned under armpits. Beginning with hands at shoulders, extend arms by pushing hands in front of shoulders. Slowly return to starting position.



Medicine Ball

Hold medicine ball in both hands at chest level. Press ball forward by extending arms in front of chest. Return to starting position by pulling elbows back toward ribs and bending arms.



IV. Muscle Conditioning Exercises Continued

UPPER BODY EXERCISES

LAT PULLDOWNS

Muscles Targeted: Lats, Shoulders, Biceps



Medicine Ball

Hold medicine ball in both hands with arms extended overhead. Pull ball down toward sternum by bending elbows out to the sides. Return to starting position.

Tubing

Hold ends of tubing in each hand with hands shoulder distance apart. Wrap excess tubing loosely around hand or hold in fisted hand. Extend arms overhead with elbows slightly bent. Pull tubing down toward sternum by bending elbows. Return to starting position.

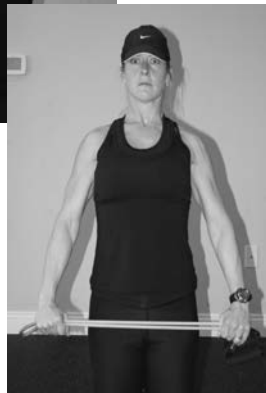


IV. Muscle Conditioning Exercises Continued

UPPER BODY EXERCISES

LAT PULLOVERS

Muscles Targeted: Lats, Shoulders



Tubing

Hold tubing between hands approximately shoulder distance apart. Extend arms overhead, pull on tube to create resistance. With elbows slightly bent, extend shoulders by pulling elbows down toward ribs. Return to starting position.



Medicine Ball

Hold medicine ball in both hands over head with elbows slightly bent. With elbows slightly bent, extend shoulders by pulling elbows down toward ribs. Return to starting position.



IV. Muscle Conditioning Exercises Continued

UPPER BODY EXERCISES

BICEP CURLS

Muscles Targeted: Biceps

Tubing

Stand with center of tubing positioned underneath both feet. Hold ends of tubing in each hand with hands shoulder distance apart. Bring hands toward shoulders by flexing elbows. Slowly return to starting position. Keep elbows by sides throughout the entire range of motion. Lighten resistance by standing on tubing with one foot only.



Medicine Ball

Hold medicine ball in front of body with arms fully extended, elbows by sides. Flex elbows to bring medicine ball toward chest. Extend elbows to return medicine ball to starting position.

IV. Muscle Conditioning Exercises Continued

UPPER BODY EXERCISES

TRICEP EXTENSIONS

Muscles Targeted: Triceps



Tubing

Hold one end of tubing in right hand with arm overhead, elbow flexed at 90 degrees. Hold other end of tubing in left hand with left hand in the small of the back, elbow bent at 90 degrees. Anchor tubing with left hand while extending right arm by pressing right hand overhead. Slowly return to starting position.

Medicine Ball

Hold medicine ball overhead. Flex elbows as if bringing medicine ball behind head. Extend elbows to bring ball directly overhead.



IV. Muscle Conditioning Exercises Continued

ABDOMINAL EXERCISES

CRUNCHES

Muscles Targeted: Abdominals

Lie on back with hands behind the head, feet flat on floor and knees bent. Inhale and lift the shoulders off the floor. Exhale at top of movement. Inhale return to starting position. Can be performed with medicine ball held at chest or tubing placed under back.

Perform holding medicine ball at chest.



Perform with tubing placed under back with arms extended.



TORSO RAISES

Muscles Targeted: Abdominals and Obliques

Lie on back with knees flexed, feet flat on ground, hands behind head. Raise the torso half-way off ground. Slowly lower torso toward starting position without bringing torso to rest on the ground.



For less challenge, reach arms forward instead of holding hands behind head.



IV. Muscle Conditioning Exercises Continued

ABDOMINAL EXERCISES



REVERSE CRUNCHES

Muscles Targeted: Abdominals

Lie on back with hands placed on floor beside hips. Bend hips and knees at 90 degrees. Inhale and lift buttocks off ground while firmly pressing down with hands and arms or with hands behind the head. Slowly lower feet toward floor as low as back will allow. Return to starting position.

For less challenge, reach arms forward instead of holding hands behind head.



OBLIQUE CRUNCHES

Muscles Targeted: Abdominals and Obliques

Lie on back with knees flexed, feet flat on ground, hands behind head. Raise the torso off ground bringing right elbow toward left knee. Slowly return to starting position. Alternate bringing opposite elbow toward opposite knee.

IV. Muscle Conditioning Exercises Continued

ABDOMINAL EXERCISES

CYCLING/CRISS CROSS

Muscles Targeted: Abdominals and Obliques

Lie on back with hands placed on floor beside hips. Extend left leg while bringing right knee and left elbow toward each other. Extend right leg while bringing left knee toward right elbow.



To decrease challenge, keep knee bent with foot on floor rather than fully extending leg.

SIDE LYING TORSO FLEXIONS/SIDE LYING OBLIQUE CRUNCH

Muscles Targeted: Abdominals and Obliques

Lie on side with legs extended, one hand behind head and other arm extended in front of shoulder. Lift feet approximately 3 inches off ground. Perform lateral flexion while lifting shoulder off the ground. Return to starting position.



For less challenge, reach top arm toward knee instead of holding hand behind head and keep feet on ground.



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #12

1. Provide cues, describe proper technique and explain modifications for the following Lower Body Exercises:

Straight Squats:

Wide Stance Squats:

Rear Lunges:

2. Provide cues, describe proper technique and explain modifications for the following Upper Body Exercises:

Chest Press with Tubing:

Lat Pulldowns with Medicine Ball:

Tricep Extensions with Tubing:

3. Provide cues, describe proper technique and explain modifications for the following Abdominal Exercises:

Crunches:

Torso Raises;

Reverse Crunches:

COOL DOWN AND FLEXIBILITY

- **Cool Down**—The Cool Down is a good time to review any short term goals which were set during the Workout portion of the Boot Camp training session and to applaud everyone for their effort in reaching their short term goals.
 - Purpose: To provide a transition between vigorous activity and less vigorous or intense exercise. This time allows the working heart rate to decrease and return to pre-exercise rate. It also helps participants to flush the lactate out of the muscles and decrease muscle soreness.
 - Time: 2-5 Minutes.
 - Guidelines: Transition from more intense exercises to less intense exercises. Cooling down also includes re-hydrating with water, a sports drink, or electrolyte solution to replenish fluids, carbohydrates and electrolytes. (i.e., If performing speed work, after sprinting, walk to cool down).
- **Flexibility**—During the Flexibility portion of the Boot Camp training session, you may want to take the time to reinforce positive behavior and habits such as healthy eating and getting plenty of sleep.
 - Purpose: Flexibility is as significant as muscular strength/ endurance and cardio-respiratory stamina. If range of motion is limited due to inflexibility, potential physiological benefits may be reduced. The post workout stretches improve posture and performance. Stretching alleviates stiffness, maintains joints and prevents low back pain and other injuries.
 - Time: 5-10 Minutes.
 - Guidelines: Appropriate static stretches may include calves, quadriceps, hamstrings, hip flexors, low back, upper back, shoulders, biceps, triceps, and neck. Exhale as you move into each position. Hold the limits of joint motion until there is tension in the muscle, then relax into the stretch for 15 to 20 seconds.

COOL-DOWN

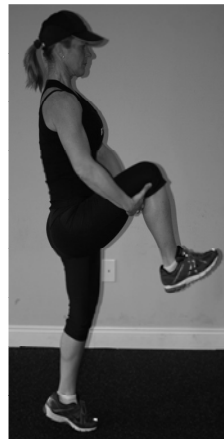
- The Cool-Down Portion of the Workout is the best time to transition from more intense exercises to less intense exercises.
- Choose 2-3 Warm-Up Exercises to use as Cool-Down Exercises or the Muscle Conditioning Exercises can provide a Cool-Down period following Drills or Cardio Conditioning.
- The Cool-Down can include re-hydrating with water, a sports drink, or electrolyte solution to replenish fluids, carbohydrates and electrolytes.

Below is an example of Cool-Down Exercises taken from the Warm-Up Exercises:

TRUNK TWISTS



HIGH KNEE PULLS



SKATING



LATERAL LUNGES/SIDE SQUATS



SHOULDER ROLLS



NECK ROLLS



FLEXIBILITY WORK

- Stretch all of the major muscle groups during the Flexibility portion of the Training Session. If you worked it, you must stretch it.
- Move into the limits of joint motion until there is tension in the muscle without pain or strain.
- Relax and hold a static stretch for 15 to 30 seconds.
- Do not bounce or perform ballistic movements during stretches.



