100 Citizens: Building Muscular Fitness and Cardiorespiratory Endurance in a Free
Community-Based Exercise Program Targeting High-Fit Adults

A thesis submitted in partial fulfillment of the requirements
For the degree of Master of Science in Kinesiology

By
Christopher Vincent Balam

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The thesis of Christopher Vincent Balam is approved:

___________________________________________                _____________________
Kimberly Henige, Ed.D.                                                                 Date

___________________________________________                _____________________
Sloane Burke, Ph.D.                                                                 Date

___________________________________________                _____________________
Jimmy Xie, Ph.D.                                                                 Date

___________________________________________                _____________________
Steven Loy, Ph.D., Chair                                                               Date

California State University, Northridge
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ABSTRACT

100 Citizens: Building Muscular Fitness and Cardiorespiratory Endurance in a Free Community-Based Exercise Program Targeting High-Fit Adults

By

Christopher Vincent Balam
Master of Science in Kinesiology

The purpose of this study was to assess the effectiveness of an 11-week progressive exercise program, delivered by undergraduate kinesiology students, on the cardiovascular endurance and muscular fitness in high-fit community-dwelling adults at El Cariso Park in Sylmar, CA. It was hypothesized that participants would display statistically significant increases in each area of physical fitness tested, justifying the creation of community-based exercise programs in high-fit populations.

Eligibility requirements for this study were being between ages 18-80, currently enrolled 100 Citizens participant, and categorized as high-fit by pre-testing. Participants were evaluated using four biometric measures assessing body composition, four physical fitness tests assessing muscular and cardiovascular endurance, and a behavioral questionnaire that assessed physical activity levels and perceptions of confidence and health satisfaction.

The program was offered three days per week (Mon/Wed/Fri) for a total of 30 sessions during the 11-week intervention. Each one-hour exercise session consisted of a 7-minute dynamic warm-up, four 12-minute exercise stations and a 5-minute cool
down. The exercise stations targeted muscular endurance for the upper body, lower body and core regions and the fourth station targeted cardiovascular endurance. Programming was based on non-linear progressive overload, where changes are induced by altering duration, type and intensity of exercise using body weight and external load.

Eleven of twelve participants completed pre- and post-testing, attended at least 50% of exercises sessions and thus were included in data analysis. There was a statistically significant increase in the plank, mean value pre 1.7 minutes versus 2.7 post, push-up, mean value pre 26.7 repetitions versus 33.9 post, one-minute squat, mean value pre 38.5 repetitions versus 52.3 post, and 12-minute walk/run, mean value pre 32 ml/kg/min versus 36.5 ml/kg/min post. These results demonstrated that this program was effective in increasing all measured variables of muscular fitness and cardiovascular endurance.
CHAPTER I

Introduction

Globally, not achieving an adequate amount of physical activity per week is one of the ten leading risk factors for death (6). In addition, physical inactivity is a known risk factor for developing non-communicable diseases such as cardiovascular diseases, some cancers and type 2 diabetes. In spite of this knowledge, there is still a profusion of adults not engaging in the recommended amount of physical activity per week. In 2013, 79.8% of United States (US) adults did not meet the recommended amount of activity for both aerobic and muscle-strengthening physical activity per week, as outlined by the CDC (5). For US Latinos this number is increased to 81.8% (5).

The World Health Organization (WHO) has recognized that individuals who engage in regular and sufficient levels of physical activity can experience health benefits such as improved muscular and cardiorespiratory fitness, improved bone health, reduced fall risk, reduced chances of developing certain non-communicable diseases, as well as many other possible benefits (6).

Understanding why adults do not engage in the recommended amount of physical activity is a complex issue. There are many possible reasons why an individual may not participate in physical activity on a regular basis. Some of these factors can be addressed by the individual, but others may be out of their control. WHO has listed fear of violence and crime in outdoor areas, lack of parks and sidewalks, high-density traffic and low air quality as possible environmental factors acting as barriers to individuals pursuing physical activity (6). Possible solutions to these barriers, such as community exercise
programs should be explored in order to increase the amount of physical activity in the US.

Community exercise programs provide access to organized group physical activity, allowing individuals to enhance health and fitness (10, 24, 26, 39). Furthermore, programs offered in public parks may be offered at a reduced cost, or free to participants due to free park access (26). The preponderance of research about community exercise programs for Latinos focus on sedentary women, given Latino women are the most rapidly growing sedentary ethnic group in the US (33). However, 100 Citizens has fostered the growth of a moderately to higher fit population through its creative programming and this study provides a systematic analysis of individuals that are categorized as high-fit according to program standards. There are no studies to date that analyze the effects of a community-based exercise program on high-fit community-dwelling adults in a predominantly Latino community.

Research reveals that high-fit individuals display a more favorable cardiovascular disease risk profile when compared to their low-fit counterpart, even if the high-fit individual has a larger BMI (36). By engaging in physical activity and maintaining a higher level of fitness, individuals can experience a protective effective against the hazards of being overweight and obese (36). This is of relevance because the Latino population is disproportionately affected by chronic illnesses such as cardiovascular disease and diabetes due to being overweight and not engaging in the recommended amount of physical activity per week, among other factors (29, 30). Sylmar has a Latino population of 69.8%, which is considered high for Los Angeles County (3).
The objective of this study was to assess the effectiveness of an 11-week progressive exercise program, delivered by undergraduate kinesiology students, on the aerobic fitness and muscular endurance in high-fit community-dwelling adults at El Cariso Park in Sylmar, CA. It was hypothesized that participants would display statistically significant increases in each area of physical fitness tested. This study is significant because it may give merit to the efficacy of community-based exercise programs in high-fit populations, and justify the creation of similar programs to assist in the prevention and treatment of the chronic illnesses that disproportionately affect the Latino community.

- **Operational Definitions:**
  - High-Fit: Being ranked in the top third of all participants in at least three out of four of the field tests administered.
  - Aerobic Fitness: Aerobic fitness was assessed using the ACSM 12-minute walk/run protocol (27).
  - Muscular Endurance: Muscular endurance was assessed using the ACSM push-up protocol for men and women (27), the Topend Sports one-minute squat test (21) and the Navy Plank Test (41).

- **Assumptions:**
  - All participants exerted maximal effort on pre and post physical fitness tests.
  - All participants honestly answered the questions provided on the PAR-Q and ACSM Pre-Participation Screening form.

- **Delimitations:**
High-Fit: Participants in this study that ranked in the top third in the field tests administered, or self-selected participation in high-fit group within the pre-established community-based fitness program.

Age: Participation in this program was limited to adults between the ages of 18-80.

Location- the exercise intervention took place at El Cariso Park in Sylmar, CA.

Testing- tests were selected based on ease on administration as well as the ability to be administered as a battery in large groups.

Limitations

Previous Fitness Level- 100 Citizens at El Cariso Park was in operation for two years prior to the study and many of the high-fit participants engaged in physical activity outside of the program. Possibly limiting their potential increase in physical fitness.

Adherence- the program was offered three times a week on Monday, Wednesday and Friday on a voluntary basis.

Holiday and Semester Breaks- participation rates of both student interns and participants declined.

Student Interns- the number of student interns available to assist in implementation was based solely on who voluntarily applied and was selected.
CHAPTER II

Literature Review

Benefits of Exercise and Physical Activity

Physical activity can be simply defined as movement carried out by the body, while exercise is considered structured repetitive movements done in order to increase or maintain physical fitness (21). Many studies have been conducted to examine the benefits of physical activity and exercise on disease risk, psychological health, athletic performance and other areas. For the purposes of the present study the effects of exercise on physical fitness results of fit participants was examined.

The benefits of exercise and physical activity can be shown through both field and lab testing. Lab measures were not used in the 100 Citizens program, but these measures will be discussed due to the importance and relevance of the findings to this research.

Regular physical activity, as a form of disease management and prevention, is becoming more widely accepted and seen as a viable public health option (4, 14, 19, 34). Anti-inflammatory processes induced as a result of physical activity are critical in the protection against diseases related to low-grade inflammation, such as type 2 diabetes and cardiovascular diseases (7, 22, 39). In a longitudinal study done at São Paulo State University in Brazil, a one-year exercise intervention was implemented among 36 participants. This study measured levels of biomarkers at baseline, six months and one year. Exercise consisted of two 60-minute sessions per week where participants would engage in stretching, moderate intensity aerobic exercise and strength training. The aerobic exercise was walking at 60-70% of peak heart rate while subjectively attempting to maintain an effort level between 13-15 on the Borg scale. Strength training consisted...
of free weights, mat work and exercise bands. Strength training targeted all major muscle groups and was performed in 3 sets of 30 seconds, followed by one minute of recovery. Participants also received counseling in which they were encouraged to engage in physical activity outside of the program and increase daily physical activity. This study showed a 56% decrease in the biomarker C-reactive Protein (CRP) over the course of one year. CRP is triggered by cardiovascular diseases, and a decrease from (above 3.0 mg/L) to (1.0 to 3.0 mg/L) shows that the group mean went from high risk to average risk (39). This study is in agreement with similar studies that claim a reduction in CRP levels is possible when increasing physical activity (7, 22). One limitation of the São Paulo study was the sample size at the conclusion of the study was 13 female participants, as opposed to the 36 that initially signed up. Eleven voluntarily dropped out before the six-month evaluation, eight more either voluntarily dropped out or failed to meet the 75% attendance rate before the one-year evaluation, and finally four did not complete all evaluations. This study has shown that dysregulation between the pro- and anti-inflammatory processes is related to complications found in people with chronic diseases, such as insulin resistance, atherosclerosis and metabolic disorders. Increasing physical activity can reduce the likelihood of developing these chronic diseases (34, 36, 39).

Similarly, a study by Loprinzi et al. utilizing accelerometry data from the 2003-2006 National Health and Nutrition Examination Survey (NHANES) examined biomarkers in normal, overweight and obese individuals (36). This study aimed to determine if higher levels of accelerometry-determined physical activity were favorably associated with biomarkers in the overweight and obese subjects. In addition, it was examined if overweight or obese individuals who are adequately active have similar or
more favorable biomarker levels than normal weight individuals who are not adequately active. The findings of this research supported other studies that physical activity has a protective effect on biomarkers in normal, overweight and obese individuals (11, 15, 37). Furthermore, it was noted that overweight active individuals have a similar, or more favorable, cardiovascular disease risk profile compared to a normal weight individual who is inactive. Therefore, when addressing the obesity epidemic in the US, physical inactivity should be addressed in unison with weight loss. Increasing physical activity may provide benefits not seen in weight loss alone (36).

**Exercise Prescription**

Frequency, intensity, time, type, population being served, level of instructor and many other factors must all be taken into account when designing an exercise program. It is imperative to know the limitations of the population being served, as well as what they are seeking to achieve by participating in exercise. In addition, what is possible to implement within the construct of a program’s resources must be considered.

In the most recent American College of Sports Medicine (ACSM) position stand for exercise prescription in apparently healthy adults, all of the aforementioned variables are discussed. To develop and maintain aerobic fitness an individual must engage in moderate to vigorous intensity aerobic exercise 3-5 days a week; 150 minutes if moderate and 75 minutes if vigorous (23). However, it is noted that greater benefits are associated with higher level of activity. Participants in the 100 Citizens program had the opportunity to engage in 60 minutes of moderate to vigorous physical activity three times a week for a total of 180 minutes (144 minutes muscular endurance, 36 minutes aerobic endurance). Sessions within 100 Citizens were not entirely aerobic in nature, however it has been
established that cardiovascular endurance can be enhanced through anaerobic work. Additional cardiorespiratory exercise outside of the fitness program was encouraged for further development of cardiovascular endurance.

ACSM’s recommendation for improving muscular endurance in any muscle group is working that specific muscle at or below 50% of an individual’s one repetition maximum (1RM) for 2-4 sets of 15-20 repetitions, at least 2-3 days per week (23). In most free community-based fitness programs a true 1RM for a given exercise will likely not be evaluated due to the lack of formal weight training in the population being tested, as well as a lack of funds for equipment. Therefore, using ACSM’s repetition guidelines for muscular endurance can provide a template to create an exercise program and assure the correct amount of volume is being administered. Often times in free community-based exercise programs, the recommended amount of physical activity necessary for improvement in various components of physical fitness are not met. This can be rectified by encouraging participants to participate in physical activity outside of the program as well (39).

In group exercise and community-based programs, there can be a lack of progression of exercise. This is likely because of the transient nature of the participants within these classes and programs. However, the fault that occurs when no progression is offered is participants will likely cease improving physical fitness. Therefore, it is of benefit to periodize exercise programming to continually challenge participants by altering the volume and emphasis of training. Periodization is systematic sequencing of training variables in an integrative fashion used to optimize specific training outcomes at pre-determined time points (12). Periodization is widely used throughout athletics in
preparation for specific sporting events, competitions and so forth. However, the implementation of this training planning methodology has been implemented sparingly in the community setting (18).

**Community-Based Exercise Programs**

Most exercise interventions for Latino populations have catered to women. Latino women are the fastest growing sedentary population in the US, so it understandable that a concentrated effort to appeal to such large group would be made (33). However, in a study done at the University of California, San Diego, researchers sought to assess the feasibility of designing and implementing a physical activity program for Latino men (32). In this study, levels of physical activity in 36 men were measured at baseline and post. The intervention in this study was based on teaching Latino men what to do to reach the recommended amount of physical activity per week. They received exercise manuals to follow, were taught how to use pedometers distributed to them, and received assistance in goal setting. To be included in this study men had to be underactive, which was classified as engaging in physical activity less than 60 minutes per week. At baseline, the mean level of physical activity amongst the participants was 1.5 minutes per week. At the conclusion of the 12-week intervention physical activity increased 125.70 minutes. The subjects’ preferences were mixed, but researchers did note that there was a preference for team sports such as basketball and soccer (32).

There are various barriers to participating in the requisite amount of exercise other than the type of exercise offered. Deterrents to community members staying active include factors such as lack of time, lack of childcare and not having access to transportation (46). Studies such as this display the need to cater to the demographics of
the community where an intervention is taking place in order to best meet the needs of the community. In another study that observed barriers to physical activity in Latino populations, it was cited that white women listed lack of time or energy for psychosocial barriers to physical activity, while Latinas cited caregiving duties (31). These studies are in agreement that childcare poses a barrier to engaging in physical activity (42). The aforementioned variables must be considered when implementing a community-based exercise program in if the program is to be successful. Larsen and Van Duyn made the point of looking beyond individuals not having a desire to exercise as the main deterrent to participation in physical activity, and stated that programs must provide their participants with childcare if adherence is to be expected (31, 46).

**Testing Protocols**

When time is a limiting factor and large groups of subjects are to be tested, the National Strength and Conditioning Association (NSCA) recommends that testing batteries be implemented (8). Meaning that there are duplicates of one test running concurrently, and there will likely be multiple tests ran in one session. This is recommended when the need to obtain testing scores from large groups in a short amount of time, more sensitive lab-based measurements may require too much time or be too costly to complete. This requires evaluators to be well trained and the session must be well planned, organized and appropriate. Appropriate sequencing of tests must be employed so results are not confounding.

According to the studies done by Cooper and Penry, the Cooper 12-Minute Run test is a good indication of cardiovascular fitness and a measure for monitoring changes in fitness (17, 35). In the study done by Cooper, cardiovascular fitness was assessed using
Cooper’s 12-Minute Walk/Run test and correlated to treadmill testing as a means for determining maximal oxygen uptake. Cooper found a .897 correlation between the two methods, determining that the 12-minute field performance test is an objective measure of the cardiovascular fitness of an individual. Similarly, a study done at the University of Glasgow in Scotland, maximal oxygen uptake was compared between the Cooper Walk/Run test, a multistage shuttle run test and a submaximal cycle test (25). This study found a correlation of .92 between the 12-minute test and the direct measurement of maximum oxygen uptake on a treadmill. The multistage shuttle test and submaximal cycle test had a correlation of .86 and .76 to the treadmill test, respectively. The 12-Minute Walk/Run test has a capability to be ran in a battery of tests and is easily instructed to large groups simultaneously. This field test has a high test-retest coefficient, and allows for a standard to be established (40). This test has been touted as a good indicator of functional capacity, but the test does not seem to accurately estimate criterion maximal oxygen uptake (VO2max) values (27, 28). Caution must be used when using the results to predict VO2max.

In a study done by Baumgartner et al. (9), the 90° push-up protocol was tested to determine the objectivity, reliability and validity of the upper body muscular endurance assessment. The study used a test and re-test protocol to randomly tested 300 students in the Sports Science program at the Sultan Idris University of Education. The push-up test was determined to be a reliable and valid testing measure, as well as easy to instruct in a battery of testing (9, 38). Issues discovered in the study that should be addressed for future tests included informing participants to wear appropriate clothing so correct body position is easily seen, retaining the same hand position as the pretest to ensure validity
and using a cadence so that the participants do not attempt to execute push-ups at a speed that will cause them to break form. This is in agreement with other studies suggesting that the push-up test is an acceptable measure for upper body muscular endurance (35, 38).

The squat has long been used as a means for gauging lower body strength. However, most of the protocols that have been validated employ the use of a 1RM (8). There are not many protocols that use the squat to assess lower body muscular endurance that are valid and reliable to my knowledge. However, research done by Carpinelli et al. tested the claim that it is necessary to test a subject’s 1RM for each specific exercise in order to effectively prescribe resistance training programs (13). This systematic review challenged the popular notion of the 1RM being a necessity, and determined that performing a maximal number of repetitions with a submaximal resistance to be directly related to muscular strength. In addition, they found that relationship with submaximal testing to be more relevant to strength gains than know the actual 1RM. This review provides perspective for programs and research unable to test the 1RM. Topend Sports has created a generalized squat protocol that is valid and reliable and can be implemented as a field test without the need for strength training equipment (21). This method is suitable for use in many populations, but caution should be used when assessing depth across subjects.

Plank testing as a means for assessing core muscular endurance is a relatively new concept, and has not been adopted as an industry standard. Many researchers still employ the curl-up test to assess core muscular endurance. However, studies advocating a shift to plank testing are steadily emerging (20, 41, 45). Benefits of replacing the curl-up test with the plank test may include better core stability, posture of the trunk and hip, and
balance and control during exercise (43, 44). In a study done by Peterson (41), standards for the plank test for inclusion the Navy’s Physical Readiness Test were proposed. This study operated on the basis that there might be a correlation between the curl-up test and the Navy’s lower back injury rate. This study tested 178 participants within the Navy, from the original 178, 163 (125 male, 28 female) completed both pre and posttesting. With the data collected, it was determined that the plank test is an easy to use alternative to the curl-up test that may reduce the amount of low back injuries if trained regularly. This study proposed standards that are independent of sex and age. It is their belief that the same standards should be applied to all ages and sex. These findings are in agreement with a study done by Strand et al., which found that there was no sex interaction for termination time in the prone forearm plank test (45). Strand et al. did indicate that further research needed to conducted to elucidate valid norms.

Summary/Conclusions

It is generally agreed upon that increases in physical activity increase levels of physical fitness and decrease disease risk profile (7, 34, 36, 37, 39). Specifically decreases in the biomarker CRP are seen, which is significant in terms of lowering the risks of cardiovascular disease. The protective effect exercise has on the prevalence of chronic diseases related to physical inactivity was relevant to the 100 Citizens community-based exercise program because participants of the program were predominantly Latino. As previously cited, Latinos in the US are disproportionately affected by chronic diseases related to physical inactivity and obesity. The implementation of the 100 Citizens three day a week exercise program assisted in the development and/or maintenance of a high level of aerobic fitness and muscular
endurance (23). This study will show the feasibility of increasing or maintaining aerobic fitness and muscular endurance within higher-fit individuals utilizing a program designed to include a progressive overload program within a community-based “boot-camp like” exercise program.
CHAPTER III

Research Design and Methods

Research Design

The purpose of this experimental research was to determine if a free community-based progressive exercise program, delivered by undergraduate kinesiology students, could significantly improve physical fitness in an 11-week period. Participants were evaluated using four biometric measures assessing body composition, four physical fitness tests assessing muscular and aerobic endurance, and a behavioral questionnaire that assessed physical activity levels and perceptions of confidence and health satisfaction. This study was approved by the Institutional Review Board at California State University, Northridge.

Participants

The inclusionary criteria in this study required individuals to be between the ages of 18-80, currently enrolled as a participant in the 100 Citizens program, be classified as high-fit by program standards and have filled out a bill of rights and an informed consent form acknowledging the risks associated with partaking in this study.

The exclusionary criteria in this study were participants who answered yes to any questions on the Physical Activity Readiness Questionnaire (PAR-Q), unless cleared by physician, refusal to sign the Adult Informed Consent form, not completing both pre and posttesting, or not attending at least 50% (15) of sessions offered. The purpose and procedures were explained to all participants and written consent was obtained.

This three-group program assigned participants to one group based on their fitness level determined by their pre-testing results. Each group corresponds with a level of
fitness going from low to moderate to high. The groups are as follows, Let’s Get Moving (low-fit), Active Lifestyle (moderate-fit) or Performance (high-fit), respectively. This study solely analyzed the Performance group. Nine participants (3 male, 6 female) began in the Performance group within the pre-established program at El Cariso Park in Sylmar, CA. The group’s self-identified ethnicities consisted of eight Latinos and one Caucasian. The mean age of the Performance group at pre-testing was 49 (SD = 11.4) Further participant characteristics are provided in the table below:

Table 1

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</tbody>
</table>

Research Team

The research team responsible for collecting data consisted of three graduate students, 22 undergraduate Citizens interns/volunteers during pre-testing and 32 during post-testing. All interns and volunteers completed a test administration training session the week before testing, in addition a retention test was completed to assure evaluator’s knowledge of testing protocol. Only students deemed to be proficient in test administration and data recording were permitted to assist in pre- and post-testing.
Measures

The independent variable (IV) for this study was the workout intensity administered. There were three possible groups for participants to be placed in based on their pre-testing results. This study solely analyzed the high-fit group, which will be referred to as the Performance group for the remainder of this document.

The dependent variables (DV) for this study were split into three different categories. The categories are as follows:

- Behavioral Questions:
  - Confidence
  - Health Satisfaction
  - Days Engaged in Aerobic Training
  - Days Engaged in Strength Training

- Biometrics Measurements:
  - Weight
  - Height
  - Body Mass Index (BMI)
  - Body Fat Percentage (BIA)
  - Waist-to-Hip Ratio

- Physical Capacity Tests:
  - Cooper’s 12-Minute Walk/Run
  - ACSM Push-Up Test
  - Navy Plank Test
  - Topend Sports Squat Test
100 Citizens’ Challenge Course

*Procedures*

One month prior to conducting pretesting, the program was advertised to the Sylmar community. The program was advertised by program interns and volunteers via passing out fliers with program and research information in community faith-based organizations. See appendix A for the flier. Furthermore, a video entailing the future direction of the program was shown to the current 100 Citizens participants to provide information about upcoming research, a new diabetes prevention program (Healthy You), and raffle incentives for bringing new participants to the program.

Participants were encouraged to attend the Healthy You program in addition to the exercise sessions as a part of a holistic approach to improving health and wellbeing in the Sylmar community at El Cariso park. Healthy You provided participants with education and lifestyle solutions to induce and maintain a modest weight loss of 5-7%, resulting in a reduction of the risk for developing diabetes by 58% according to the Centers for Disease Control (CDC) (1). The educational classes on nutrition concepts, weight loss strategies and healthy lifestyle intervention tactics were delivered by the 100 Citizens interns and volunteers. Classes were between 20-30 minutes immediately after exercise sessions each day operation.

Prior to the 11-week exercise intervention, pre-testing was administered for participants to place them in the correct intervention that provided the correct stimulus for improvement in a safe and progressive manner, as well as establish a baseline. See Appendix I for testing protocols. Pre- and post-testing were conducted as a battery of
field tests, meaning that large groups were tested concurrently with simple testing techniques not requiring lab equipment.

Participants began each testing day by filling out an informed consent form, bill of rights, and a pre or post survey depending on whether this paperwork was administered before or after the 11-week intervention. The bill of rights and adult consent form only need to be filled out once. If a participant joined on a testing day, he/she was also required to fill out a PAR-Q and a park registration form. See appendix B for all paperwork required of participants.

After completing all of the required paperwork, measurements of weight, height, body fat percentage and waist-to-hip ratio were taken. If any of tests were not completed on the first day of testing participants were able to complete any of the measures on either the second testing day or the final make-up day. No measures were taken after the testing week concluded.

Lastly, participants progressed to physical capacity testing where they began with a 5-minute warm-up administered by a tester. Two warm-ups were implemented to accommodate participants finishing paperwork or biometric measurements when warm-up one began. After warm-up, two of four possible tests were administered based on testing group assignment. All tests scores were recorded and initialed on a testing card by a tester and was collected at the end of each testing day. See appendix G for testing card. Two tests were administered each day to avoid confounding results due to prior exercise affecting subsequent test results. Therefore, participants in the Performance testing group were assigned to the plank and 12-minute walk/run test on Monday, and the push-up and squat test on Wednesday. A make-up testing day on Friday was allowed for participants
who missed a day of testing. See Table 2 below for an outline of the testing week. A flow chart was created for student testers to direct participants from one test to another without confusion. See Appendix C for flow charts.

Table 2

**Performance Testing Agenda:**

<table>
<thead>
<tr>
<th>Day 1 (Mon.)</th>
<th>Day 2 (Wed.)</th>
<th>Day 3 (Fri.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check-In</td>
<td>Check-In</td>
<td>Check-In</td>
</tr>
<tr>
<td>Paperwork*</td>
<td>Paperwork*</td>
<td>Paperwork*</td>
</tr>
<tr>
<td>Biometrics*</td>
<td>Biometrics*</td>
<td>Biometrics*</td>
</tr>
<tr>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up</td>
</tr>
<tr>
<td>Plank Test</td>
<td>1-Minute Squat Test**</td>
<td>Make-Up of All Tests***</td>
</tr>
<tr>
<td>12-Minute Walk/Run</td>
<td>Push-Up Test**</td>
<td></td>
</tr>
</tbody>
</table>

*Only needs to be completed on one testing day
**1-Minute Squat Test & Push-Up Test may be performed in any order
***Tests performed in the same order as Day 1 and Day 2 to prevent fatiguing of muscle groups tested

To assure consistency and reliability, each tester was provided a script for the test he/she was administering. Each tester was instructed to read off of the script verbatim to assure all participants received the same instruction. English and Spanish instructions were provided for participants for all physical capacity tests. See Appendix D for all test scripts.

After the completion of pre-testing, physical capacity results were evaluated for participant placement into one of the three fitness groups: Let’s Get Moving, Active Lifestyle or Performance. Each group corresponds with a level of fitness going from low to moderate to high, respectively. Fitness level was determined by testing scores meeting the criteria for the Performance group in at least three out of the physical capacity tests.
See Appendix I for all of the testing ranges. These ranges were determined by using population means to create criteria for each group. This process will be explained further in the discussion section.

In addition to physical capacity tests used to track participant fitness, a bi-weekly challenge course was implemented to provide instructors and participants with a measure that can be tracked throughout the course of the program. Using the park running course and a series of body weight exercises participants performed this practical assessment every two weeks in lieu of the cardiovascular exercise station. See Appendix I for further challenge course information.

The program was offered three days per week (Mon/Wed/Fri) for a total of 33 sessions during the 11-week intervention. Due to government holidays requiring closure of the park, the program was unable to run on three exercise sessions resulting in a total of 30 sessions. On each day of operation, a one-hour exercise session was offered consisting of a 7-minute dynamic warm-up, four 12-minute exercise stations and a 5-minute cool down. The exercise stations targeted muscular endurance for the upper body, lower body and core regions and the fourth station targeted cardiovascular endurance. The stations were sequenced in no particular order due to the group being too large to start in the same station and follow the same sequence.

Exercise in the Performance group focused on advancement into more complex and physically demanding move. Multi-joint movements were emphasized in order to accomplish the greatest amount of work in the four 12-minute exercise stations by recruiting large muscle masses. In addition to the 36 minutes of dedicated cardiovascular
work achieved in the program per week, participants engaged in circuit-based resistance training in other stations to assist in the development of cardiovascular endurance (47).

Programming of exercise was designed by the investigator, and implemented by interns and volunteers at the El Cariso location. The programming was based on progressive overload, where changes are induced by altering duration, type and intensity of exercise using body weight and external load and equipment in some cases. Equipment was shared between all three groups in the 100 Citizens program at El Cariso; therefore, the same implements were not available during each session for any of the three groups. Equipment utilized during this intervention is listed below in Table 3.

Table 3

<table>
<thead>
<tr>
<th>• Battle Ropes</th>
<th>• Cones</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sandbags</td>
<td>• Hurdles</td>
</tr>
<tr>
<td>• Kettlebells</td>
<td>• Ladders</td>
</tr>
<tr>
<td>• Dumbbells</td>
<td>• Park Benches</td>
</tr>
<tr>
<td>• Resistance Bands</td>
<td>• Running Path</td>
</tr>
<tr>
<td>• Medicine Balls</td>
<td>○ Incline</td>
</tr>
<tr>
<td>• Steppers</td>
<td>○ Decline</td>
</tr>
</tbody>
</table>

In order to ensure exercises were implemented in a progressive manner, this study used periodization to plan the program in advance of the intervention. Periodization is broken in three cycles called the macro, meso and microcycle. The type of periodization used was non-linear and incorporated aspects of a training method called conjugate training where each workout had a different intensity due to equipment used. Non-linear
periodization was used because the amount of overload that could be induced by load with park-provided equipment, the duration of a single exercise could be increased in one station, and the frequency a single exercise could be instructed in a circuit was limited. Conjugate style training allowed for altering the type and intensity of exercise from one session to the next. In doing this, the point of emphasis for each training session was then altered to match the equipment, or lack thereof, being used.