RUNNER'S LUNGE

Muscles Targeted: Quadriceps and Hip Flexors

Step forward with left leg in a lunge position with knee at approximately 90-degree angle and right leg extended with knee resting on the floor. Place fingertips on floor with arms extended. Gently press forward through the hips.



Place hands on top of left thigh for balance for individuals who may not possess the flexibility to perform a full Runner's Lunge.



STANDING CALF STRETCH

Muscles Targeted: Gastrocnemius and Soleus

Stand in upright position with hands on the hips. Place the right foot on the ground behind the body with the heel pressing toward the ground. Gently bend the right knee while keeping the heel pressing toward the ground. Hold stretch. Repeat on left leg.

STANDING TIBIAL STRETCH

Muscles Targeted: Tibialis Anterior, Ankle, Foot

Stand in upright position with arms out to sides for balance. Place the right foot on the ground behind the body with the top (dorsal) side of the toes resting on the ground. Gently lean into the right leg while pressing the top of the foot toward the ground until slight resistance is felt. Hold stretch. Repeat on left leg.

Can be performed with stretching leg placed in front of supporting leg as demonstrated in the DVD.



ILIOTIBIAL BAND STRETCH— STANDING POSITION

Muscles Targeted: Tensor Fasciae Latae, Gluteals, Iliotibial Band

In a standing position, cross the leg over the front of the left leg. Stand with both feet planted firmly into the floor. Extend right arm overhead and gently perform lateral flexion to the left. Hold stretch. Keep legs in crossed position and gently reverse the arms so that the left arm is extended overhead. Gently perform a side flexion to the right. Hold stretch. Repeat entire sequence on opposite side.

STANDING QUADRICEPS

Muscles Targeted:

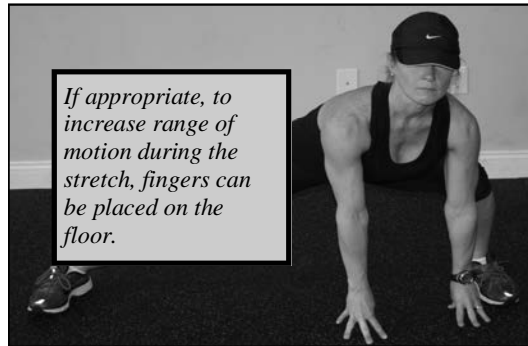
Quadriceps Group and Hip Flexors

Stand on right leg with right knee and toe pointing forward. Bring the left heel toward the left gluteus by bending the left knee. Gently grasp the left foot or ankle while pushing the hips forward. Hold stretch. Repeat on left leg.



Grasp foot with opposite hand to avoid hyper-flexion of the knee.

If appropriate, to increase range of motion during the stretch, fingers can be placed on the floor.



STANDING HIP ADDUCTOR STRETCH

Muscles Targeted: Adductors

Stand with feet more than shoulder width apart. Perform a half-squat with the right leg while keeping the left leg straight. Place hands on top of right thigh for support. Repeat on other side.



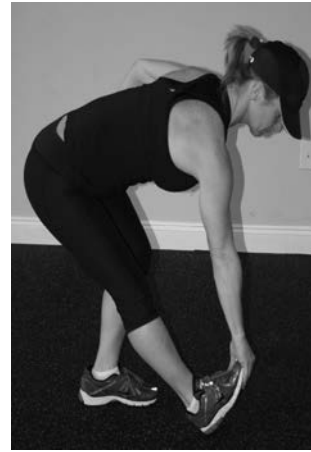


STANDING HAMSTRING STRETCH

Muscles Targeted:

Hamstrings

Stand with feet hip distance apart with the left knee bent and right leg extended with right foot dorsi flexed, heel resting on the ground. Rest palms on tops of thighs to provide support to the low back. Slowly flex torso forward until a stretch is felt in the right hamstring. Hold stretch. Repeat on left leg.



- *Participants who possess greater flexibility in the hamstrings & low back can perform by adding addition resistance by grasping right toe with right hand.*
- *Can be performed with heel of extended leg elevated on a park bench or step.*

HELPFUL HINTS FOR TIME EFFICIENCY DURING FLEXIBILITY PORTION OF WORKOUT

- *Perform Upper Body Stretches in conjunction with Standing Lower Body Stretches.*
 - *Upper Back Stretch while performing Standing Calf Stretch.*
 - *Triceps Stretch while performing Standing Iliotibial Stretch.*
 - *Chest Stretch while performing Standing Runners Lunge.*

SHOULDER STRETCH

Muscles Targeted: Posterior Deltoids, Lats, Triceps, Trapezius

Perform in standing or seated position. Bring right arm across front of body. Place the left hand above or below the right elbow. Gently pull the right arm down toward the left side of the body. Hold stretch. Repeat on left arm.



UPPER BACK STRETCH

Muscles Targeted: Middle Trapezius, Rhomboids

Perform in standing or seated position. Extend arms in front of chest with fingers clasped. Slowly tuck in the chin toward collarbone and round the upper back. Hold stretch.

CHEST STRETCH

Muscles Targeted: Pectorals

Perform in standing or seated position. Clasp hands together behind back. Keeping hands as close to body as possible, inhale. Exhale as you press hands down. Allow shoulder blades to depress and retract during the exhale. Hold stretch.



OVERHEAD TRICEP STRETCH

Muscles Targeted: Triceps

Perform in standing or seated position. Right arm reaches overhead, flexing at the elbow and reaching right hand with fingers pointing down center of back.. Left hand may rest to the front of the body gently applying pressure to the right tricep to reach further behind the body or the left hand may reach for the right elbow and gently apply pressure. Hold stretch. Repeat on left arm.

BICEP STRETCH

Muscles Targeted :Biceps and Forearms

- Stand with feet hip distance apart.
- Extend arms fully to the sides with palms facing upward.
- Gently flex the wrist.
- Hold stretch.

Can be performed with one arm at a time using a door frame, tree or post.





ILIOTIBIAL BAND STRETCH—SUPINE POSITION *(not demonstrated in the DVD)*

Muscles Targeted: Tensor Fasciae Latae, Gluteals, Iliotibial Band

Lie on back on comfortable surface. Bend left knee with left foot placed firmly on the floor. Cross the right ankle over and proximal to the left knee. Bring the left knee up by lifting the left foot off the ground. Lift the head, neck & shoulders off the ground. Place the hands behind the left thigh. Gently pull the left knee until slight resistance is felt. Hold. Repeat on left leg.

SIDE LYING QUADRICEPS STRETCH

Muscles Targeted: Quadriceps Group and Hip Flexors

Lie on right side with head resting in hand. Bring the left heel toward the left gluteus by bending the left knee. Gently grasp the left foot or ankle while pushing the hips forward. Hold stretch. Repeat on other side.



SUPINE HAMSTRING STRETCH

Muscles Targeted: Hamstrings

Lie flat on back on a comfortable surface. Extend right leg fully with heel pressing toward the sky/ceiling. Place hands behind right leg. Perform a gentle pulling motion until slight tension is felt in the hamstring. Hold stretch. Repeat with left leg.

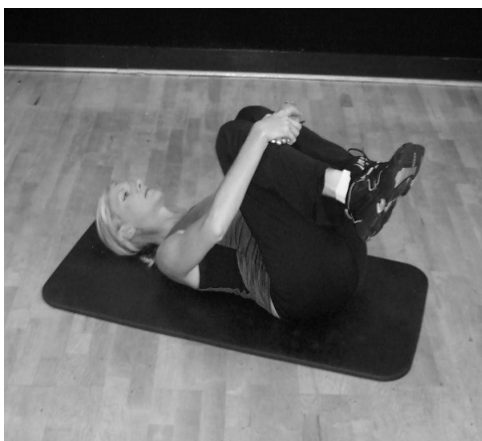
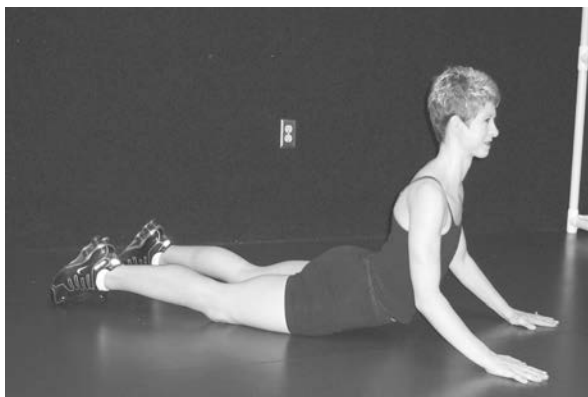


Individuals who possess greater flexibility through the low back & hamstrings, can place hands behind the calf while perform the stretch.