In this study, the macrocycle represents the entire 11-week intervention, the three mesocycles were the medium term training periods within the macrocycle and lastly microcycles were the short term training cycles. Each mesocycle’s exercise volume was altered in non-linear fashion. Exercises in the first three-week mesocycle lasted 35 seconds, 40 seconds in the second four-week mesocycle and 35 seconds in the last three-week mesocycle. The microcycles were two-day training periods that followed exercise duration for given mesocycle. The same program was used for each microcycle. See Appendix H for all exercise sessions. See Table 4 below for a description of the periodization used.

<table>
<thead>
<tr>
<th>Cycle Duration</th>
<th>Exercise Duration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesocycle I</td>
<td>3 weeks</td>
<td>35 seconds per exercise</td>
</tr>
<tr>
<td>Mesocycle II</td>
<td>4 weeks</td>
<td>40 seconds per exercise</td>
</tr>
<tr>
<td>---------------</td>
<td>---------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Mesocycle III</td>
<td>3 weeks</td>
<td>35 seconds per exercise</td>
</tr>
</tbody>
</table>

Data Analysis

Pre- and post-testing data was analyzed using paired t-tests with bootstrapping to determine if statistical significance was found in the changes made throughout the 11-week intervention. Bootstrapping is a technique used in studies such as this that have a small sample size and non-normal distribution. It is a more reliable estimate of the statistics than an asymptotic test in this case. Results were considered significant if p<.05.
CHAPTER IV

Results

Program Adherence

The intervention occurred over 11 weeks and had a total of 33 possible sessions. However, due to three government holidays resulting in park closure the final total of offered sessions was 30. Attendance was taken each day of operation by the Exercise Director to ensure consistency. The average attendance for the participants of this study was 78% (SD=3.7). No participants were eliminated from data analysis due to not meeting the minimum of 50% adherence required. However, participants may have been eliminated from individual tests if they did not complete both pre- and post-testing. Therefore, the sample size for each test varies. In addition to the original nine participants in the performance group, three participants were added as a result of meeting group criteria during pre-testing. The figure below details the percent of sessions attended by all participants included in the study (n=12).

Figure 1
As a result of the smaller than expected sample size, the statistical technique referred to as bootstrapping was applied to all tests utilizing a paired sample t-test.

**Behavioral Questionnaire**

**Days Strength**

A paired samples t-test was calculated to compare the mean days participants reported engaging in strength training each week pre- and post-test (n = 10). This number only looked at days outside of the 100 Citizens exercise intervention. The mean days reported for the pre-test was 1.8 (sd = 1.3), and the mean for the post-test was 2.1 (sd = 1.1). Significance from pre- to post-testing was not found (p>.05).

**Figure 2**

![Days Strength](image)

**Days Aerobic**

A paired samples t-test was calculated to compare the mean days participants reported engaging in aerobic training per week pre- and post-test (n = 10). This number only looked at days outside of the 100 Citizens exercise intervention. The mean days reported...
for the pre-test was 3.8 (sd = 2.3), and the mean for the post-test was 3.4 (sd = 1.2). Significance from pre- to post-testing was not found (p>.05).

**Figure 3**

Confidence

A paired samples t-test was calculated to compare the mean score participants reported in their perceived confidence performing exercises on their own pre- and post-test (n = 10). The mean confidence performing exercises reported for the pre-test was 3.3 (sd = 1), and the mean for the post-test was 3.3 (sd = .5). Scoring a three on this 1-5 Likert scale indicates that participants were “somewhat confident” at both pre- and post-testing. Significance from pre- to post-testing was not found (p>.05).
**Health Satisfaction**

A paired samples t-test was calculated to compare the mean overall satisfaction of health participants reported pre- and post-test (n = 9). The mean satisfaction reported for the pre-test was 3.4 (sd = 1), and the mean for the post-test was 4.0 (sd = 1). Group means improving from a mean score of three to four indicates that participants went from “neither dissatisfied or satisfied” to “satisfied”. Significance from pre- to post-testing was not found (p>.05).
Biometric Measurements

Weight

A paired samples t-test was calculated to compare the mean weight pre- and post-test (n = 11). The mean weight for the pre-test was 65.6 (sd = 13.0), and the mean on the post-test was 63.9 (sd = 12.6). A significant decrease from pre- to post-testing was found (p<.05). This data represents a 2.6% decrease in total weight amongst participants.
Figure 6

* indicates significant differences from pre-test to post-test (p<.05)

*Body Fat Percentage*

A paired samples t-test was calculated to compare the mean body fat percentage of participants pre- and post-test (n = 10). The mean body fat percentage for the pre-test was 31.3 (sd = 4.4), and the mean for the post-test was 31.1 (sd = 4.8). Significance was not found in this measure (p>.05).
**Body Mass Index**

A paired samples t-test was calculated to compare the mean BMI pre- and post-test (n = 11). The mean BMI for the pre-test was 25.7 (sd = 3.8), and the mean on the post-test was 25 (sd = 3.5). A significant decrease from pre- to post-testing was found (p<.05).

**Waist-to-Hip Ratio**
A paired samples t-test was calculated to compare the mean waist-to-hip ratio in participants pre- and post-test (n = 10). The mean waist-to-hip ratio for the pre-test was 0.9 (sd = 0.2), and the mean on the post-test was 0.8 (sd = 0.1). Significance was not found in this measure (p>.05).

Figure 9

Grouping Criteria

See Table 1 below for the minimum scores necessary for placement of participants into the three groups in the 100 Citizens program. This study solely focused on the performance group. Participants were required to produce scores that qualified for the Performance group in at least three out of four physical capacity measures to be included in this study. Further explanation for the rationale behind these scored will be explained in the discussion.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>Let’s Get Moving</th>
<th>Active Lifestyle</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>≤ 1:00 minute</td>
<td>1:01 - 1:45 minute</td>
<td>1:46+ minute</td>
</tr>
<tr>
<td>Test</td>
<td>Time Range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Minute Squat</td>
<td>≤ 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 - 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Push-Up</td>
<td>≤ 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 - 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-Minute Walk/Run</td>
<td>≤ 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 - 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Physical Capacity Tests**

**Plank**

A paired samples t-test was calculated to compare the mean plank time pre- and post-test (n = 10). The mean plank time for the pre-test was 1.7 minutes (sd = 1.0), and the mean on the post-test was 2.7 minutes (sd = 0.7). A significant increase from pre- to post-testing was found (p<.05). This data represents a 58.2% increase in plank test time amongst participants.

**Figure 10**

* indicates significant differences from pre-test to post-test (p<.05)
12-Minute Walk/Run

A paired samples t-test was calculated to compare the mean estimated VO$_{2\text{MAX}}$ amongst participants pre- and post-test (n = 10). The mean VO$_{2\text{MAX}}$ for the pre-test was 32 ml/kg/min (sd = 4.9), and the mean for the post-test was 36.5 ml/kg/min (sd = 4.8). A significant increase from pre- to post-testing was found (p<.05). This data represents a 14.1% increase in estimated VO$_{2\text{MAX}}$ amongst participants.

Figure 11

* indicates significant differences from pre-test to post-test (p<.05)

Push-Up

A paired samples t-test was calculated to compare the mean push-up repetitions pre- and post-test (n = 11). The mean repetitions for the pre-test was 26.7 (sd = 12.2), and the mean for the post-test was 33.9 (sd = 12.1). A significant increase from pre- to post-testing was found (p<.05). This data represents a 27% increase in push-up repetitions amongst participants.
A paired samples t-test was calculated to compare the mean squat repetitions pre- and post-test (n = 11). The mean repetitions for the pre-test was 38.5 (sd = 7.9), and the mean for the post-test was 52.3 (sd = 8.6). A significant increase from pre- to post-testing was found (p<.05). This data represents a 35.8% increase in squat repetitions amongst participants.
A paired samples t-test was calculated to compare the mean challenge course time between the first and fifth test ($n = 5$). The mean time for the first test was 5.9 ($sd = 0.9$), and the mean for the fifth test was 4.8 ($sd = 0.8$). A significant decrease from the first test to the fifth test was not found ($p<.05$).
CHAPTER V

Discussion

The increasingly problematic levels of physical inactivity in the US represents a disconnect between what we prioritize for disease prevention as a country and the state of the problem. Altering the way we look at prevention strategies by changing from a reactive to a proactive method can assist in avoiding chronic diseases that are more prevalent amongst sedentary adults. The 100 Citizens exercise program provides participants with free access to 180 minutes of moderate to vigorous intensity physical activity per week, 30 minutes greater than the CDC’s recommendation for moderate physical activity (16). It was hypothesized that participants in the high-fit “Performance” group would see statistically significant increases in all physical capacity measures tested as a result of participating within the 11-week exercise intervention.

The 100 Citizens program has become a feasible solution to physical inactivity for many adults in neighborhoods where a 100 Citizens program is implemented. By providing free and supervised physical activity in public parks, community-dwelling adults are more likely to attempt to engage in physical activity as barriers such as cost, transportation and childcare are removed (33, 46). The park selected for this study was El Cariso Park in Sylmar, CA. Sylmar has a Latino population of 69.8%, which is considered high for Los Angeles County (2). The Latino population is disproportionately affected by non-communicable diseases related to physical inactivity, so by implementing the 100 Citizens program in the Sylmar community the program is addressing a community with a great need for physical inactivity.
**Strengths of Study**

Statistically significant increases in physical capacity were observed in the plank, 12-minute walk/run, push-up and 1-minute squat test from pre- to post-testing. Statistical significance was also observed without the bootstrapping technique, but only for two of the four tests. Without bootstrapping, the 12-minute Walk/Run and squat test were not significant (p>.05). The results indicate that the exercise stimulus provided to participants was adequate to induce change. It was expected that participants in the high-fit group would see modest changes due to already being at a higher level of fitness and having less room for improvement. However, due to a high adherence rate of 78% and an observed high level of exertion during workouts, participants were able to see substantial increases in each test. Participants saw the greatest overall increase in terms of percentage in the plank test with a 58% increase in time held in the plank position. The other tests saw increases of 35.8% for the squat test repetitions, 27% for the push-up test repetitions and 14.1% increase in estimated V0\textsubscript{2\text{MAX}} for the 12-minute walk/run test.

These numbers may reflect the exercises participants take part in outside of the program, and more importantly what is neglected. There is a general understanding of how much physical activity participants partake in outside of the program, as they reported that they engage in 2.1 days of strength training and 3.4 days of aerobic training during the post-test questionnaire. This may explain why there was a smaller percent change in the 12-minute walk/run in comparison with the push-up, plank and squat tests. If it can be elucidated what specific types of physical activity participants partake in outside of 100 Citizens, programming can further target and improve these variables. In addition, it is possible that the competitive personality characteristics of these high-fit
individuals played a role in the amount of improvement seen, and because of the small sample size, the Performance group may have experienced a greater sense of belonging and camaraderie.

In the bi-weekly challenge course, statistical significance was not observed. However, this measure of overall fitness displayed a one-minute reduction in mean time to completion between test one and test five. Possibly indicating that a type II error occurred due to the smaller sample size for the challenge course. The small sample size of five was observed due to participants not being in attendance during test one or test five.

The progressive exercise system used by this study is replicable and can be implemented by all 100 Citizens locations. Because the system uses a method that didn’t rely on one mode of progression, programs with considerably less access to equipment can use this system and see improvement despite equipment not being constantly available and limited load progression. Though this program was effective at increasing testing scores through the periodized programming, other types if periodization should also be looked at to indicate what is best practice for this three day a week community based program, especially considering adherence rates being high for the Performance group.

This study attained a mean adherence rate of 78% (sd = 3.7), meaning that participants attended 23 out of 30 sessions on average. This successful adherence rate may be telling of the reduction of barriers to exercise. Two barriers to exercise noted by Van Duyn (46) and Larsen (33) are not having access to childcare and lack of transportation. By implementing this program in the public park system and making it
available to the entire community, transportation issues were not limiting for most participants in the program. In addition, most participants with children, not yet in school, would bring them to the 100 Citizens program and look after them while exercising, eliminating the need for costly and/or inconvenient child care. Having the program in a public park in the center of a community and allowing participants to bring their children with them assists in eliminating barriers to physical activity.

Participants in this study had a statistically significant mean weight loss of 2.6%. This may be because nine out of eleven participants participated in the Healthy You diabetes prevention program offered after exercise sessions, where lifestyle modifications were made to improve diet and wellbeing. Literature has shown that significant health improvements can be had with modest weight loss of 5-7% (cit). Although, participants did not reach the minimum of 5%, it can be hypothesized that participants in this program likely reduced their risk for cardiovascular disease due to the combination of modest weight loss and substantial increases in physical fitness seen throughout the 11-week intervention. Papini et al. (46) observed a reduction in disease risk profile in participants after completing a one year, two day per week community-based exercise program. Participants in the Papini study went from high risk to low risk with a stimulus that provided less frequency and intensity per week. Furthermore, participants in the Loprinzi (36) study that exhibited higher levels of fitness displayed a protective effect against non-communicable disease risk, even when the BMI was greater in the high-fit individual. It can be hypothesized that following participants in this study for a longer period of time would have yielded greater improvements.
Limitations

One limitation experienced in this study was a small sample size. The total number of participants during pre-testing was 12, and varied from one test to another due to absence during post-testing. To correct for the small sample size a technique called bootstrapping was used. Bootstrapping is a type of resampling used to address small sample sizes and reduce the risk of error. The sample size for each test was increased to 2,000 participants based on random selection of those included in each test.

Participants in this study were a part of the 100 program before the beginning of the intervention, as this community exercise program has been active in the Sylmar community since 2013. The participants’ previous exposure to the program may have had an effect on the results observed in this study.

The criteria for group placement during pre-testing was not based on industry-standard normative data. This is because the goal of placing participants into groups was that they would be as close to homogenous as possible, and the stimulus provided would be appropriate for all in the group. Because organizations such as the American College of Sports Medicine (ACSM) include age and sex into the fitness classification levels, it was determined the best method was to split the group data into thirds for each test and develop criteria for group placement based on the group means. If ACSM criteria were used the interns would not be able to efficiently accommodate a 55-year-old woman’s numbers who qualifies as superior are drastically different from a 20-year-old male that is superior. It is understood that this method is not ideal for placement and categorization of fitness. The method was used with the intention of continuous data collection in all 100
Citizen locations until true normative data can be established that is representative of 100 Citizens participants.

Using bioelectrical impedance to determine body fat percentage may not have been reliable. This is due to the fact that participants were not briefed about the protocol beforehand relative to importance of hydration and physical activity in the day of and prior to testing. Therefore, the numbers obtained through this measure were not supportive of the decrease in weight, and physical fitness data. However, it is understood that there is a possibility the measurement was accurate due to the assumed variability of three to five percent.

During the waist to hip ratio measurement there may have been inaccuracies due to tester measuring techniques differing. The selected testers were instructed to take the waist measurement at the narrowest location above the umbilicus or at the level of the umbilicus if no natural waist could be found. The subjective decision by the testers may be the reason why significance was not seen in this test, despite seeing a substantial decrease that altered both male and female classification.

**Implications**

The results of this 11-week exercise intervention yielded statistically significant improvements in all areas of physical capacity and body weight. This demonstrates kinesiology’s ability to implement successful physical activity programs. The intention of this study was to determine if a progressive exercise program could improve the physical fitness in high-fit participants at El Cariso park in Sylmar, CA so the system could be replicated at the nine other 100 Citizens locations. Five other locations have since transitioned to this progressive exercise structure and method of testing. The three
locations that have yet to adopt this new style are 100 Citizens California State University affiliates, CSU San Francisco, CSU Stanislaus and CSU Los Angeles. It is our intention that these three universities will adopt this system in the near future.

This physical activity program also has the ability to change healthcare in the US, which has focused on treating an illness once it has become an issue and less on preventing it. 100 Citizens provides surrounding communities with 30 minutes more than the CDC recommended amount of physical activity, which recommends 150 minutes of moderate intensity physical activity. This does not factor in the amount of vigorous activity the participants engage in, which would favor more positive health benefits.

**Future Research**

More sensitive measurements are recommended for future research. Participants displayed statistically significant improvements in physical capacity tests and weight loss, but more measuring biomarkers such as C-reactive protein may be more telling of the participants’ disease risk. Knowing if disease risk profile statistically significantly decreases in a community containing a population that is at greater risk for non-communicable diseases, such as Latinos, could have an enormous impact on disease prevention recommendations.

In addition to looking at different measures, the type of periodization should be experimented with. Participants were able to see substantial results using non-linear periodization coupled with conjugate training, where participants remain at one volume for a three to four week block with alternating loads. However, it is unknown if this is the best method for improvement in this setting. Daily undulating periodization should also be experimented with, whereby the volume of load changes each session. Studies have
observed a 10% body fat reduction in a 12-week intervention using this type of periodization (18). This could benefit the participants of 100 Citizens by seeing a greater reduction in body fat, and therefore disease risk.
REFERENCES


APPENDIX

Appendix A

100Citizens
HEALTHY YOU @ EL CARISO
El Cariso Regional Park
13100 Hubbard St., Sylmar, CA 91342
(818)-367-5043 / (818)-357-5049

CSUN | Department of Kinesiology

Exercise for FREE! Lose Weight! Get Healthy!
ALL fitness levels are welcome!

Monday, Wednesday, Friday | 8:30 - 9:30am
For more information visit: www.100citizens.org
Appendix B

County of Los Angeles Department of Parks and Recreation
North County Community Services Agency
13100 Hubbard St. Sylmar, CA 91342

100 Citizens
Adult Fitness Program
Monday and Wednesday 8:30 – 9:30 am

Name

Last Name

Address

City                          Zip

Day Time Phone                        Evening Phone

Email Address

Emergency Contact Name/Relationship

Emergency Phone Number

I hereby release the County of Los Angeles Department of Parks and Recreation, its officers, agents, servants, employees, or volunteers from any liability or responsibility for any death or injuries and losses to any person arising while participating in any activity associated in any way with the 100 Citizens program.

Title VI Complain
The County of Los Angeles Department of Parks and Recreation is an equal opportunity provider. If you feel you have been discriminated against in any way, please contact the Department’s Title VI Coordinator at 310-786-3090.

ADA NOTICE
The Americans with Disabilities Act (ADA), the County of Los Angeles, Department of Parks & Recreation, has designated an ADA Coordinator to carry out the department’s compliance with the non-discriminatory provisions of the ADA. For more information you may contact the ADA Coordinator, Office 310-786-3090 or 310-471-4118. Up to 72 hour advance notice, sign language interpreters and related materials in alternative format (large print, audio-record, video-recording, live description) or any other reasonable accommodations are available to the public for County sponsored activities and events.

Signature: ___________________________       Date: ________________
Appendix C

PAR-Q & YOU
(A Questionnaire for People Aged 15 to 69)

Regular physical activity is fun and healthy, and increasingly more people are starting to become more active every day. Being more active is very safe for most people. However, some people should check with their doctor before they start becoming much more physically active.

If you are planning to become much more physically active than you are now, start by answering the seven questions in the box below. If you are between the ages of 15 and 69, the PAR-Q will tell you if you should check with your doctor before you start. If you are over 69 years of age, and you are not used to being very active, check with your doctor.

Common sense is your best guide when you answer these questions. Please read the questions carefully and answer each one honestly: check YES or NO.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?</td>
<td></td>
</tr>
<tr>
<td>2. Do you feel pain in your chest when you do physical activity?</td>
<td></td>
</tr>
<tr>
<td>3. In the past month, have you had chest pain when you were not doing physical activity?</td>
<td></td>
</tr>
<tr>
<td>4. Do you have your balance because of dizziness or do you ever lose consciousness?</td>
<td></td>
</tr>
<tr>
<td>5. Do you have a bone or joint problem (for example, back, knee, or hip) that could be made worse by a change in your physical activity?</td>
<td></td>
</tr>
<tr>
<td>6. Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?</td>
<td></td>
</tr>
<tr>
<td>7. Do you know of any other reason why you should not do physical activity?</td>
<td></td>
</tr>
</tbody>
</table>

If you answered YES to one or more questions

Talk with your doctor by phone or in person BEFORE you start becoming much more physically active or BEFORE you have a fitness appraisal. Tell your doctor about the PAR-Q and which questions you answered YES.

- You may be able to do any activity you want — as long as you start slowly and build up gradually. Or you may need to restrict your activities to those which are safe for you. Talk with your doctor about the kinds of activities you wish to participate in and follow his/her advice.
- Find out which community programs are safe and helpful for you.

If you answered NO honestly to all PAR-Q questions, you can be reasonably sure that you can start becoming much more physically active — begin slowly and build up gradually. This is the safest and soundest way to go.

- Take part in a fitness appraisal — this is an excellent way to determine your basic fitness so that you can plan the best way for you to live actively. It is also highly recommended that you have your blood pressure evaluated. If your reading is over 144/94, talk with your doctor before you start becoming much more physically active.

For more information on the PAR-Q, call the Canadian Society for Exercise Physiology at 1-800-875-7666.

No changes permitted. You are encouraged to photocopy the PAR-Q but only if you use the entire form.

If the PAR-Q is being given to a person before he or she participates in a physical activity program or a fitness appraisal, this section may be used for legal or administrative purposes.

"I have read, understood and completed this questionnaire. Any questions I had were answered to my full satisfaction."

Name _____________________________ Date _____________________________

Signature of person or guardian (if participants under the age of majority)

Note: This physical activity clearance is valid for a maximum of 12 months from the date it is completed and becomes invalid if your condition changes so that you would answer YES to any of the seven questions.


## Cuestionario Para Práctica de Actividad Física

Un cuestionario para personas de edades 15 a 69

La actividad física es divertida y saludable, y cada día más gente está comenzando a ser más activa. Siendo más activo es seguro para la mayoría de las personas. Sin embargo, algunas personas deben ser evaluadas por un médico antes de empezar siendo más activos.

Si usted piensa ser más activo, empiece por contestando las siete preguntas en este cuestionario. Si tiene entre 15 a 69 años de edad, este cuestionario le dirá si necesita consultar con un médico antes de comenzar. Si usted es mayor de 69 años de edad y no ha sido muy activo debe visitar a un médico.

El sentido común es su mejor guía al contestar las siguientes preguntas. Por favor lea las preguntas cuidadosamente y responda con honestidad: marca Sí o No.

<table>
<thead>
<tr>
<th>No.</th>
<th>Pregunta</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>¿Alguna vez su médico le ha dicho que tiene un problema en el corazón y que usted debe hacer actividad física sólo bajo recomendación médica?</td>
</tr>
<tr>
<td>2.</td>
<td>¿Usted presenta dolor o molestias en su pecho cuando hace actividad física?</td>
</tr>
<tr>
<td>3.</td>
<td>¿En el último mes, ha tenido dolor en el pecho sin estar haciendo actividad física?</td>
</tr>
<tr>
<td>4.</td>
<td>¿Perdió su balance o equilibrio a causa de mareo, o alguna vez ha perdido la conciencia?</td>
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<tr>
<td>5.</td>
<td>¿Tiene algún problema en los huesos o articulaciones que pueda empeorar al hacer actividad física?</td>
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<tr>
<td>6.</td>
<td>¿Su médico le ha recomendado medicina para la presión arterial o para una condición de corazón?</td>
</tr>
<tr>
<td>7.</td>
<td>¿Conoce cualquier otra razón que le impida a realizar actividad física?</td>
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</table>

### Si Usted Respondió:

Si ha contestado Sí a una o más preguntas:
- Hablar con su médico por teléfono o en persona ANTES de empezar o aumentar su nivel de actividad física o ANTES de realizar una prueba de ejercicio. Infórmale a su médico sobre este cuestionario y cuales preguntas respondió "Sí".
  - Usted puede ser capaz de hacer cualquier actividad que quiere, siempre y cuando comience lentamente y aumente gradualmente. O bien, puede que tenga que limitar sus actividades a las que son seguras para usted. Hable con su médico acerca de los tipos de actividades que desea participar y siga sus consejos.
  - Averigüe en su comunidad los programas que sean seguros y saludables para usted.

### "NO" a Todas las Preguntas

<table>
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<tr>
<th>Usted puede estar seguro que puede:</th>
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<tr>
<td>- Comenzar a ser más activo - comience lentamente y aumente gradualmente. Esto es la manera más segura y fácil.</td>
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<tr>
<td>- Realizar una prueba de ejercicio: Esta es una forma excelente para determinar su condición física y poder planear el mejor plan para aumentar su actividad física. También es recomendable que se haga una evaluación de la presión arterial. Si su presión es más alta de 144/94, hable con su médico antes de empezar a ser más activo.</td>
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</table>

Refrase en siendo más activo:
- Si no se siente bien debido a una enfermedad temporal tal como resfriado, gripe, o fiebre – espere a sentirse mejor;
- Si está o puede estar embarazada. Hable con su médico antes de comenzar.
- AtenCIÓN: Si su salud cambia y contesta Sí a cualquiera de las preguntas arriba, déjelo a su instructor de ejercicio. Pregúntele si debe de cambiar su plan de actividad física.

Informado uso de este cuestionario: La Sociedad Canadiense de Fisiología del Ejercicio, Salud Canadá, y sus agentes no asumen ninguna responsabilidad de las personas que realizan actividad física, y si tiene alguna duda después de completar este cuestionario, consulte con su médico antes de hacer actividad física.

"Yo he leído, entendido y he completado este cuestionario. Todas las preguntas han sido contestadas con mi completa satisfacción."

Nombre: ________________________________
Firma: ___________________________ Fecha: ___________________________
COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION
"Creating Community Through People, Parks and Programs"

PHOTOGRAPHY CONSENT, RELEASE AND WAIVER OF LIABILITY

I hereby give my consent to the County of Los Angeles to photograph me and use the photograph(s) for informational, educational, promotional, or publicity purposes concerning the county and its services.

I understand that the photograph(s) may be used on the county’s Website, or in official county publications or displays, public newspapers, magazines, reports, or other public documents; or electronic or digital recordings. I also understand that the photograph(s) may be used without any further consent or authorization from me; the county may modify the photograph(s) in the process of editing, and I will not be entitled to any compensation for use of the photograph(s).

I also agree to release the County of Los Angeles, its officers, employees, or agents, from any and all liability arising out of or connected to the use of the photograph(s) as stated above.

I have read and understand the foregoing consent, release, and waiver of liability, and voluntarily accept and agree to its terms.

Name (print): __________________________
Signature (if 18 years of age or older): __________________________
Date: __________________________

Name of Parent/Guardian, if under 18 years of age (print): __________________________
Parent/Guardian Signature: __________________________
Date: __________________________
Appendix E

PRE-QUESTIONNAIRE

1. On average, how many days per week do you engage in aerobic physical activities outside of the 100 Citizens Program (for example: brisk walking or jogging)?
   
   0 1 2 3 4 5 6 7

2. On average, how many days per week do you engage in strength training outside of the 100 Citizens Program (for example: body weight exercises, weight lifting, or resistance training)?
   
   0 1 2 3 4 5 6 7

3. How much do you know about exercise?
   a. Nothing at all
   b. A little
   c. A moderate amount
   d. A lot
   e. A great deal

4. How confident are you in performing exercises on your own?
   a. Not confident at all
   b. Slightly confident
   c. Somewhat confident
   d. Very confident
   e. Extremely confident

5. What is your overall satisfaction with your health?
   a. Very dissatisfied
   b. Dissatisfied
   c. Neither dissatisfied or satisfied
   d. Satisfied
   e. Very satisfied

6. How did you hear about the 100 Citizens Program?
   a. Friends
   b. Flyers
   c. Relatives
   d. Park Office
   e. Other: _______

7. What do you hope to achieve with the 100 Citizens Program (lose weight / be more healthy)?

   __________________________________________

8. Do you feel the program will help you achieve these goals?
   a. Yes
   b. No
   c. Not sure
**PRE-CUESTIONARIO**

1. ¿En promedio, cuántos días a la semana participa en ejercicios aeróbicos *fuera del programa de 100 Citizens* (por ejemplo: caminar a paso ligero o correr)?
   
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2. ¿En promedio, cuántos días a la semana participa en ejercicios de entrenamiento de fuerza *fuera del programa de 100 Citizens* (por ejemplo: ejercicio de peso corporal, levantamiento de pesas, o ejercicio de resistencia)?
   
<table>
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3. ¿Cuánto sabe usted sobre el ejercicio?
   a. Nada
   b. Muy poco
   c. Una cantidad moderada
   d. Mucho

4. ¿Confía o confía en sí mismo al realizar los ejercicios solo/sola?
   a. No confiado/confiada
   b. Poco confiado/confiada
   c. Algun tanto confiado/confiada
   d. Muy confiado/confiada
   e. Extremadamente confiado/confiada

5. En totalidad, cuál es su satisfacción con su salud?
   a. Muy insatisfecho
   b. Insatisfecho
   c. Ni satisfecho ni insatisfecho
   d. Satisfecho
   e. Muy satisfecho

6. ¿Cómo escucha del programa de 100 Citizens?
   a. Amigos/Amigas
   b. Folletos
   c. Parientes
   d. La oficina del parque
   e. Otra: __________

7. ¿Qué meta espera lograr con el programa de 100 Citizens (bajar de peso / ser más saludable)?