ABDOMINAL STRETCH/MODIFIED COBRA

Muscles Targeted: Rectus Abdominis/
Anterior Portion of the Abdominal Girdle

Lie in a prone position with hands resting underneath shoulders. Keeping chin tucked to collarbone, slowly extend the arms while lifting the chest. Perform gentle movement until lengthening is felt through the abdominal region. Hold stretch.



LOW BACK STRETCH—PRONE POSITION (*Not demonstrated in DVD*)

Muscles Targeted: Lower Spinal Muscles

Lie on back on comfortable surface. Slowly lift feet off the floor with knees bent. Place hands behind thighs. Lift head & neck while simultaneously pulling knees toward chest. Hold stretch. Slowly return to starting position.

LOW BACK STRETCH—STANDING POSITION
(*Not demonstrated in DVD*)

Muscles Targeted: Lower Spinal Muscles

Standing with feet shoulder width apart. Hinge forward from hips while slightly flexing knees. Rest forearms or elbows on thighs slightly above knees. Tuck chin toward chest to lengthen through the back of the neck. Round upper back by spreading the shoulder blades. Hold stretch. Slowly return to starting position by rolling up to erect standing position.





The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #13

1. The Cool Down portion of a Boot Camp Training session is a good time to review _____ goals which were set earlier in the training session.
2. Explain how to perform a Cool Down and why it is important to include a Cool Down period in each Boot Camp Training session.
3. The Flexibility portion of a Boot Camp Training session is a good time to reinforce positive behavior and _____.
4. Explain the importance of the Flexibility portion of a Boot Camp Training session and list the benefits that can be achieved by regularly performing flexibility exercises.
5. Explain how to cue, proper technique and modifications for the following Flexibility activities:

Runners Lunge:

Standing Tibial Stretch:

Standing Hamstring Stretch:

CREATING THE PROGRAM

Variety of Levels

- Each participant should work at their own pace to reach their highest potential.
- The worst thing that could happen to someone who is new to your program is for him/her to get injured because of doing too much too soon.

Work at Own Pace

- Allow participants to perform sets and repetitions for a period of time rather than setting specific repetitions per set.

For example, if you ask you students to perform 3 sets of 15 push-ups in 2 minutes, you may have some participants who are unable to complete this task.

Program Progression

- **Beginners—8 Week General Conditioning Program:** Many Boot Camp participants may have been exercising regularly but not incorporating all of the components of fitness performance encompassed in a Boot Camp program. To avoid injury and drop-out, these individuals will need to undergo a period of general conditioning. An individual who has been performing cardio-respiratory exercise on a regular basis (i.e. running or indoor cycling), but has not been engaging in the types of activities in Boot Camp such as Drills, Calisthenics, and Muscle Conditioning, will need to build a base level before progressing to Intermediate/Advanced Level.

- Week 1:
 - 1-2 sets of each exercise/activity.
 - Allow 60 seconds rest between sets.
- Week 2:
 - 1-2 sets of each exercise/activity.
 - Allow 45 seconds rest between sets.
- Week 3:
 - 1-2 sets of each exercise/activity.
 - Allow 30 seconds rest between sets.
- Week 4: Fitness Assessment and Girth Measurements
 - 2-3 sets of each exercise/activity
 - Allow 60 seconds rest between sets.
- Week 5:
 - 2-3 sets of each exercise/activity.
 - Allow 45 seconds rest between sets.
- Week 6:
 - 2-3 sets of each exercise/activity.
 - Allow 30 seconds rest between sets.
- Week 7:
 - 3 sets of each exercise/activity.
 - Allow 30-60 seconds rest between sets.
- Week 8:
 - Fitness Assessment and Girth Measurements
 - 3 sets of each exercise/activity.
 - Allow 30-60 seconds rest between sets.

- **Intermediate/Advanced Level—8 Week Program:** Individuals who fall under the Intermediate/Advanced category will be individuals who have a good base cardio-respiratory fitness, who participate in core and muscle conditioning activities such as yoga, Pilates, strength training and who also possess a good level of flexibility. These individuals may possibly be de-conditioned for activities such as the lateral movement field drills and may need to have their reps/sets adjusted accordingly.
 - Week 1:
 - 2-3 sets of each exercise/activity.
 - Allow 45-60 seconds rest between sets.
 - Week 2:
 - 2-3 sets of each exercise/activity.
 - Allow 45 seconds rest between sets.
 - Week 3:
 - 2-3 sets of each exercise/activity.
 - Allow 30-45 seconds rest between sets.
 - Week 4: Fitness Assessment and Girth Measurements
 - 2-3 sets of each exercise/activity.
 - Allow 30 seconds rest between sets.
 - Week 5:
 - 3 sets of each exercise/activity.
 - Allow 30-60 seconds rest between sets.
 - Week 6: Fitness Assessment and Girth Measurements
 - 3 sets of each exercise/activity.
 - Allow 30-45 seconds rest between sets.
 - Week 7:
 - 3 sets of each exercise/activity.
 - Allow 30 seconds rest between sets.
 - Week 8: Fitness Assessment and Girth Measurements
 - 3 sets of each exercise/activity.
 - Allow 15-30 seconds rest between sets.

TEAM WORK

Working with a group of individuals who range from Beginner to Advanced Levels can be quite challenging. Depending upon the group dynamics, you could have Beginners who may feel intimidated by the Advanced participants, who most likely will be competitive. In addition, it can be quite difficult for a trainer to be certain that all participants are working at the level that is most appropriate and that will elicit optimal results.

- Pair Beginner participants and Intermediate/Advanced participants.
 - Each will time the other when performing exercises/activities.
 - Each will encourage the other and give praise for a job well done.
- When running, have the faster runners go back to “bring in the rear” and encourage the Beginners to complete the assigned running task and, thus, meet their goal.
 - Explain that the faster runners just have to run farther so the slower runners feel they are helping, not hindering, the faster runners.
 - Explain that everyone is going to run or walk for the same amount of time, no matter the speed of movement.
- Create sub-groups within the large group with an equal number of Beginners and Intermediate/Advanced participants in each sub-group.
 - Perform relays during the Drill portion of the Workout.
 - Allow the sub-groups to compete with Muscle Conditioning Activities.

8 WEEK BOOTCAMP SCHEDULE

Week 1	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING	X						
Warm-Up	X	X	X	X	X	X	
Cardio		X		X		X	Off Day
Calisthenics	X		X		X		
Drills			X			X	
Muscle Conditioning		X		X		X	
Flexibility	X	X	X	X	X	X	
Week 2	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING							
Warm-Up	X	X	X	X	X	X	
Cardio	X		X		X	X	Off Day
Calisthenics		X			X	X	
Drills		X		X			
Muscle Conditioning	X		X	X		X	
Flexibility	X	X	X	X	X	X	
Week 3	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING							
Warm-Up	X	X	X	X	X	X	
Cardio	X	X		X	X	X	Off Day
Calisthenics	X		X		X	X	
Drills		X	X			X	
Muscle Conditioning		X		X		X	
Flexibility	X	X	X	X	X	X	
Week 4	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING	X						
Warm-Up	X	X	X	X	X	X	
Cardio		X		X	X	X	Off Day
Calisthenics			X		X	X	
Drills		X	X			X	
Muscle Conditioning	X	X		X		X	
Flexibility	X	X	X	X	X	X	

8 WEEK BOOTCAMP SCHEDULE

Week 5	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING							
Warm-Up	X	X	X	X	X	X	
Cardio	X	X		X	X	X	Off Day
Calisthenics	X	X	X		X	X	
Drills	X		X		X	X	
Muscle Conditioning		X		X		X	
Flexibility	X	X	X	X	X	X	
Week 6	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING	X						
Warm-Up	X	X	X	X	X	X	
Cardio		X	X	X	X	X	Off Day
Calisthenics		X	X		X	X	
Drills		X		X		X	
Muscle Conditioning	X			X		X	
Flexibility	X	X	X	X	X	X	
Week 7	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING							
Warm-Up	X	X	X	X	X	X	
Cardio	X	X	X	X	X	X	Off Day
Calisthenics	X		X		X	X	
Drills	X	X		X	X	X	
Muscle Conditioning		X		X		X	
Flexibility	X	X	X	X	X	X	
Week 8	MON	TUES	WED	THURS	FRI	SAT	SUN
TESTING					X	<i>Celebration!</i>	
Warm-Up	X	X	X	X			
Cardio	X	X	X	X			
Calisthenics	X		X				
Drills	X	X		X			
Muscle Conditioning		X		X			
Flexibility	X	X	X	X	X		

DESIGNING YOUR OWN BOOTCAMP TRAINING SESSIONS

- Use the Outline below to practice designing training sessions for each day of Week 2 of the Example 8-Week Training Program on the proceeding pages.
 - Decide on amount of time for each portion of the workout for each day.
 - Select exercise/activity for each portion.
 - Determine amount of time and number of sets/circuits/intervals for each exercise/activity.

Week 2	MON	TUES	WED	THURS	FRI	SAT	SUN
Warm-Up							
Cardio							
Calisthenics							
Drills							
Muscle Conditioning							
Flexibility							



The following review questions are designed to assist you in reviewing the material covered in the preceding pages in preparation for the written examination. Please take a few moments to read and answer each question below.

REVIEW #14

1. Briefly explain how a Boot Camp Trainer can encourage participants to work at their own pace and why it is important to the success of your program to allow participants to work at their own pace.
2. Explain why it may be necessary to schedule an 8-Week General Conditioning Boot Camp Program prior to implementing an 8-Week Intermediate/Advanced Boot Camp Program when scheduling your Boot Camp Training Programs.
3. List and explain strategies that can be used to incorporate team work into Boot Camp Training sessions and the importance of team work to the success of participants and overall success of your Boot Camp Training Program.

FiTOUR® Instructor Observation

Please contact a local health facility or fitness instructor so that you may arrange a time that is convenient for both to complete the observation. This observation will allow you to gain perspective as to the methods of teaching and instruction in a particular discipline. Please complete the form below while observing. **NOTE: Please be sure to explain to the instructor that this observation will not be used for anything other than to aid in learning and that the observation sheet will not be viewed by one but yourself.**

Instructor Name _____ Facility Name/Location _____

PERSONALITY	PREPARATION	TECHNIQUE	PARTICIPANTS
Place a number from 1-5 in the box next to each beow (5 being the highest rank)	Place a number from 1-5 in the box next to each beow (5 being the highest rank)	Place a number from 1-5 in the box next to each beow (5 being the highest rank)	Place a number from 1-5 in the box next to each beow (5 being the highest rank)
Positive personal hygiene	Time was used effectively	Exhibits positive reinforcement	Participants are enjoying the class
Displays poise and Composure	Use of appropriate language	Appropriate voice projection	Participants are on task for majority of class
Displays professional attitude	Evidence of planning/preparation	Utilizes "hands-on" teaching experiences	Participants ask questions/inquire
Develops a rapport with participants	Room size/temperature was adequate	Proximity-changes places often to observe	Participants are serious about the class
Creates a fun, safe and health beneficial atmosphere	Demonstrates proficient knowledge in subject area	Provides an atmosphere conducive to learning	Instructor communicates effectively with class
Total	Total	Total	Total

Total Score _____ out of 100%

Evaluation/Comments



BOOT CAMP FORMS

Permission is given by FiTOUR® to copy the following forms
to use to for a Boot Camp Program.

BOOT CAMP WEEKLY DESIGN & PLAN

WEEK ____	MON	TUES	WED	THURS	FRI	SAT	SUN
Warm-Up							
Cardio							
Calisthenics							
Drills							
Muscle Conditioning							
Flexibility							

BOOT CAMP REGISTRATION FORM

Please complete the following information accurately.
All information will be kept strictly confidential and will be used only to enhance the safety of the exercises you perform during the Boot Camp Program.

(Please print legibly)

Name: _____ **Nickname:** _____
Address: _____ **City:** _____ **ST:** _____ **Zip:** _____
Home Phone: _____ **Work:** _____ **Cell:** _____
Email Address: _____ **Date of Birth:** _____
Emergency Contact Name: _____ **Phone No.:** _____

What type of fitness activities do you regularly perform? Please list number of days per week and duration of activity(ies). _____

Please check any of the following conditions that apply to you:

Have you ever been told by a physician that you have or have had any of the following?

- Heart attack Cancer Seizure Stroke
 Diabetes Lung Problems High cholesterol (>200)
 High blood pressure Arthritis Osteoporosis Exercise Induced Asthma

If you are currently taking any prescription(s) or over-the-counter medications, please list them:

Do you smoke? Yes No

Do you have any past injuries, or currently experience problems with, any of the following?

- Cramping Low Back Chest Pain Shin Splints Middle Back Neck
 Shoulders Hands Feet/Ankles Hips Calves Knees
 Fainting Dizziness Loss of Coordination Irregular heart beat Heat Intolerance
 Asthma Migraines Amenorrhea Fibromyalgia

List any recent surgeries:

Are there any additional issues or concerns you would like to disclose prior to beginning Boot Camp?

I realize that there are risks to all exercise, including injury and possible death, although every effort will be made to decrease any risk of injury. I take full responsibility for my participation in the Boot Camp Training Program. Knowing that I participate at my own pace, and that I am free to discontinue participation at any time, I will inform the Boot Camp Trainer of any problems immediately.

Signature: _____ Date: _____

BOOT CAMP GOAL SETTING QUESITONNAIRE

Name: _____ Date: _____

DEGREE of SATISFACTION with Current Level of Fitness <i>Check the best number for each aspect of your current fitness level, using this scale 4 = Very Satisfied 3 = Satisfied 2 = Dissatisfied 1 = Very Dissatisfied</i>	4	3	2	1
Amount of Energy				
Cardiovascular Endurance				
Muscular Strength & Endurance				
Flexibility of Hamstrings and Low Back				
Ability to cope with tension & stress				
Ability to relax				
Ability to get a good night's rest				
Low-back function				
Physical appearance/Body Weight				

AREAS OF IMPROVEMENT

Take a few moments to think about the areas of your life which you feel need improvement. Briefly list areas of improvement below.

1. Specific Physical Problem:

2. Appearance of Particular Part of Body:

3. Ability to Participate in a Specific Sports (i.e. tennis, skiing, running, etc.)

4. Risk of a Health Problem:

5. Other:

BOOT CAMP BEHAVIORAL CHANGE CONTRACT

I _____ do agree that I will adhere to the suggested exercise and diet guidelines as set forth by _____ Boot Camp Program:

1. I will attend all Boot Camp Training Sessions at _____ am/pm on _____ (day(s)) for _____ weeks beginning on _____, 20____ and ending on _____, 20____.
2. I will keep a daily journal in which I record daily exercise activities.
3. I will keep a daily journal in which I record food and calorie consumption.
4. I commit to having positive thoughts and engaging in positive behavior throughout the duration of _____ Boot Camp Program.
5. Throughout the duration of the _____ Boot Camp Program, I commit to letting go of habit patterns that are unhealthy and negative and that have kept me from my goals in the past.
6. Throughout the duration of the _____ Boot Camp Program, I commit to forming new habit patterns that are healthy and positive to replace the old habit patterns in a constant effort to improve the areas of my life that I identified as needing improvement.
7. I commit to advising the _____ Boot Camp Program Trainer of any injury or illness I experience during the _____ Boot Camp Program.
8. I commit to performing modified exercises if the execution an exercise being performed during any of the _____ Boot Camp Program Training sessions results in pain or feels as if it could cause injury.
9. I commit to taking each day one at a time and to making positive changes every day for the duration of the _____ Boot Camp Program.
10. At the conclusion of the _____ Boot Camp Program, I commit to adopting and maintaining all of the positive changes and new habit patterns formed during the Boot Camp Program.

Signed _____ Date _____

BOOTCAMP TEST RESULTS

NAME: _____

DATE: _____

Week/Date	One-Mile Jog/ Walk	Sit-Ups	Push-Ups
Week #1/			
Week #4/			
Improvement from Week 1-4			
Week #6/			
Improvement from Week 4-6			
Week #8/			
Improvement from Week 6-8			
TOTAL IMPROVEMENT			

Week/Date	Chest	Navel	Hips	Right Thigh	Left Thigh	Total Inches Lost
Week #1/						
Week #4/						
Improvement from Week 1-4						
Week #6/						
Improvement from Week 4-6						
Week #8/						
Improvement from Week 6-8						
TOTAL IMPROVEMENT						

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- FiTOUR *Official Core and Functional Training Manual, Vol. 2*, 2009



BASIC EXERCISE SCIENCE

Theories & Applications

The information contained on the following pages may be used as a reference.