   ______________________________________

8. ¿Cree que el programa le ayudara lograr esa meta?
   a. Sí
   b. No
   c. No estoy seguro/segura
POST-QUESTIONNAIRE

1. What is your gender?
   Female     Male

2. What is your age?
   ______________________

3. What is your zip code/city of residence?
   ______________________

4. What best describes your ethnicity?
   a. Hispanic/Latino
   b. Black/African American
   c. Caucasian/White
   d. Asian/Pacific Islander
   e. Other: ________________

1. On average, how many days per week do you engage in aerobic physical activities outside of the 100 Citizens Program (for example: brisk walking or jogging)?
   0 1 2 3 4 5 6 7

2. On average, how many days per week do you engage in strength training outside of the 100 Citizens Program (for example: body weight exercises, weight lifting, or resistance training)?
   0 1 2 3 4 5 6 7

3. How would you rate your knowledge of exercise?
   a. Not knowledgeable
   b. Somewhat Knowledgeable
   c. Very Knowledgeable

4. How confident are you in performing exercises on your own?
   a. Not Confident
   b. Somewhat Confident
   c. Very Confident

5. What is your overall satisfaction with your health?
   a. Very dissatisfied
   b. Dissatisfied
   c. Neither dissatisfied or satisfied
   d. Satisfied
   e. Very satisfied

6. Did you achieve your goals with the 100 Citizens Program?
   a. Yes
   b. No

7. What did you like most about the 100 Citizens Program?
   ______________________

8. What did you like least about the 100 Citizens Program?
   ______________________

9. Did you attend “Healthy You”?
   a. Yes
   b. No

10. Since starting the 100 Citizens Program, have you made any changes to your nutrition? If yes, how?
    ______________________
## POST-QUESTIONNAIRE

1. ¿Cuál es su género?
   - Femenino
   - Masculino

2. ¿Cuál es su edad?

3. ¿Cuál es su código postal/ciudad de residencia?

4. ¿Cuál describe mejor su origen étnico?
   - a. Hispánico/Latino
   - b. Afroamericano
   - c. CAucásico/Norteamericano
   - d. Asiático/Islas del Pacífico
   - e. Otro: __________

---

1. ¿En promedio, cuántos días a la semana participa en ejercicio aeróbico *fuera del programa de 100 Citizens* (por ejemplo: caminar a paso ligero o correr)?

   0 1 2 3 4 5 6 7

2. ¿En promedio, cuántos días a la semana participa en ejercicios de entrenamiento de fuerza *fuera del programa de 100 Citizens* (por ejemplo: ejercicios de peso corporal, levantamiento de pesas, o ejercicio de resistencia)?

   0 1 2 3 4 5 6 7

3. ¿Qué clasificación le daría a su conocimiento sobre el ejercicio?
   - a. Sin conocimiento
   - b. Poco conocimiento
   - c. Mucho conocimiento

4. ¿Qué confiado es usted de sí mismo al realizar los ejercicios solo/sola?
   - a. No confiado/confiada
   - b. Algún tanto confiado/confiada
   - c. Muy confiado/confiada

5. ¿En totalidad, cuál es su satisfacción con su salud?
   - a. Muy insatisfecho
   - b. Insatisfecho
   - c. Ni satisfecho ni insatisfecho
   - d. Satisfecho
   - e. Muy satisfecho

6. ¿Logró su meta con el programa de 100 Citizens?

   a. Sí
   b. No

7. ¿Qué fue lo que le gustó más del programa de 100 Citizens?

8. ¿Qué fue lo que menos le gustó del programa de 100 Citizens?

9. ¿Atendió al programa de "Healthy You"?
   - a. Yes
   - b. No

10. ¿Desde que empezó el programa de 100 Citizens, ha hecho cambios en su nutrición? Si respondió Sí, ¿cómo?

    __________________________________________

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Appendix G

Push-Up Test Script-English

1. “Hello, my name is (your name), and I will be testing your push-up.”
2. To begin you will be in one of two positions:
   a. Hands & toes (males)
   b. Hands, knees and toes (females)
3. Begin by lying face down with your hands on the side of your chest roughly shoulder width apart
   a. Fingers pointed forwards
4. Pull your toes up towards your knees (dorsiflex)
5. Feet are hip width apart
6. Raise your entire body up to the starting position (straight line)
7. Perform 1-5 practice reps so your tester can assure you are in the correct position
   a. Bend at elbows
   b. Contact pushup counter
   c. Press back up to the starting position
   d. Maintaining straight line throughout body
8. Go to the rest position for 30 seconds
9. After your rest, return to the starting position
10. On your tester’s signal begin the test
11. The test will be stopped if:
   a. You voluntarily stop the test
   b. Perform 2 repetitions with improper form consecutively
      i. Hips too high/low
      ii. Did not touch counter
      iii. Did not return to full extension
   c. Rest >2 seconds
   d. Strain forcibly
Push-Up Test Description: Spanish

1. “Hola me llamo (your name) voy a tomarles examen de practica de las lagartijas.
2. Para empezar usted va estar en una de las dos posiciones:
   a. Para los hombres (men) usted va usar sus manos e los pies.
   b. Para las mujeres (women) usted va usar sus manos, los pies, y las rodillas.
3. Iniciamos acostandose sobre su abdomen con las palmas de sus manos hacia el piso alado de su pecho
   a. Dedos apuntando hacia afrente.
4. Apunten sus dedos de sus pies hacia sus rodillas (dorsiflex)
5. La posición de sus pies deben de estar alineado al ancho de los hombros su cadera.
6. Levante su cuerpo para la posición inicial. (una linea recta)
7. Realizen uno a cinco repeticiones (1-5 reps) del ejercicio para que examenador pueda asegurale si esta en la forma corecta.
   a. Doblen sus codos
   b. Hagan contacto bajando su cuerpo manteniendo la espalda derecha
   c. Empujen de regreso al posición inicial
   d. Manteniendo la espalda derecha
8. Vayan a la posición de descanso y esten allí de treinta segundos (30 secs)
9. Después del descanso regresen al la posición inicial
10. En la senal del examinador va a empezar el examen de practica.
11. El examen de practica va a ser detenido si:
    a. Usted voluntariamente detenie el examen de practica.
    b. Realizan dos (2) repeticiones impropio consecutivas
       i. Sus caderas están muy arribar or muy abajo
          i. ii. Si su pecho no toca la maquina de contar a la misma vez manteniendo su espalda derecha
          ii. Si usted no regreso al la extensión completa
    c. Si usted descanse por menos de dos segundos (2 secs)
    d. Si usted cepa de la fuerza
1-min Squat Test Script-English

1. “Hello, my name is (your name), and I will be testing your squat.”
2. To begin you will take a seat on the edge of the chair (make sure they are stable):
3. Find a position that is appropriate for your feet so that you can comfortably stand-up without using your arms to assist (roughly between hip and shoulder)
4. Your arms will be crossed with your hands on your shoulders
5. **have everyone stand-up**
6. From standing position (starting), you will lower down to lightly tap the chair and return to the standing position.
7. Perform 1-5 practice reps so your tester can assure you are doing the movement properly
8. Rest for 30 seconds
9. After resting, return to the starting position and on your tester’s signal begin the test
10. The test will be stopped if:
   a. Voluntarily stop
   b. Perform 2 repetitions with improper form consecutively
      i. Improper hand placement
      ii. Not touching the seat
      iii. Do not return to standing position completely
      iv. Heels lift, valgus etc.
   c. Rest ≥2 seconds
   d. Strain forcibly
1-min Squat Test Script- Spanish

1. “Hola me llamo (your name) voy a tomarles el examen de la sentadillas .
2. Para empezar van a tomar un aciento en la esquina de la silla . (make sure they are stable).
3. Encuentren una posicion que este apropiada para sus pies para que puedan parase sin usar sus brazos.
4. Sus brazos van a estar cruzados con sus manos ensima de sus hombros.
5. Digan a todos que se paren “Vamos a para nos desde la silla”. (Tell everyone “lets stand up from the chair”)
6. Desde la posicion parade (starting), van a bajar a tocar la silla ligeramente y luego regresar al la posicion parada.
7. Van a practicar la actividad 1-5 veces (1-5 times) para que el examinador puedan accegurace que lo estan haciendo adecuadamente.
8. Descansen por 30 segundos
9. Después de descansar, van a regresar a la posicion y en la senal de el examinador van a empezar el examen de practica.
10. El examen va hacer terminado si:
   a. Si usted para voluntariamente
   b. Inicia 2 repeticiones con la forma incorrecto
      i. Las manos estan en la posicion incorreto
      ii. No tocas el aciento
      iii. No regresan completamente a la posicion parada
      iv. El tobillo se levanta del el suelo
   II. Descansen por mas de 2 segundos
   III. Se cepa de la fuerza (Strain forcibly)
Plank Test Script-English

1. “Hello, my name is (your name), and I will be testing your plank.”
2. For this test you will remain in the proper plank position with a pvc pipe resting horizontally across your lower back for a maximum of four minutes.
3. Please begin by lying face down on the floor (prone)
4. locate the two bony bumps directly above your pant line, on either side of your spine.
   a. *Individual testers will mentally make note of where these processes are on the participant
5. Pull your toes up towards your knees as much as you can (dorsiflex)
6. Place your elbows directly beneath your shoulders
7. Form a “V” with your arms by touching your fingertips together, hands facing down
8. Raise your hips high enough so that your body is in a straight line from head to heels
9. You will hold this position until the tester adjusts the PVC pipe onto your low back
10. Your tester will then let you know to return to the starting position and rest for 30 seconds
11. After your rest, you bring your hips up to the bar and remain in contact with the bar for the duration of the test.
12. The test will be stopped if:
   a. Your hips drop below the bar for 2 seconds
   b. Your hips raise the bar for 2 seconds
   c. Your chest position changes for 2 seconds
   d. Your head position changes for 2 seconds
   e. Voluntarily stop
**Plank Test Script- Spanish**

1. “Hola, me llamo (your name) voy a hacer la prueba practica para el ejercicio tablón”
2. Para esta prueba practica, va a permanecer en la posicion apropiado del tablon con una pipa de pvc encima de su espalda horizontal. Van a tener que retener la pipa de pvc con su cintura el tiempo que puedan o lo máximo de cuatro minutos (4 min).
3. Por favor de acostarse sobre su abdomen
4. Por favor empiezen primero de localizar sus huesos que se encuentra al nivel de la cadera en la parte de atras dejando en medio de la espina dorsal.
   a. Individual testers will mentally make note of where these processes are on the participant
5. Apunten sus dedos de sus pies hacia sus rodillas
6. Alinien sus codos con sus hombros.
7. Forman (individual) Formen (group of participants) una “V” con sus brazos tocando sus dedos de sus dos manos.
8. Levanten sus caderas suficiente para que su cuerpo quede en una linea recta desde su cabeza a sus tobillos.
9. Van a retener esta posicion hasta que ajusten la pipa de pvc sobre su cintura.
10. El examinador le avisara cuando tengas que regresar a la posicion inicial. Van a descansar por 30 segundos.
11. Después de descansar por 30 segundos va a subir su cadera hasta la pipa y permanecer en contacto con la pipa durante el examen.
12. El examen va a ser detenido si:
   a. Sus caderas bajen abajo de la pipa por dos segundos (2 sec).
   b. Sus caderas suban la pipa por dos segundos (2 sec).
   c. El pecho cambie de posición por dos segundos (2 sec).
   d. La cabeza cambie de posición por dos segundos (2 sec).
   e. Si usted voluntariamente se pare
12-Minute Run/Walk Test Script-English

1. “Hello, my name is (your name), and I will be testing your 12-Minute Walk/Run.”
2. For this test you will travel as far as possible around the turf field in 12-minutes by running, walking or using a combination of the two.
3. For each lap completed, a student will hand you a popsicle stick to hold onto throughout the run.
4. If popsicle stick is dropped, a student will run it to you.
5. Time updates will be given to you every minute throughout the test until the 11-minute mark, after which a time update will be provided at the 11:30-minute mark before calling for participants to stop.
6. When the 12-minute period is over, students will “CALL STOP”. Please stop and remain in place until your distance is recorded using the measuring wheel and your popsicle sticks are collected.
7. Cover as much distance as possible.
12- Minute Run/ Walk Test Script- Spanish

1. “Hola, me llamo (your name), voy (individual) a tomarles a ustedes la prueba de la caminata que va a durar 12 (doce) minutos. (Side note: when it is one person proctoring the exam you will use the words “voy”, when it is a group of interns and volunteers you will use the word “vamos”). Nosotros vamos a tomarles a ustedes la prueba de la caminata que va a durar 12 (doce) minutos.

2. Para este examen de pratica van a tener la opcion de correr, caminar o combinar las dos para correr alrededor del la pista de correr las veces que puedan entre los doce minutos.

3. Las vueltas van a ser contadas usando unos palos pequeños hechos de maderas. Recibirán un palo de madera en cada vuelta.

4. Si unos de los palos de madera se caen, un estudiante va a correr a levantararlo y regresarlo al participante.

5. Se va actualizar el tiempo cada minute entre el exam de practica hasta el minuto 11. Después el tiempo va ser actualizar al 11 minutos y 30 segundos antes que avicemos a los participantes que paren.

6. Cuando se termine la caminata de 12 (doce) minutos todos los estudiantes van a gritar (yell out) “Paren se ha terminado el examen.” Por favor paren y matengasen en el lugar donde esten hasta que los palos de madera se colecten y sus distancias sean tomadas usando la sinta de medir.