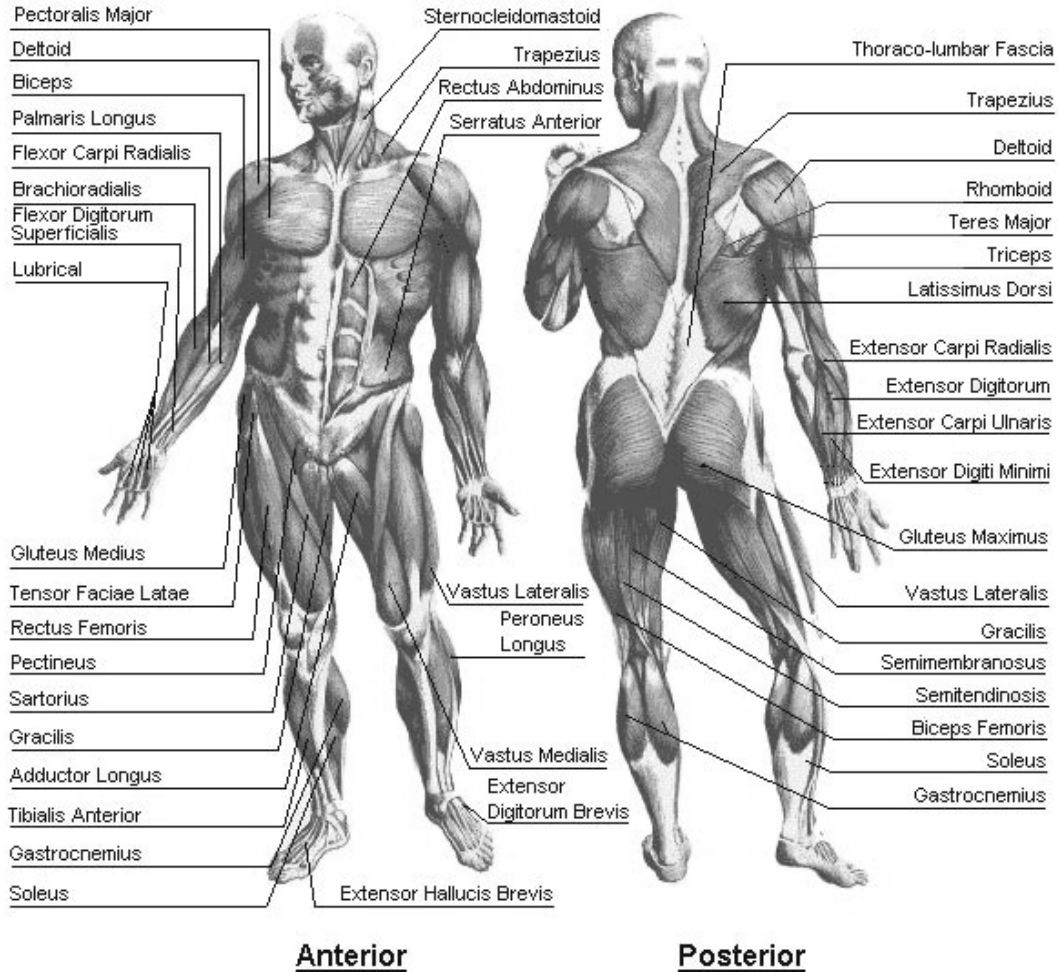
FiTOUR® recommends that all fitness professionals regularly review the basic exercise science theories and applications contained on the following pages.

Basic Exercise Science Theories and Applications are covered in depth in FiTOUR® Primary Group Exercise Instructor and FiTOUR® Primary Personal Trainer Certification Programs.

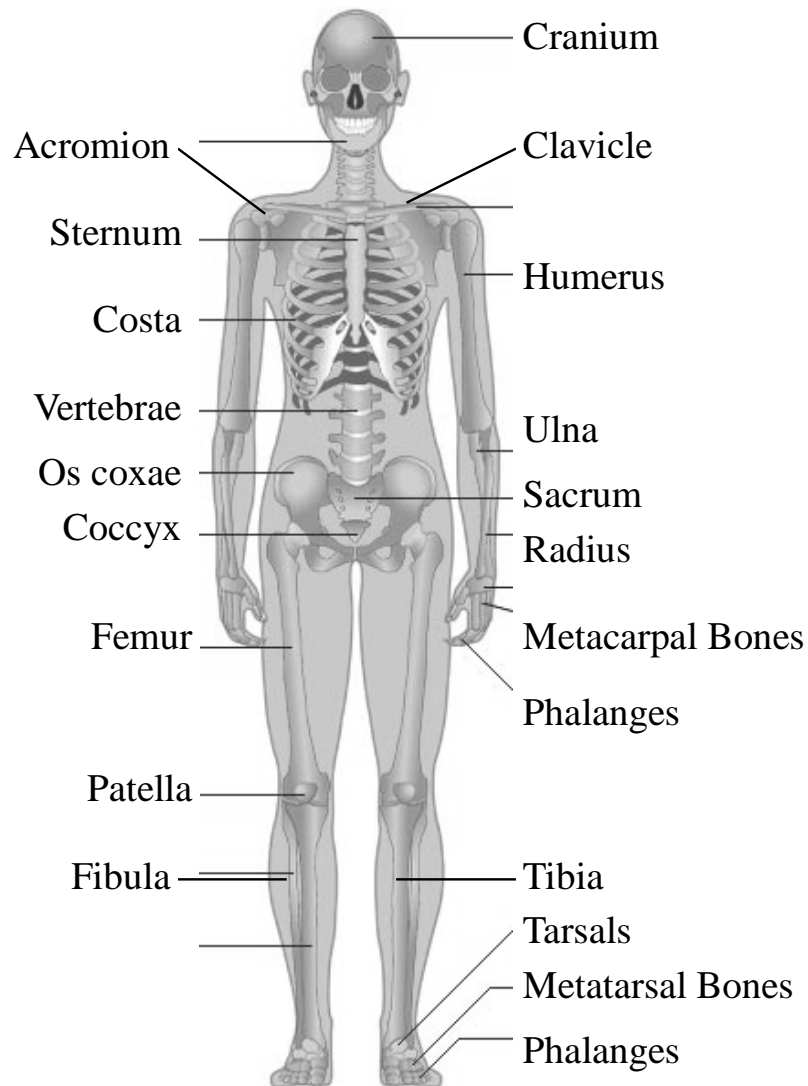
Musculoskeletal Anatomy

Anatomy Definition—The structure of the human body.

- **Striated or Skeletal Muscle:** The anatomical structure that provides the force necessary to move the body.
- **Myology:** The study of muscles

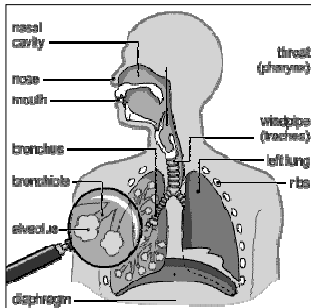


- **Bone:** The anatomical structure that provides support, movement, and protection for the body.
- **Osteology:** The study of bones



General Basic Physiology

- **Definition:** Physiology is the study of human body function.
- **Cardiorespiratory/Cardiovascular Function**
 - Cardio– Heart
 - Respiratory– Lungs and Ventilation
 - Vascular– Blood Vessels
 - **Definition:** A health-related component of physical fitness that relates to the ability of the circulatory and respiratory systems to supply oxygen during physical activity.
 - **Respiratory System:** The primary function of the respiratory system is to supply the blood with oxygen in order for the blood to deliver oxygen to all parts of the body. The respiratory system does this through breathing. When we breathe, we inhale oxygen and exhale carbon dioxide. This exchange of gases is the respiratory system's means of getting oxygen to the blood. Respiration is achieved through the mouth, nose, trachea, lungs, and diaphragm.

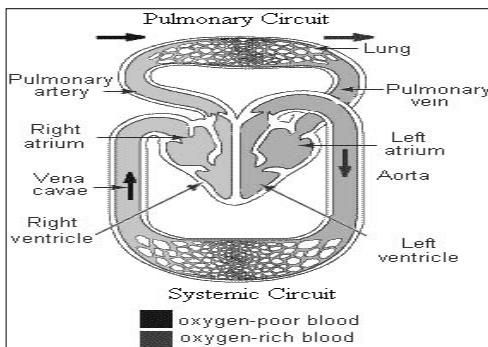


Oxygen enters the respiratory system through the mouth and the nose. The oxygen then passes through the pharynx and the trachea which is a tube that enters the chest cavity. In the chest cavity, the trachea splits into two smaller tubes called the bronchi. Each bronchus then divides again forming the bronchial tubes. The bronchial tubes lead directly into the lungs where they divide into many smaller tubes which connect to tiny sacs called alveoli. The average adult's lungs contain about 600 million of these spongy, air-filled sacs that are surrounded by capillaries. The inhaled oxygen passes into the alveoli and then diffuses through the capillaries into the arterial blood. Meanwhile, the waste-rich blood from the veins releases its carbon dioxide into the alveoli. The carbon dioxide follows the same path out of the lungs when you exhale. The diaphragm's job is to help pump the carbon dioxide out of the lungs and pull the oxygen into the lungs. The diaphragm is a sheath of muscles that lies across the bottom of the chest cavity. As the diaphragm contracts and relaxes, breathing takes place. When the diaphragm contracts, oxygen is pulled into the lungs. When the diaphragm relaxes, carbon dioxide is pumped out of the lungs.