7. Cubran la distancia mas posible que puedan durante la caminata!
Appendix H

Warm-Up: Squat & Push-Up Test

1. Light Jog 1min
2. Lateral Weight Shift in Bottom of Squat 30sec
3. Medium Jog 1min
4. Squat to walk out push-up/high plank (depending on ability) 30sec
5. Jogging in place w/ exaggerated claps 30sec
6. Shoulder Taps or high plank hold 30sec
7. Squats 30sec
8. Lunge w/ Elbow to knee hold 15sec (R) & 15sec (L)

Warm-Up: Plank & 12-min Walk/Run

1. Light Jog 1min
2. Dynamic Reverse Lunge w/ Elbow to knee 20sec (R) & 20sec (L)
3. Medium Jog 1min
4. Low plank hold 30sec
5. High Plank Hold 20sec
6. Fast jog 1min
7. Standing Mountain Climbers 30sec

Warm-Up Make-Up Day

1. Light jog 1min
2. Jumping Jacks 30sec
3. Squat to walk out push-up/high plank (depending on ability) 30sec
4. Low Plank 30sec
5. Medium Jog 1min
6. Standing mountain climbers 30sec
7. Squats 30sec
8. Shoulder Taps 30sec
## Appendix I

<table>
<thead>
<tr>
<th>NAME: ___________________________</th>
<th>☐ Bill of Rights</th>
<th>☐ Adult Consent Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP: __________________________</td>
<td>☐ Height</td>
<td>☐ 12-Minute Walk/Run</td>
</tr>
<tr>
<td>TEST (Pre/Post &amp; Date): __________</td>
<td>☐ Weight</td>
<td>☐ Push-Up</td>
</tr>
<tr>
<td>AGE: ______  SEX (M/F): _________</td>
<td>☐ Plank</td>
<td>☐ 1-Minute Squat</td>
</tr>
</tbody>
</table>

### BODY COMPOSITION

- **Weight:** ________________  Notes: ____________________________
- **Height:** ________________  Notes: ____________________________
- **BMI:** ________________  Notes: ____________________________

### PHYSICAL FITNESS TESTS

- **Plank:** ________________  Notes: ____________________________
- **Push-Up:** ________________  Notes: ____________________________
- **12-Minute Walk/Run:** ________________  Notes: ____________________________
- **1-Minute Squat:** ________________  Notes: ____________________________
Appendix J

100 Citizens El Cariso Agenda

Date: 8/31/15 & 9/2/2015

Group: Performance

ALL INTERNS: Tarik, Natalia, Chris

8:00am: Agenda Read

Info Table: Natalia

Responsibilities:
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

8:30am-8:37am Warm Up: Tarik

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

8:37am-8:49am Upper Body: Chris

Equipment: Battle Ropes, Mats

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified Push-Up</td>
<td>Single Arm Wave (R)</td>
<td>Chair Pose</td>
</tr>
<tr>
<td>Pull &amp; Dash</td>
<td>Single Arm Wave (L)</td>
<td>Shoulder Taps</td>
</tr>
<tr>
<td>Modified Push-Up</td>
<td>Dual Grip Wave</td>
<td>High Plank Hold</td>
</tr>
</tbody>
</table>

8:49am-9:01am Lower Body: Tarik

Equipment: Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bag Pick-Up (Squat Form)</td>
<td>Bag Pick-Up (Hinge Form)</td>
<td>Bag Pick-Up (Squat From)</td>
</tr>
<tr>
<td>Squat w/ Bag</td>
<td>Hinge w/ Bag</td>
<td>Bag Pick-Up (Hinge From)</td>
</tr>
<tr>
<td>Isometric Squat w/ Bag</td>
<td>Chair Pose</td>
<td>Isometric Squat (Bodyweight)</td>
</tr>
</tbody>
</table>

9:01am-9:13am Core: Chris, Tarik

Equipment: Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Plank</td>
<td>Unilateral Farmer’s Carry (R)</td>
<td>Isometric BirdDog (L)</td>
</tr>
<tr>
<td>Side Plank (R)</td>
<td>Unilateral Farmer’s Carry (L)</td>
<td>Isometric BirdDog (R)</td>
</tr>
</tbody>
</table>
69 Citizens El Cariso Agenda

**Group: Performance**

**ALL INTERNS:** Tarik, Xavier, Chris

**8:00am:** Agenda Read

**Info Table:** Xavier

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up:** Tarik

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body:** Chris

**Equipment:** Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder Taps</td>
<td>Bag Pick-Up (Hinge Form)</td>
<td>Push-Ups w/ Toe Grab</td>
</tr>
<tr>
<td>Modified Push-Up</td>
<td>Bent Over Row w/ Bag</td>
<td>Triceps Dips on Sandbag</td>
</tr>
<tr>
<td>Chair Pose</td>
<td>Isom. Bent Over Row (Mid.Pos)</td>
<td>High Plank Hold</td>
</tr>
</tbody>
</table>

**8:49am-9:01am Lower Body:** Tarik

**Equipment:** Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Pick-Up (Squat Form)</td>
<td>Chair Pose</td>
<td>Alt. Reverse Lunges w/ KB</td>
</tr>
<tr>
<td>Uni-Load Squat w/ KB (R)</td>
<td>Hinge w/ KB</td>
<td>SL Isom. Glute Bridge (R)</td>
</tr>
<tr>
<td>Uni-Load Squat w/ KB (L)</td>
<td>Isometric Squat (Bodyweight)</td>
<td>SL Isom. Glute Bridge (L)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
</tr>
</tbody>
</table>

**9:01am-9:13am Core: Tarik**  
*Equipment: N/A*

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isom. Crawl</td>
<td>Birdog (R)</td>
<td>Alt. Leg Chops</td>
</tr>
<tr>
<td>Side Plank w/ Dynamic Reach (R)</td>
<td>Birdog (L)</td>
<td>Standing Mountain Climbers</td>
</tr>
<tr>
<td>Side Plank w/ Dynamic Reach (L)</td>
<td>Isom. Crawl</td>
<td>Alt. Lateral Knee to Elbow</td>
</tr>
</tbody>
</table>

**9:13am-9:25am Cardio: Chris**  
*Equipment: N/A*

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumping Jacks</td>
<td>Sideline to Sideline Jog</td>
<td>Boxing Burnout</td>
</tr>
<tr>
<td>Butt Kickers</td>
<td>Skipping</td>
<td>Jumping Jills</td>
</tr>
<tr>
<td>High Knees</td>
<td>Sideline to Sideline Jog</td>
<td>Sideline to Sideline Jog</td>
</tr>
</tbody>
</table>

**9:25am-9:30am Cool Down: Chris**  
*Equipment: N/A*
- Healthy You
- San Fernando 5k

---

**100 Citizens El Cariso Agenda**  
*Date: 9/11/2015 & 9/14/15*

**Group: Performance**

**ALL INTERNS:** Chris, Tarik, Xavier

**8:00am:** Agenda Read  
**Info Table:** N/A

**Responsibilities:**
- Greeting new participants  
- Administering New Participant Forms  
- Blood Pressure

**8:30am-8:37am Warm Up: Chris**

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body: Chris, Xavier**  
*Equipment: Bands*
### Lower Body: Tarik
**Equipment:** Medicine Balls

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge w/ Ball</td>
<td>SL RDL (L)</td>
<td>Isometric Lunge w/ OH Ball Press (R)</td>
</tr>
<tr>
<td>Isometric Lunge w/ Ball Press (R)</td>
<td>SL RDL (R)</td>
<td>Isometric Lunge w/ OH Ball Press (L)</td>
</tr>
<tr>
<td>Isometric Lunge w/ Ball Press (L)</td>
<td>Alt. Weight Shift at Bottom of Squat</td>
<td>Glute Bridges</td>
</tr>
</tbody>
</table>

- Partner SA Band Row - ½ of 35sec pulling down, ½ of 35 sec isometric hold

### Core: Chris, Tarik, Xavier
**Equipment:** Medicine Balls

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral Ball Toss (R)</td>
<td>Bear Crawl (fwd/bkwr)</td>
<td>Side Plank (R)</td>
</tr>
<tr>
<td>Lateral Ball Toss (L)</td>
<td>V-Sit</td>
<td>Low Plank</td>
</tr>
<tr>
<td>Lateral Ball Toss (Alt.)</td>
<td>Low Plank</td>
<td>Side Plank (L)</td>
</tr>
</tbody>
</table>

- Will take place at handball courts

### Cardio: Chris, Tarik, Xavier
**Equipment:** N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Course</td>
</tr>
<tr>
<td>Recovery Lap</td>
</tr>
</tbody>
</table>

### Cool Down: Xavier

---

**100 Citizens El Cariso Agenda**

**Group:** Performance

**ALL INTERNS:** Tarik, Natalia, Chris

**8:00am:** Agenda Read

**Info Table:**
Responsibilities:

- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

8:30am-8:37am Warm Up: Tarik

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

8:37am-8:49am Upper Body: Natalia

Equipment: Battle Ropes, Mats

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Push-Up</td>
<td>Sidewinders</td>
<td>Pull &amp; Dash</td>
</tr>
<tr>
<td>High Plank Hold, SA iso. Flexion (R)</td>
<td>Sidewinder (L)</td>
<td>Push-Up w/ Toe Grab</td>
</tr>
<tr>
<td>High Plank Hold, SA iso. Flexion (L)</td>
<td>Sidewinder (R)</td>
<td>High Plank Hold</td>
</tr>
</tbody>
</table>

8:49am-9:01am Lower Body: Tarik

Equipment: Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat w/ Bag</td>
<td>Hinge w/ Bag (near)</td>
<td>Squat Pulses w/ Bag</td>
</tr>
<tr>
<td>Iso. Lunge w/ Bag (R)</td>
<td>Hinge w/ Bag (far)</td>
<td>Bag Pick-Up (Hinge Form)</td>
</tr>
<tr>
<td>Iso. Lunge w/ Bag (L)</td>
<td>Iso. Hinge w/ Bag</td>
<td>Bag Pick-Up (Squat Form)</td>
</tr>
</tbody>
</table>

9:01am-9:13am Core: Chris

Equipment: Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palloff Press (R)</td>
<td>Low Plank</td>
<td>Fwd/Rev Crawl</td>
</tr>
<tr>
<td>Palloff Press (L)</td>
<td>High Plank w/ Knees to Elbows</td>
<td>Bird Dog Pulses (R)</td>
</tr>
<tr>
<td>Leg Chops</td>
<td>V-Sit</td>
<td>Bird Dog Pulses (L)</td>
</tr>
</tbody>
</table>

9:13am-9:25am Cardio: Natalia, Tarik, Chris

Equipment: N/A
### Circuit 1
- Jumping Jacks
- Jumping Jills
- Hopping

## Circuit 2
- Sideline to Sideline Jog
- Quick Feet in Place
- Sideline to Sideline Jog

## Circuit 3
- Boxing Burnout
- Boxing Burnout in iso. Squat
- Sideline to Sideline Jog

- Quick feet will include directions shouted to them in which they will turn that way.

### 9:25am-9:30am Cool Down: Natalia

#### 100 Citizens El Cariso Agenda

**Date:** 9/21/15 & 9/23/2015  
**Group:** Performance  
**ALL INTERNS:** Natalia, Chris  

**8:00am:** Agenda Read  
**Info Table:** Tarik  

**Responsibilities:**  
- Greeting new participants  
- Administering New Participant Forms  
- Blood Pressure

**8:30am-8:37am Warm Up:** Natalia  
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body:** Natalia  
**Equipment:** Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Row w/ Band (L)</td>
<td>Bent Over Row w/ Band</td>
<td>SA Row w/ Band (L)</td>
</tr>
<tr>
<td>SA Row w/ Band (R)</td>
<td>Modified Push-Up</td>
<td>SA Row w/ Band (R)</td>
</tr>
<tr>
<td>Push-Up</td>
<td>Shoulder Taps</td>
<td>Push-Up</td>
</tr>
</tbody>
</table>

**8:49am-9:01am Lower Body:** Chris  
**Equipment:**

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat</td>
<td>Squat Jump Over Hurdle</td>
<td>SL Hinge (L)</td>
</tr>
<tr>
<td>SL Hinge (L)</td>
<td>Reverse Lunge (R)</td>
<td>SL Hinge (R)</td>
</tr>
<tr>
<td>SL Hinge (R)</td>
<td>Reverse Lunge (L)</td>
<td>Squat Jump Over</td>
</tr>
</tbody>
</table>
**9:01am-9:13am Core:** Chris  
**Equipment:** Dumbbells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Plank w/ Reach (R)</td>
<td>Mountain Climbers</td>
<td>High to Low Plank</td>
</tr>
<tr>
<td>Side Plank w/ Reach (L)</td>
<td>Isometric Bird Dog (R)</td>
<td>Side Plank w/ Reach (L)</td>
</tr>
<tr>
<td>Low Plank</td>
<td>Isometric Bird Dog (L)</td>
<td>Side Plank w/ Reach (R)</td>
</tr>
</tbody>
</table>

- Hold dumbbells for side plank, Bird Dog

**9:13am-9:25am Cardio:** Natalia  
**Equipment:** Hurdles, Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral Jumps over Hurdle</td>
<td>Partner Resisted Run w/ Band</td>
<td>Burpees</td>
</tr>
<tr>
<td>Shuffle Around Hurdle (L)</td>
<td>Partner Resisted Run w/ Band</td>
<td>Boxing Burnout</td>
</tr>
<tr>
<td>Shuffle Around Hurdle (R)</td>
<td>Sideline to Sideline Jog</td>
<td>Sideline to Sideline Jog</td>
</tr>
</tbody>
</table>

**9:25am-9:30am Cool Down:** Chris

---

**100 Citizens El Cariso Agenda**  
**Date:** 9/25/15 & 9/28/2015

**Group:** Performance  
**ALL INTERNS:** Tarik, Natalia, Chris

**8:00am:** Agenda Read  
**Info Table:** Xavier

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up:** Tarik  
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body:** Chris  
**Equipment:** Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
</table>
SA Row w/ Sandbag (R)  Bent-Over Row  SA Row w/ Sandbag (R)  
SA Row w/ Sandbag (L)  Walk-Out Push-Up  SA Row w/ Sandbag (L)  
Push-Up w/ Toe Grab  Shoulder Taps  Push-Up

8:49am-9:01am **Lower Body**: Natalia  
Equipment: Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat Jumps 10sec</td>
<td>SL Iso. Glute Bridge (R)</td>
<td>Squat Jumps 10sec</td>
</tr>
<tr>
<td>Squats 30sec</td>
<td></td>
<td>Squats 30sec</td>
</tr>
<tr>
<td>Goblet Squat to Press w/ KB</td>
<td>SL Iso Glute Bridge (L)</td>
<td>Goblet Squat to Press w/ KB</td>
</tr>
<tr>
<td>Iso. Hinge w/ KB at Chest</td>
<td>Bilateral Glute Bridge (L)</td>
<td>Iso. Hinge w/ KB at Chest</td>
</tr>
</tbody>
</table>

9:01am-9:13am **Core**: Tarik  
Equipment: Sandbags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uni. Farmer’s Walk (R)</td>
<td>Low Plank w/ Alt. Lifting Up Elbow</td>
<td>Uni. Farmer’s Walk (R)</td>
</tr>
<tr>
<td>Front Rack Walk</td>
<td>Chair Pose</td>
<td>Front Rack Walk</td>
</tr>
</tbody>
</table>

• Can grab another kettlebell to overload same side

9:13am-9:25am **Cardio**: Chris, Natalia, and Tarik  
Equipment: 

**Challenge Course**

12-Minute Walk/Run

9:25am-9:30am **Cool Down**: Natalia

---

100 Citizens El Cariso Agenda  
Date: 9/30/2015 & 10/02/15

Group: Performance  
ALL INTERNS: Tarik, Natalia, Chris

8:00am: Agenda Read  
Info Table: 
Responsibilities:
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

8:30am-8:37am **Warm Up**: Natalia
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

8:37am-8:49am **Upper Body**: Natalia
Equipment: Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA Row w/ Band (L)</td>
<td>Bent Over Row w/ Band</td>
<td>5-Sec Eccentric Push-Ups</td>
</tr>
<tr>
<td>SA Row w/ Band (R)</td>
<td>Modified Push-Up</td>
<td>SA Row w/ Band (L)</td>
</tr>
<tr>
<td>Walk-Out Push-Up</td>
<td>Shoulder Taps</td>
<td>SA Row w/ Band (R)</td>
</tr>
</tbody>
</table>