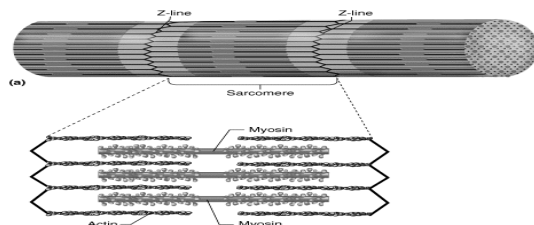
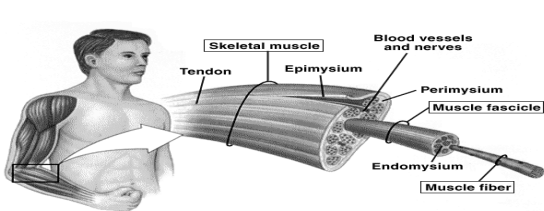


- **Cardiovascular System:** The cardiovascular system is a complex system with one central organ: the heart. The heart is the body's pacemaker. It pumps oxygen-rich blood to the different parts of the body. The blood's journey through the body is an extensive trip through highways of veins, arteries, and other branches. The heart is divided into four chambers: the left and right atria, and the left and right ventricle. The atria are on the upper half of the heart, and the ventricles make up the lower portion. The object of the blood is to circulate oxygen for the growth and development of cells.

The inferior vena cava is the vein that collects the blood returning from the lower body, and the superior vena cava returns blood from the upper body. The deoxygenated blood of these two veins enters the heart in the right atrium and is pumped to the right ventricle. Then the blood travels out of the heart and enters the pulmonary artery. This artery carries the blood to the lungs to get oxygen. Once the blood reaches the lungs, carbon dioxide already in the blood is diffused into the lungs. Carbon dioxide is a cell's waste product after using oxygen. This is

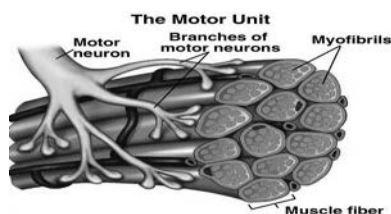


- **Cardiorespiratory System:** Blood enters the heart in the left atrium, from the superior and inferior vena cava. The superior vena cava is the vein that collects the blood returning from the upper body, and the inferior vena cava returns blood from the lower body. The deoxygenated blood of these two veins enters the heart in the right atrium and is pumped to the right ventricle. Then the blood travels out of the heart and enters the pulmonary artery. This artery carries the blood to the lungs to get oxygen. Once the blood reaches the lungs, carbon dioxide already in the blood is diffused into the lungs. Carbon dioxide is a cell's waste product after using oxygen. This is where the circulatory system and the respiratory system intertwine. The oxygen in the lungs is diffused through the alveoli sacs and then through the wall of the lungs into the bloodstream. The blood carries the oxygen to the various cells in the body. To get the oxygen to the actual cells, the arteries branch off into smaller arterioles. These even branch off to capillaries, the smallest of blood vessels. Their walls are extremely thin and elastic. In these vessels, the red blood cells must travel single file to pass through. The oxygen diffuses across the capillary wall. It then travels to a nearby cell and enters through the cell membrane. The carbon dioxide that leaves the cell to allow room for the oxygen makes its way to the bloodstream. Once it reaches the capillaries, it has entered the bloodstream. The capillaries then fork into venules, which then fork into veins. The veins carry the carbon dioxide in the blood back to the heart. This completes the cycle of the circulatory system.



Muscles

- 3 Types
 - Smooth (Involuntary)
 - Cardiac (Involuntary)
 - **Skeletal/Striated (Voluntary):** About 400
- Muscle (Fasciculus– A bundle of muscle fibers surrounded by perimyseum)
 - Muscle Fiber
 - Myofibril
 - Sarcomere: Fundamental Unit of Contraction
 - Actin - Thin Filament
 - Myosin - Thick Filament



Motor Unit: The functional unit of muscular contraction that includes a motor nerve and the muscle fiber that its branches innervate.

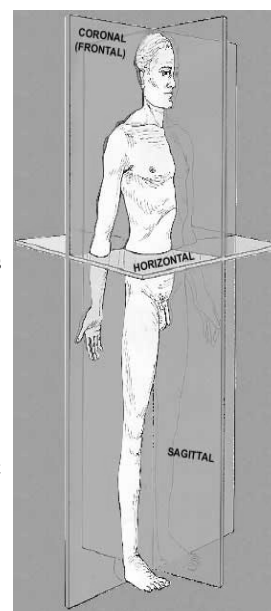
Kinesiology/Biomechanics

- **Definition:** Kinesiology is the scientific study of human movement.
- **Planes of Movement:** Flat imaginary surfaces that divide the body into halves in order to correspond with movement, motion, and actions. Human movement occurs in a plane.
 - Median/Sagittal Plane: A vertical plane that passes through the body anterior to posterior dividing the body into right and left sections. Flexion and extension actions occur within the sagittal plane.
 - Frontal/Coronal Plane: A vertical plane that passes through the body from side to side dividing the body into anterior and posterior sections. Abduction and adduction actions occur within the frontal plane.
 - Transverse/Horizontal Plane: A horizontal plane that passes through the body dividing the body into superior and inferior sections. Rotation and twisting actions occur within the transverse/horizontal plane.
 - Oblique Plane: A plane that lies tilted among the 3 primary planes associated with kinesiology.

*Movement within a plane will always occur parallel to that plane.

- **Muscle Movement/Action**

- **Prime Movers (Agonist):** Muscles responsible for a definite movement of a joint.
- **Antagonist:** Muscles that cause movement at a joint in a direction opposite to that of its agonist.
- **Synergists:** Muscles that keep the joint steady while the prime mover applies force to a neighboring joint.



- **Joint Actions**

- Flexion: The movement of a limb caused by concentric muscular contraction, resulting in a decrease in the angle of a joint.
- Extension: Increasing the angle of a joint.
- Hyperextension: A continuation of extension past the normal anatomical position.
- Lateral Flexion: Flexing to the side (Usually an action of the vertebral column)
- Dorsiflexion: Flexion of the ankle joint bringing the top of the foot towards the shin
- Plantar Flexion: Extension of the ankle joint lowering the top of the foot away from the shin. The bottom of the foot lowers towards the floor.
- Abduction: Within the anatomical position, movement of a bone laterally away from the midline of the body.
- Adduction: Within the anatomical position, movement of a bone towards the midline of the body.
- Rotation: Movement around an axis
- Internal Rotation: Rotation of a joint inward towards the midline of the body.
- External Rotation: Rotation of a joint outwards away from the midline of the body.
- Circumduction: A stationary point on a line with the distal end moving in a circle forming a cone. This is a combination of movements in all planes.
- Elevation: Upward movement/action of the scapula
- Depression: Downward movement/action of the scapula
- Protraction: Abduction of the scapula
- Retraction: Adduction of the scapula
- Pronation (eversion): The position of the hand with the palm facing down. The inward rotational roll position of the foot.
- Supination (inversion): The position of the hand with the palm facing up. The outward rotational roll position of the foot.
- Neutral Spine: The natural inward arch of the low back which distributes load equally throughout the low back. This distribution of load helps to prevent injury and allows for efficient movement.
- Anterior Tilt: An arching of the lower back that causes the pelvis to tilt towards the front of the body.
- Posterior Tilt: A rounding of the lower back that causes the pelvis to tilt towards the back of the body.