8:49am-9:01am **Lower Body**: Tarik
Equipment: N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt. Reverse Lunge</td>
<td>Squat Hops from Low Position</td>
<td>Glute Bridges</td>
</tr>
<tr>
<td>Hinge w/ Arms Extended</td>
<td>Reverse Lunge (R)</td>
<td>Isometric Glute Bridge</td>
</tr>
<tr>
<td>Hopping</td>
<td>Reverse Lunge (L)</td>
<td>Hinge w/ Arms Extended</td>
</tr>
</tbody>
</table>

9:01am-9:13am **Core**: Chris
Equipment: Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Plank w/ Reach (R)</td>
<td>Rack Carry (R)</td>
<td>SA OH Carry (R)</td>
</tr>
<tr>
<td>Side Plank w/ Reach (L)</td>
<td>Rack Carry (L)</td>
<td>SA OH Carry (L)</td>
</tr>
<tr>
<td>Low Plank</td>
<td>Two Handed Carry</td>
<td>Two Handed Carry</td>
</tr>
</tbody>
</table>

- Two Handed Carry- weight will be held out in front of the participants while walking

9:13am-9:25am **Cardio**: Natalia, Tarik, Chris
**Equipment:**

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Knees</td>
<td>Partner Resisted Run w/ Band</td>
<td>Burpees</td>
</tr>
<tr>
<td>Quick Feet</td>
<td>Partner Resisted Run w/ Band</td>
<td>Boxing Burnout</td>
</tr>
<tr>
<td>Jumping Jacks</td>
<td>Sideline to Sideline Jog</td>
<td>Sideline to Sideline Jog</td>
</tr>
</tbody>
</table>

- boxing burnout - ½ standing with quick feet and the other ½ from squat position

**9:25am-9:30am Cool Down:** Chris

---

**100 Citizens El Cariso Agenda**

**Date:** 10/5/15 & 10/7/2015

**Group:** Performance

**ALL INTERNS:** Chris, Tarik, and Natalia

**8:00am:** Agenda Read

**Info Table:** N/A

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up:** Natalia

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body:** Natalia

**Equipment:** Battle Ropes

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R) Jumping Jacks</td>
<td>SA Wave (R)</td>
<td>External rotation (R)</td>
</tr>
<tr>
<td>(L) Jumping Jacks</td>
<td>SA Wave (L)</td>
<td>External rotation (L)</td>
</tr>
<tr>
<td>Pushups</td>
<td>6-sec Eccentric pushup</td>
<td>Pushups</td>
</tr>
</tbody>
</table>

- Partner SA Band Row - ½ of 35sec pulling down, ½ of 35 sec isometric hold

**8:49am-9:01am Lower Body:** Chris

**Equipment:** Medicine Balls
<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge w/ Ball</td>
<td>SL RDL (L)</td>
<td>Isometric Lunge w/ OH Ball Press (R)</td>
</tr>
<tr>
<td>Isometric Lunge w/ Ball Press</td>
<td>SL RDL (R)</td>
<td>Isometric Lunge w/ OH Ball Press (L)</td>
</tr>
<tr>
<td>(R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isometric Lunge w/ Ball Press</td>
<td>Alt. Weight Shift at Bottom</td>
<td>Glute Bridges</td>
</tr>
<tr>
<td>(L)</td>
<td>of Squat</td>
<td></td>
</tr>
</tbody>
</table>

**9:01am-9:13am Core:** Tarik  
**Equipment:** Medicine Balls

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral Ball Toss (R)</td>
<td>Bear Crawl (fwd/bkwr)</td>
<td>Side Plank (R)</td>
</tr>
<tr>
<td>Lateral Ball Toss (L)</td>
<td>V-Sit</td>
<td>Low Plank</td>
</tr>
<tr>
<td>Lateral Ball Toss (Alt.)</td>
<td>Low Plank</td>
<td>Side Plank (L)</td>
</tr>
</tbody>
</table>

- Will take place at handball courts

**9:13am-9:25am Cardio:** Chris, Tarik, and Natalia  
**Equipment:** N/A

**Circuit 1**

12-min run walk

**9:25am-9:30am Cool Down:** Chris  
- Will lead cool down for all 3 groups as ONE BIG GROUP

---

**100 Citizens El Cariso Agenda**  
**Date:** 10/9/2015 & 10/14/15  
**Group:** Performance  
**ALL INTERNS:** Tarik, Chris, Xavier  
**8:00am:** Agenda Read  
**Info Table:**  
**Responsibilities:**  
- Greeting new participants  
- Administering New Participant Forms  
- Blood Pressure  
**8:30am-8:37am Warm Up:** Xavier  
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.
If Xavier doesn’t arrive on time for warm-up Tarik will take over for him.

**8:37am-8:49am Upper Body: Tarik**

**Equipment:** Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Plank SA Row w/ Band (L)</td>
<td>Bent Over Row Reverse Flys</td>
<td>Push-Up</td>
</tr>
<tr>
<td>High Plank SA Row w/ Band (R)</td>
<td>Shoulder Press</td>
<td>Three Point Hold 20/20sec</td>
</tr>
<tr>
<td>Shoulder Taps</td>
<td>Bent Over Row</td>
<td>Bent Over Reverse Flys</td>
</tr>
</tbody>
</table>

- Remove one arm for 20 secs, and then the other arm for 20 secs.

**8:49am-9:01am Lower Body: Chris, Xavier**

**Equipment:** N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bag Pick Up Squat Form</td>
<td>Bag Pick Up Hinge Form</td>
<td>Reverse Lunge with Bag (L)</td>
</tr>
<tr>
<td>Squat w/ Bag</td>
<td>Hinge w/ Bag</td>
<td>Reverse Lunge with Bag (R)</td>
</tr>
<tr>
<td>SL Iso. Glute Bridge 20/20sec</td>
<td>Glute Bridge w/ Bag</td>
<td>Squats</td>
</tr>
</tbody>
</table>

**9:01am-9:13am Core: Chris, Tarik, Xavier**

**Equipment:** Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitcase Carry (R)</td>
<td>In &amp; Out Hops</td>
<td>Ant. Load Carry</td>
</tr>
<tr>
<td>Suitcase Carry (L)</td>
<td>Side Plank (R)</td>
<td>SA Hug Carry (R)</td>
</tr>
<tr>
<td>Ant. Load Carry</td>
<td>Side Plank (L)</td>
<td>SA Hug Carry (L)</td>
</tr>
</tbody>
</table>

- Ant. Carry- participants will balance load of bag on knuckles and not rest bag against body.

**9:13am-9:25am Cardio: Xavier, Chris, Tarik**

**Equipment:**

<table>
<thead>
<tr>
<th>Circuit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Course</td>
</tr>
</tbody>
</table>

1. 1 lap around tennis courts
2. 10 Push-Ups
3. 10 Mountain climbers
a. 10 on each leg
4. 10 Squats
5. 1 lap around tennis courts

9:25am-9:30am Cool Down: Xavier

100 Citizens El Cariso Agenda

Date: 10/16/2015 & 10/19/15

Group: Performance

ALL INTERNS: Tarik, Xavier

8:00am: Agenda Read

Info Table:

Responsibilities:
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

8:30am-8:37am Warm Up: Xavier

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

8:37am-8:49am Upper Body: Tarik, Xavier

Equipment: Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB OH Press from Kneeling Position (L)</td>
<td>KB SA High Row (R)</td>
<td>Push-Up</td>
</tr>
<tr>
<td>KB OH Press from Kneeling Position (R)</td>
<td>KB SA High Row (L)</td>
<td>Three Point Hold 20/20sec</td>
</tr>
<tr>
<td>KB OH Side to Side Press from Seated Position</td>
<td>Chair Pose w/ Pulses</td>
<td>High Plank</td>
</tr>
</tbody>
</table>

- Three-point hold- Remove one arm for 20 secs, and then the other arm for 20 secs.

8:49am-9:01am Lower Body: Chris

Equipment: N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat Jumps/ Squats</td>
<td>Hinge w/ Arms at Chest</td>
<td>Squat Jumps/ Squats</td>
</tr>
<tr>
<td>Hopping</td>
<td>Alt. Reverse Lunges</td>
<td>Squats Pulses</td>
</tr>
<tr>
<td>Squats Pulses</td>
<td>Hinge w/ Arms OH</td>
<td>Hinge w/ Arms OH</td>
</tr>
</tbody>
</table>

- Squat jumps/squats- 20 seconds each

9:01am-9:13am Core: Tarik, Xavier
Equipment: Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner Side Plank</td>
<td>Bird Dog</td>
<td>Standing Mountain Climb</td>
</tr>
<tr>
<td>w/ Row (R)</td>
<td></td>
<td>Climbers</td>
</tr>
<tr>
<td>Partner Side Plank</td>
<td>Partner Side Plank</td>
<td>Power Knees (R)</td>
</tr>
<tr>
<td>w/ Row (L)</td>
<td>w/ Fly (R)</td>
<td></td>
</tr>
<tr>
<td>Low Plank</td>
<td>Partner Side Plank</td>
<td>Power Knees (L)</td>
</tr>
<tr>
<td></td>
<td>w/ Fly (L)</td>
<td></td>
</tr>
</tbody>
</table>

9:13am-9:25am **Cardio**: Tarik, Xavier

Equipment:

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fwd/Rev Quick Feet</td>
<td>Burpees</td>
<td>Jumping Jacks</td>
</tr>
<tr>
<td>Hopping</td>
<td>Sideline to Sideline Jog</td>
<td>Jumping Jills</td>
</tr>
<tr>
<td>High Knees</td>
<td>Uppercuts</td>
<td>Speed Skaters</td>
</tr>
</tbody>
</table>

9:25am-9:30am **Cool Down**: Xavier

**100 Citizens El Cariso Agenda**

Date: 10/21/15 & 10/23/2015

**Group**: Performance

**ALL INTERNS**: Tarik, Chris, and Xavier

**8:00am**: Agenda Read

**Info Table**:

- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up**: Xavier

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

**8:37am-8:49am Upper Body**: Chris, Xavier

Equipment: Steppers

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bent-Over Y’s</td>
<td>Stepper: Triceps Dip</td>
<td>Chair Pose</td>
</tr>
<tr>
<td>Stepper: Moving High Plank(L→R)</td>
<td>Bent-Over T’s</td>
<td>Stepper: Triceps Dip</td>
</tr>
</tbody>
</table>
### 8:49am-9:01am Lower Body
**Equipment:** N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking Lunges</td>
<td>Hinge</td>
<td>Squat Jacks</td>
</tr>
<tr>
<td>Squat Jumps (Traveling FWD)</td>
<td>SL Glute Bridge (R)</td>
<td>Squats</td>
</tr>
<tr>
<td>Iso. Squat w/ Pulses</td>
<td>SL Glute Bridge (L)</td>
<td>Hinge</td>
</tr>
</tbody>
</table>

### 9:01am-9:13am Core
**Equipment:** N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Climbers</td>
<td>Standing Mountain Climbers</td>
<td>Forward Crawl</td>
</tr>
<tr>
<td>High Plank Knees to Elbows</td>
<td>Chair Pose</td>
<td>Reverse Crawl</td>
</tr>
<tr>
<td>In → Out Hops</td>
<td>Chair Pose w/ Pulses</td>
<td>Iso. Crawl</td>
</tr>
</tbody>
</table>

### 9:13am-9:25am Cardio
**Equipment:** Hurdles / Ladders

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders: Lateral 2in (R)</td>
<td>Hurdles: Run/Jump Over</td>
<td>Quick Feet</td>
</tr>
<tr>
<td>Ladders: Lateral 2in (L)</td>
<td>Hurdles: Zig-Zag Through</td>
<td>Jumping Jacks</td>
</tr>
<tr>
<td>Ladders: 2in → 2out (fwd)</td>
<td>Hurdles: Run/Jump Over</td>
<td>10yd Sprint w/ 10yd Backpedal</td>
</tr>
</tbody>
</table>

- 15yd sprint after each exercise through the hurdles or ladders

### 9:25am-9:30am Cool Down
**Equipment:** N/A

### 100 Citizens El Cariso Agenda
**Date:** 10/26/15 & 10/28/2015

**Group:** Performance

**ALL INTERNS:** Tarik, Chris, and Natalia

**8:00am:** Agenda Read

**Info Table:**

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
Blood Pressure

8:30am-8:37am Warm Up: Natalia
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 10mins.

8:37am-8:49am Upper Body: Natalia
Equipment: Ropes

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA External Rotation (R)</td>
<td>Sidewinders</td>
<td>Walk Out Push-Ups</td>
</tr>
<tr>
<td>SA External Rotation (L)</td>
<td>Chair Pose w/ Rope</td>
<td>SA Waves (R)</td>
</tr>
<tr>
<td>Walk Out Push-Up</td>
<td>Chair Pose Pulses</td>
<td>SA Waves (L)</td>
</tr>
</tbody>
</table>

8:49am-9:01am Lower Body: Chris
Equipment: SandBags

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge w/ Bag</td>
<td>SL Glute Bridge (L)</td>
<td>SL Lunge w/ Bag (R)</td>
</tr>
<tr>
<td>SL Lunge w/ Bag (R)</td>
<td>SL Glute Bridge (R)</td>
<td>SL Lunge w/ Bag (L)</td>
</tr>
<tr>
<td>SL Lunge w/ Bag (L)</td>
<td>Iso. Glute Bridge w/ Alt. Foot Taps</td>
<td>Squat w/ Bag</td>
</tr>
</tbody>
</table>

9:01am-9:13am Core: Tarik
Equipment: Dumbbell

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Plank w/ Press (R)</td>
<td>BirdDog w/ Pulses (R)</td>
<td>High Plank w/ Knee To Elbow</td>
</tr>
<tr>
<td>Reverse High Plank</td>
<td>Iso. Crawl Hold</td>
<td>In &amp; Out Jumps</td>
</tr>
<tr>
<td>Side Plank w/ Press (L)</td>
<td>BirdDog w/ Pulses (L)</td>
<td>Reverse High Plank</td>
</tr>
</tbody>
</table>

9:13am-9:25am Cardio: ONE BIG GROUP
Equipment:

<table>
<thead>
<tr>
<th>Circuit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-Min Walk/Run</td>
</tr>
</tbody>
</table>

9:25am-9:30am Cool Down: Chris

100 Citizens El Cariso Agenda          Date: 10/30/15 & 11/02/2015
**Group: Performance**  
**ALL INTERNS:** Tarik, Chris, and Natalia  
**8:00am:** Agenda Read  
**Info Table:**

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up:** Natalia  
For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 7 mins.