- **Anatomical Directional Terminology**

- Anterior: In front or in front of the body
- Posterior: Behind or in back (rear) of the body
- Prone: The body lying face downward
- Supine: Lying on the back, face upward position of the body
- Midline: An imaginary external vertical line which is used as a reference line to divide the body or body parts into left and right sections
- Lateral: On or to the side, outside, farther from the median or midsagittal plane
- Medial: Relating to the middle or center, nearer to the medial or midsagittal plane
- Proximal: Nearest the trunk or the point of origin
- Distal: Situated away from the center or midline of the body, or from the point of origin
- Superior (Supra): Above in relation to another structure, higher
- Inferior (Infra): Below in relation to another structure, lower

General Training Concepts and Terms

- **Acclimatization:** A physiological adaptation to a new environment (higher altitude, temperature, or humidity). It may take 7 to 12 days to acclimate to different environments.
- **Adherence:** A state of continuing an exercise program as prescribed.
- **Aerobic Activities:** Sub-maximal intense activities that use large muscle groups with energy supplied in the presence of oxygen that can be performed for a long period of time.
- **Agility:** Ability to start, stop, and move the body quickly in different directions.
- **Anaerobic Activities:** High intensity activities during which energy demands exceed the ability to supply oxygen and cannot be performed for a long period of time.
- **Balance:** The ability to maintain a certain posture or to move without falling; symmetrical.
- **Conditioning:** Exercise conducted on a regular basis over a period of time ("training").
- **Coordination:** The ability to perform a task integrating movements of the body.
- **Cross Training:** Incorporating different modalities of exercise into one's overall training regimen to avoid over-training, boredom, and/or plateau.
- **Delayed Onset of Muscle Soreness (DOMS):** Muscle soreness that occurs 1-2 days after an exercise training session.
- **Efficiency:** The ratio of energy expenditure to work output. How well an individual can perform or execute an exercise.
- **Fartlek (Speed Play):** A form of physical conditioning which alternates fast and slow running over varied terrain for 3-4 miles.
- **Force:** Any push or pull that tends to cause movement
- **Interval Training:** A fitness workout that alternates harder and lighter bouts of intensities throughout the session
- **Overload Principle:** To place greater than usual demands upon some part of the body.
- **Periodization:** A specific period of time (weeks, months, or years) over which the frequency, volume, and intensity of training are systematically varied to avoid over-training and to promote continued progress.
- **Plyometrics:** A method of resistance training that emphasizes the stretching of the muscle prior to the contraction.
- **Power:** The ability to exert muscular strength quickly.
Expressed as $\text{Force} \times \text{Speed} = \text{Power}$
- **Progressive Overload Principle:** Introducing overloads in a systematic manner.
- **Rest:** One must plan days of rest to yield an improvement in one's overall performance
 - **Active Rest**– Days that consist of light, fun activities different from one's normal workout program
 - **Passive Rest**– Days that consist of doing no activity.
- **Reversibility:** A marked decrease in endurance, muscular strength, and flexibility with the cessation of exercise
 - **Muscular Strength**– Begins to reduce after 72 hours of cessation
 - **Cardiovascular Endurance**– Begins to reduce after 2 weeks of cessation
- **Specificity Concept:** The idea that one should train in a specific manner to achieve a specific outcome.
- **Speed:** The ability to move the body quickly.
- **Training Effect:** Overall positive improvements in the performance of the heart, lungs, and muscles due to conditioning.
- **Training Variation:** Systematically manipulating training variables to create an overload thereby demanding the body to adapt and improve.

General Exercise Guidelines

- **FITT Principle:** The 4 principles involved in all progressive exercise programs.
 - Frequency: How often one exercises during the week or the number of exercise sessions during a week.
 - Intensity: How hard one works during an exercise session.
 - Time (Duration): The length of the exercise session.
 - Type: The modality of exercise being executed.
- **ACSM Guidelines and the FITT Principle**
 - Cardiovascular (Aerobic) Training
 - Frequency: 3-5 Days a Week
 - Intensity
 - Guidelines for Monitoring Intensity (*See also* next page)
 - 60%-90% of MHR (Age Predicted Maximum Heart Rate)
 - 50%-85% of VO₂max or HRR (Heart Rate Reserve)
 - Time
 - 20-60 minutes of continuous vigorous activity
 - When just beginning, do as much as you can
 - 1996 Surgeon General's Report– Accumulate 30 minutes of vigorous activity throughout the day for health purposes.
 - Resistance Training
 - Frequency: Minimum 2 days/week
 - Intensity: 8-10 Major Muscles
 - Time: 8-12 Reps/1-2 Sets
For continued muscular development increase to 3 sets and heavier load
 - Flexibility
 - Frequency: At least 3 days/week or after every workout
 - Intensity: Stretch all major muscles to the point of mild discomfort
 - Time: Hold each stretch 15-30 seconds/Repeat each stretch 3-5 sets
- **General Safety Tips**
 - Always consult a physician before beginning a new exercise program.
 - Warmup and Cooldown before and after every workout.
 - Use proper posture.
 - Use proper exercise form.
 - Breathe properly. Never hold breath. Inhale to prepare. Exhale to execute a movement.
 - Avoid exercising in extreme temperatures (hot or cold) and humidity.
 - Take days off during the week to rest and repair the body.
 - Wear proper clothing and footwear.
 - Drink water before, during, and after exercise.
 - Maintain heart rate within the target heart rate during exercise.
 - If one has a special health condition, take medication as prescribed by his/her physician.
 - Warning Signs to Discontinue Exercise and Seek Medical Advice
 - Labored breathing (Difficulty breathing not associated with regular increased ventilation during exercise)
 - Loss of coordination
 - Dizziness
 - Tightness in chest
- **Injury Prevention and Management**
 - Prevention
 - Increase training gradually.
 - Alternate more aggressive training days with less aggressive training days.
 - Get plenty of sleep.
 - Eat a healthy diet.
 - Make adjustments to training program when needed.
 - Avoid over-training—a condition in which there is a plateau or drop in performance over a period of time. This condition occurs when there is not sufficient time for the body to recover after a workout session.
 - Warning Signs—Extreme soreness and stiffness after training, irritableness, decrease in body weight, decrease in appetite, lack of motivation, and unable to complete a training session.
 - Management
 - RICEM—If one is injured implement basic first aid until medical professionals take over.
 - Rest
 - Ice
 - Compression
 - Elevate
 - Modality—Change activity until healed

- **Special Populations**
 - **Older Adults**
 - Choose a modality that does not impose significant orthopedic stress.
 - The activity should be convenient and fun—stressing social aspects.
 - Emphasize programs that will enhance functional strength and flexibility thereby enhancing one’s ability to lead an independent lifestyle.
 - Incorporate cardio activity.
 - Incorporate resistance training that focuses on muscular health and endurance emphasizing all major muscle groups.
 - Incorporate a flexibility program.
 - **Youth**
 - Incorporate consistent but fun exercise program.
 - Children are more apt to adapt to a cardio exercise program that emulates the way children play. For example, intermittent bouts of cardio activity within a session models how children play tag.
 - Incorporate a light resistance training program that incorporates tubing or light weights that will elicit a rep range of about 20. Limit resistance training to 2 days a week.
 - Incorporate a flexibility program.
 - Teach proper eating habits.
 - Use multi-joint rather than single-joint exercises.
 - Children overheat much faster and are more prone to heat injuries than adults.
 - **Athletes**
 - Provide a variety of activities that offer a challenge.
 - Incorporate plyometric moves and interval training.
 - Incorporate games.
 - **Obesity**
 - Encourage a complete program of diet and exercise for weight loss.
 - Place importance on health as opposed to physical appearance.
 - Exercise 3-5 days/week.
 - Exercise for longer durations at a lower intensity.
 - Avoid high impact moves.
 - Wear protective footwear.
 - Water exercise is excellent for a combination of cardio and resistance training.
 - **Pregnant Women**
 - Discuss first with the physician an exercise plan of action.
 - Exercise 3 days a week.
 - Perform a longer warm-up (10-15 minutes).
 - Avoid overheating.
 - Use the talk test or RPE scale to monitor intensity.
 - Aqua aerobics is recommended with pool temperature between 80-84°.
 - Drink water before, during, and after exercise.
 - Avoid exercising to exhaustion.
 - If one feels uncomfortable with exercises while lying on the back, choose a different exercise. Throughout the workout, take small breaks from exercises that require a supine position.
 - As part of the muscle conditioning, perform Kegel exercises.
 - Avoid deep stretches.
 - Consume 300 more kcals a day.
 - **Asthma**
 - Exercise Induced Asthma– A condition that occurs when an individual breathes large volumes of dry air that cools and dries the respiratory tract. This causes the airway to constrict making it difficult to receive oxygen.
 - Avoid exercise in a cold, dry environment.
 - One may choose an aquatic exercise program. The warm, humid air in an aquatic setting makes it easier for one to breathe.
 - Perform a longer warm-up.
 - Interval training is optimal.
 - Avoid eating at least 2 hours prior to exercise.
 - Take prescribed medication prior to exercise.
 - Have a bronchodilator on hand.
 - Exercise with a buddy in case of an incident.
 - **Hypertension/Cardiac/Stroke Rehab Released Clients**
 - Only those who have been released by their doctors should participate in a group exercise class format.
 - Exercise 3-5 days/week.
 - Perform a longer warm-up.
 - Emphasize large muscle dynamic movement done at moderate intensities (40-60% of MHR or RPE= 10-12) for long durations.
 - Avoid interval training.
 - Avoid raising the arms overhead for an extended period of time.
 - If an individual complains of pain or pressure in the chest or feels dizzy, he/she should stop exercising and contact his/her doctor.
 - Avoid Valsalva Maneuver: Increased pressure in the abdominal and thoracic cavities caused by breath holding and extreme effort. Encourage those who are prescribed medications to take them on a regular basis.

- **Arthritis**
 - Avoid exercise when the joint is inflamed.
 - Avoid exercise in the morning. This is when an individual has the least amount of mobility.
 - Perform a longer warm-up to increase the viscosity of the joints due to synovial fluid being released.
 - Move all joints through full range of motion including fingers and toes.
 - Perform exercises gently with little to no bounding.
 - These individuals should consider an aqua exercise program, keeping the water temperature between 86-90°
 - Incorporate a well-rounded exercise program that includes cardio, resistance training, and flexibility.
- **Osteoporosis**
 - A disease characterized by a decrease in the total amount of bone mineral and a decrease in the strength of the remaining bone.
 - A water exercise program that strengthens bones and the ligaments and tendons around the joints for stability is an excellent class format for these individuals.
- **Knee/Hip Problems**
 - Incorporate resistance training to strengthen the ligaments and tendons that support the knee and hip.
 - Keep the movements fluid; avoid jerky, rushed movement.
 - Avoid twisting while keep the feet planted on the floor.
 - Keep knees flexed.
 - Individuals with hip replacement should avoid crossing one leg over the other. Avoid hip flexion beyond 90°.
- **Low Back Problems**
 - Avoid bounding movements.
 - Avoid hyperextension of the lower back.
 - Strengthen abdominals.
 - Develop core strength.
 - Maintain neutral spine.
 - Stop if an exercise is painful.
 - Teach client proper lifting techniques.
- **Diabetes**
 - Type I Diabetes– A metabolic disorder characterized by inability to oxidize carbohydrates because of inadequate insulin. (Insulin Dependent)
 - Accounts for 10% of all diabetics.
 - If blood glucose is below 80-100 mg/dl, one should consume carbohydrates before exercising.
 - If blood glucose is above 250 mg/dl, one should delay exercise until the glucose is lowered.
 - One should not exercise during peak insulin action. One should avoid injecting insulin into the working muscles and instead inject insulin into a skinfold.
 - One should consume additional carbohydrates after exercise.
 - Type II Diabetes– A metabolic disorder characterized by inability to oxidize carbohydrates because of a resistance to insulin. (Noninsulin Dependent)
 - Adult Onset
 - Individuals with Type II Diabetes usually have other conditions such as obesity, high blood pressure, and high cholesterol.
 - Can be controlled with diet and exercise. Individuals may take oral medication.
 - Exercise Guidelines (set by The American Diabetes Association)
 - Participants should drink water before, during, and after exercise
 - Participants should plan insulin injections in conjunction with the exercise session.
 - Participants should wear protective footwear.
 - Avoid extreme heat and cold environments.
 - Exercise at a steady pace, about 50-70% of VO₂ MAX or HRR. Avoid interval workouts.
 - Exercise with a buddy in case hypoglycemia or hyperglycemia occurs.
 - Have easily digestible carbohydrates on hand in case of a drop in glucose.

Five Components of Fitness

1. Cardiorespiratory Fitness (CRF)- A measure of the heart's ability to pump oxygen-rich blood to the working muscles
 - Cardio– Heart
 - Respiratory– Lungs and Ventilation
 - Vascular– Blood Vessels
 - Aerobic– Working with Oxygen
 - Anaerobic– Working without Oxygen
 - Measurement of Cardiorespiratory Fitness
 - 3-minute step test
 - 1.5 Mile Walk/Run
2. Muscular Endurance– The ability of a muscle to perform repetitive contractions over a period of time or the ability to sustain an amount of weight over a period of time.
 - Abdominal Curl-up Test
 - Push Up Test
3. Muscular Strength– The ability of a muscle to generate the maximum amount of force in a single effort.
 - Measurement
 - 1 Repetition Maximum (1RM) Test (Bench Press/Leg Press)
 - Vertical Jump Test
 - Dynamometer Test (Grip Test)
4. Flexibility– The ability to move a joint through a full range of motion without discomfort or pain.
 - Measurement
 - Sit and Reach Test
 - Shoulder Reach Flexibility Test
5. Body Composition– Relative percentages of various components of the body, usually divided into fat mass (% of body fat) and fat free or lean mass (% fat free mass).
 - Fat Mass– Subcutaneous Adipose Tissue
 - Lean Mass– Muscles, bones, blood, organs, skin, hair, teeth, etc.
 - Measurement
 - Hydrostatic Underwater Weighing– Gold Standard
 - Skinfold Calipers
 - Infrared
 - Bioelectrical Impedance
 - Body Fat Standards for Active Individuals
 - Men– 5-15%
 - Women– 15-25%

About FiTOUR® Certification Courses



FiTOUR® offers affordable, nationally recognized fitness certifications that are designed to provide the fitness professional with the ultimate educational experience. Join over 1000,000 FiTOUR® trained fitness professionals who have chosen to become a FiTOUR® fitness professional and take your fitness instruction to the next level! FiTOUR® offers various certification programs for any fitness instructor or trainer looking to advance their knowledge while simultaneously creating a marketing edge for themselves as a serious fitness professional.

FiTOUR® Certification Programs

LEVEL I- FiTOUR® Instructor

Increase your earning potential and jump-start your career by becoming certified with FiTOUR®. FiTOUR® is a nationally recognized certification organization ranked high among it's class. FiTOUR® offers a wide variety of fitness education in the form of in-home or workshop format. All courses are designed with both the fitness novice, as well as, the veteran fitness professional in mind. The FiTOUR® Instructor program develops learning through completion of one course.

LEVEL II- FiTOUR® Specialist

Two course required program which includes the FiTOUR® Group Exercise certification course and any other FiTOUR® certification program. The FiTOUR® Specialist will be achieved when one has completed the FiTOUR® Group Exercise certification course AND the course of your chosen discipline. The FiTOUR® Specialist programs are available in all courses offered at FiTOUR®. The FiTOUR® Specialist program develops learning through a progression of two required courses.

LEVEL III- FiTOUR® Practitioner

Take your business to the next level with these high quality, advanced level fitness certification programs. Become a FiTOUR® Practitioner in many different disciplines. The FiTOUR® Practitioner program develops learning through a progression of three required courses.

LEVEL IV- FiTOUR® Master Practitioner

The FiTOUR® Master Practitioner program is for any fitness instructor or trainer looking to advance their knowledge while simultaneously creating a marketing edge for themselves as a serious professional. The FiTOUR® MASTER Practitioner program is the highest level certification available and is clearly a mark of distinction. Become a FiTOUR® MASTER Practitioner in many different disciplines. The FiTOUR® MASTER Practitioner program is an advanced level fitness certification program that develops learning through a progression of four required courses.

About the FiTOUR® Renewal Program



FiTOUR® is dedicated to providing fitness professionals with high quality, convenient fitness education. Because many of the existing fitness organizations have raised the CEC requirements required for renewal, it has become increasingly financially difficult to maintain certifications. FiTOUR® has designed a unique renewal program that will decrease the financial commitment and is unlike any other in the industry.

Unique Renewal System

FREE Continuing Education Credits!

Simply complete a 25 question renewal examination and receive a FREE CEC certificate for that exam!

The renewal fee is only \$25 for any FiTOUR® certification!

The certification is valid for two years from the date issued on the certificate!

Renewal Fees

Each FiTOUR® certification is valid for two years from the date issued and can be renewed online at www.FiTOUR.com anytime within 90 days of the expiration date. The renewal fee is \$25 for each FiTOUR® certification.

About the Renewal Examination

The certification renewal examination consists of 25 questions that are derived from the original certification examination. Please reference your FiTOUR® certification study material prior to completion of the renewal examination. If the minimum score of 75% is not achieved on the renewal examination, a retest is available at a fee of \$25 each. You may re-test as many times as necessary.

How to Renew a FiTOUR® Certification

Login to the Exam Center located at www.FiTOUR.com within 90 days of the expiration date. Certifications will not be eligible for renewal until 90 days prior to the expiration date.

Pay the \$25 renewal fee via the secure online processing system

Begin and successfully complete (75% or higher) the 25 question renewal examination.

Receive the updated official certificate within 7-10 business days

Maintain a FiTOUR® certification for only \$25!