**8:37am-8:49am Upper Body:** Natalia  
**Equipment:** Bands

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push-Up</td>
<td>Row w/ Band</td>
<td>Walk Out Push -Up</td>
</tr>
<tr>
<td>Walk Out High Plank</td>
<td>Shoulder Extension w/ Band</td>
<td>Shoulder Tap</td>
</tr>
<tr>
<td>High Plank Hold</td>
<td>Row w/ Band</td>
<td>Chair Pose Pulse</td>
</tr>
</tbody>
</table>

**8:49am-9:01am Lower Body:** Tarik  
**Equipment:** N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jump Squats (15sec)</td>
<td>Squat Jacks</td>
<td>Jump Squats (15sec)</td>
</tr>
<tr>
<td>Squats (30sec)</td>
<td></td>
<td>Squats (30sec)</td>
</tr>
<tr>
<td>Iso. SL Hinge (R)</td>
<td>Hinge w/ Arms OH</td>
<td>Iso. Hinge w/ Arms OH</td>
</tr>
<tr>
<td>Iso. SL Hinge (L)</td>
<td>Alt. Reverse Lunges</td>
<td>Squat Jacks</td>
</tr>
</tbody>
</table>

**9:01am-9:13am Core:** Chris  
**Equipment:** Kettlebells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>Goblet Carry</td>
<td>Chair Pose</td>
</tr>
<tr>
<td>High Plank → Low Plank</td>
<td>Rack Carry (R)</td>
<td>Goblet Carry</td>
</tr>
<tr>
<td>Iso. Crawl Hold</td>
<td>Rack Carry (L)</td>
<td>Chair Pose w/ Pulse</td>
</tr>
</tbody>
</table>

**9:13am-9:25am Cardio:** ONE BIG GROUP  
**Equipment:** Battle Ropes

| Circuit 1          | Circuit 2                        | Circuit 3                        |
Battle Rope: Pull & Dash | Jumping Jacks | Quick Feet (calling R/L)
---|---|---
SideLine→ SideLine Jog | Fwd/Rev Quick Feet | High Knees | Hopping

**9:25am-9:30am Cool Down:** Chris

---

**100 Citizens El Cariso Agenda**

Date: 11/4/15 & 11/06/2015

**Group: Performance**

ALL INTERNS: Tarik, Chris, and Xavier

8:00am: Agenda Read

Info Table:

**Responsibilities:**

- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

8:30am-8:37am *Warm Up:* Xavier

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 7 mins.

8:37am-8:49am *Upper Body:* Tarik

**Equipment:** KettleBells

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA OH Press w/ KB (R)</td>
<td>High Plank SA Row w/ KB (R)</td>
<td>Walk Out Push-Up</td>
</tr>
<tr>
<td>SA OH Press w/ KB (L)</td>
<td>High Plank SA Row w/ KB (R)</td>
<td>Bent Over SA Row (R)</td>
</tr>
<tr>
<td>Triceps Dips</td>
<td>Shoulder Taps</td>
<td>Bent Over SA Row (L)</td>
</tr>
</tbody>
</table>

- KB Press: Seated

8:49am-9:01am *Lower Body:* Xavier & Chris

**Equipment:** SandBag

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jump Squats (15sec) Squats (30sec)</td>
<td>Hinge w/ Bag</td>
<td>Squat w/ Bag</td>
</tr>
<tr>
<td>Iso. Hinge w/ Arms OH</td>
<td>Bent-Over Row</td>
<td>Alt. Reverse Lunges w/ Bag</td>
</tr>
<tr>
<td>Squat Jacks</td>
<td>Bag Pick-Up (Hinge Form)</td>
<td>Squat Pulses w/ Bag</td>
</tr>
</tbody>
</table>
9:01am-9:13am Core: Tarik & Xavier (Participants as ONE BIG GROUP)
Equipment: Medicine Balls

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iso Crawl Hold w/ Ball Roll (L)</td>
<td>BirdDog w/ Pulses (R)</td>
<td>Russian Twist w/ Medicine Ball</td>
</tr>
<tr>
<td>Iso Crawl Hold w/ Ball Roll (R)</td>
<td>BirdDog w/ Pulses (L)</td>
<td>V-Sit</td>
</tr>
<tr>
<td>Iso. Crawl Hold</td>
<td>High Plank → Low Plank</td>
<td>Plank</td>
</tr>
</tbody>
</table>

- Russian Twist: assure movement is solely in the arms

9:13am-9:25am Cardio: ONE BIG GROUP
Equipment:

<table>
<thead>
<tr>
<th>Circuit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>12min Walk/Run</td>
</tr>
</tbody>
</table>

9:25am-9:30am Cool Down: Chris

---

100 Citizens El Cariso Agenda

**Date:** 11/9/15 & 11/13/2015

**Group:** Performance

**ALL INTERNS:** Xavier, Tarik

**8:00am:** Agenda Read

**Info Table:**

**Responsibilities:**
- Greeting new participants
- Administering New Participant Forms
- Blood Pressure

**8:30am-8:37am Warm Up:** Xavier

For the dynamic warm-up, we will first focus on slow continuous movements such as jogging coupled with movements that are relevant to what will be done that day, and increase intensity as we get closer to the end of the 7 mins.

**8:37am-8:49am Cardio:** ONE BIG GROUP

**Equipment:**

<table>
<thead>
<tr>
<th>Circuit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Course</td>
</tr>
<tr>
<td>1. 1 Lap</td>
</tr>
<tr>
<td>2. 10 Push-Ups</td>
</tr>
</tbody>
</table>
3. 10 Mountain Climbers  
4. 10 Squats  
5. 1 Lap

**8:49am-9:01am Upper Body:** Tarik & Xavier (TARIK LEAD)  
Equipment: SandBag

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat to Walk Out Push-Up</td>
<td>Chair Pose w/ Pulse</td>
<td>Modified Push-Up</td>
</tr>
<tr>
<td>Bent-Over Row</td>
<td>High Row</td>
<td>High Plank</td>
</tr>
<tr>
<td>Modified Push-Up</td>
<td>Bent-Over Row</td>
<td>Chair Pose w/ Pulse</td>
</tr>
</tbody>
</table>

**9:01am-9:13am Lower Body:** Tarik & Xavier (TARIK LEAD)  
Equipment: N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt. Reverse Lunges</td>
<td>1 Minute Squat Test</td>
<td>Squat Pulses</td>
</tr>
<tr>
<td>SL Hinge w/ Arms OH (R)</td>
<td>SL Hinge w/ Arms OH (R)</td>
<td></td>
</tr>
<tr>
<td>SL Hinge w/ Arms OH (L)</td>
<td>Iso Hinge w/ Arms OH</td>
<td>SL Hinge w/ Arms OH (L)</td>
</tr>
</tbody>
</table>

**9:13am-9:25am Core:** Tarik & Xavier (XAVIER LEAD)  
Equipment: N/A

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank Test (2mins Max)</td>
<td>Power Knees (R)</td>
<td>Side Plank Pulse (R)</td>
</tr>
<tr>
<td>Standing Mountain Climbers</td>
<td>Low Plank Pulse</td>
<td></td>
</tr>
<tr>
<td>Power Knees (L)</td>
<td>Side Plank Pulse (L)</td>
<td></td>
</tr>
</tbody>
</table>

**9:25am-9:30am Cool Down:** Tarik
Appendix K

100 CITIZENS MANUAL

100 Citizens is a free exercise program for adult and seniors provided by California State University, Northridge Kinesiology students. Participants engage in exercise stations designed for all fitness levels, focusing on improving cardiovascular endurance, muscular strength and endurance, flexibility, balance, agility, and fall prevention. The 100 Citizens location in Sylmar, California takes place at El Cariso Community Regional Park on Mondays, Wednesdays, and Fridays from 8:30am to 9:30am.

The 100 Citizens Program provides participants with the tools to become more physically active and nutritionally aware. In return, they will serve as healthy role models to their families, friends, co-workers, and others in their community. With program offerings on Mondays, Wednesdays, and Fridays from 8:30am to 9:30am, participants will engage in 60 minutes of exercise targeting cardiovascular endurance, muscular strength and endurance, flexibility, balance, agility, and fall prevention.

Participant Requirements

Before enrolling in the 100 Citizens Program, participants must complete the following on the day of registration. Registration will be facilitated by one student at the Info Booth, located inside the gymnasium. Once complete and cleared to exercise, participants will be placed with the Let’s Get Moving, Active Lifestyle, or Performance group based on testing results.

1. Registration Forms*
   a. Los Angeles County Registration Form
   b. Los Angeles County Photo Consent
   c. Physical Activity Readiness Questionnaire (PAR-Q)
      i. If a participant answers “yes” to one or more questions, a
         physician’s clearance with signed approval to exercise is required
         before engaging in the program

*All participant paperwork (registration forms, PAR-Q, contact information, etc.) is held in a 3-ring binder, and stored in the front desk of El Cariso Community Regional Park

2. Blood Pressure
   a. Equipment: Omron 10 Plus Series Upper Arm Blood Pressure Monitor
   b. After successfully completing registration forms, a student will take blood pressure with the following steps:
      i. Ask participant if they have consumed caffeine or have performed any physical activity prior to measuring blood pressure
ii. Instruct the participant to sit still on a stable chair with back supported and feet flat on the floor for 5 minutes

iii. Follow instruction on blood pressure monitor and take participant through protocol

iv. Record findings on participants’ PAR-Q (blood pressure, heart rate, date, and time)
   1. If blood pressure is less than 140/90 (both variables), and answered “no” to all PAR-Q questions, participants are cleared to exercise
   2. If blood pressure is greater than or equal to 140/90 (either variable), have the participant sit in a relaxed position for 5 minutes and re-test
      a. If blood pressure is still greater than or equal to 140/90 (either variable), instruct the participant to obtain a physician’s clearance with signed approval to exercise is required before engaging in the program

Participant Attendance Tracking

1. Attendance
   a. Pre-Assigned Number
      i. Upon registration, all participants are pre-assigned a number based on their fitness group
         1. #1,000 through #1,999 — Let’s Get Moving
         2. #2,000 through #2,999 — Active Lifestyle
         3. #3,000 through #3,999 — Performance
      ii. This process assists in tracking participant attendance and testing results, and to maintain confidentiality during data collection
   b. Check-In
      i. Participants are manually checked-in on each program day by a 100 Citizens student onto a sign-in sheet
         1. Covers four weeks worth of attendance
         2. Organized by participants’ last names, who have attended the program within two months
Program Procedures

Set-Up Procedures*

- **7:45am**: Program and Exercise Directors arrive and open all storage areas to have equipment readily available, and have student volunteer/intern sign-in sheets and exercise agendas prepared.
- **8:00am**: All students (Lead and Assistant Instructors) arrive to discuss the day’s agenda (agenda read) and tasks with the Directors. Exercise station set-up immediately follows. All students receive exercise agendas by 12:00pm on the day prior to review.
- **8:30am**: 100 Citizens Fitness Program begins with a 7-minute warm-up led by a Lead or Assistant Instructor. Participant check-in process is provided by Directors, as well as Assistant or Lead Instructors.
- **8:37am-9:25am**: Four 12-minute exercise stations to target different muscle groups (upper body, lower body, core, and cardio) begin. Exercise stations led by Directors, Lead Instructors, and Assistant Instructors.
- **9:25am-9:30am**: 100 Citizens Fitness Program ends with a 5-minute cool-down led by a Lead or Assistant Instructor, incorporating stretching and breathing techniques.
- **9:30am-9:45am**: All equipment is returned to storage areas. Program and Exercise Directors provide feedback to Lead and Assistant Instructors on their performance during the Fitness Program.

*Program hours may vary per park.

Exercise Programming

1. Group Philosophies
   a. **Let’s Get Moving (LGM)**
   Focus is on movement comprehension and general physical training. The movements will be easy to understand/instruct and be less complex in nature. Movements are primarily stationary in nature versus dynamic (stationary vs. walking lunges) due to lack of coordination and balance of lower fit individuals. Will incorporate power into some movements, such as squatting at a faster rate during the concentric phase, but not jumping for height. This is to reduce impact because most participants in this group are considerably overweight or lack the range of motion and muscular strength to complete such activities with ease. There is also a higher proportion of older individuals in this group. Will provide multiple levels for exercises, including what is intended for this group as well as what is intended for Active Lifestyle to challenge themselves (Let’s Get Moving: stationary single leg lunge, Active Lifestyle: alternating lunges). Sequencing of exercises will target antagonistic muscles followed by
agonist as much as possible, which will be defined as supersets. Localized muscular fatigue will likely be an issue if compound work is incorporated. Compound work will be defined as consecutive exercises targeting the same muscle group. Exercises will be primarily body weight to emphasize fundamental movements, but will use equipment to supplement routine to increase or decrease intensity.

b. *Active Lifestyle (AL)*

Focus is on general physical training. Movements will increase in complexity from Let’s Get Moving, but will be relatively easy to comprehend for a beginner. Movements will be a combination of stationary and dynamic movements (stationary & walking lunges) to challenge all participants in this group appropriately. This group will incorporate power movements, such as jump squats and hopping. Power movements will be quantified by the number of times the feet contact the ground. The number of contacts per session will be limited to well below the NSCA’s guidelines for beginners, 80-100 contacts. Multiple levels for exercises will be provided at the level intended for this group, as well as what is intended for LGM and Performance so there is the option for challenge as well as regression when fatigue sets in. (Level 1: stationary single leg lunge, Level 2: alternating lunges, Level 3: Switch jumps).

Sequencing of exercises will incorporate both supersets and compound work. Body weight exercises as well as additional external resistance will be used in this group.

c. *Performance (P)*

Focus is on mastery of basic movements and advancement into more challenging patterns. Additionally, there will be a higher demand on the physical capacity in this group. Movements will be more complex in nature and will require more exercise experience that would have been developed in the Let’s Get Moving and Active Lifestyle groups. Simple movements will also be incorporated, but to a lesser extent. Movements are primarily dynamic, require multiple movements and challenges for balance. Stationary exercises will be used when appropriate. Power is incorporated into movements when appropriate, such as jump squats and power push-ups. Multiple levels for exercises will be provided. The levels provide what is intended for Performance, Active Lifestyle and Let’s Get Moving so the option of regression is there when fatigue sets in (Level 3: push-up jacks, Level 2: standard push-ups, Level 1: modified push-ups).

Sequencing of exercises will contain a mix of supersets and compound work, with an emphasis on compound. Body weight will be used when performing power movements and external resistance will be used to increase the difficulty of stationary and dynamic non-power movements.

2. **Group Goals**

a. Prior to each semester and program, goals should be set based on the criteria to progress into the next fitness level. Goals can include movement comprehension, physical capacity goals, attendance for increased stimulus, etc. These goals should be specific to each group, and relayed to the
participants in order to provide a greater sense of purpose. The Exercise Director will coordinate with the Assistant Exercise Director(s) to determine an appropriate goal for each group.

3. Exercise Intervention
   a. Macrocycle
      Long-term training cycle encompassing both mesocycles and microcycles. Macrocycles can last years in extreme scenarios, such as for Olympic athletes. For the purposes of 100 Citizens, the macrocycle will last anywhere from 10-14 weeks each semester. Pre and post testing weeks will not be included in this time period. It will be viewed as separate due to the volume of work provided during testing being very minimal and is only meant to be a benchmark of fitness. The overarching goals of fitness will be set here, which will determine the subsequent programming of each mesocycle and microcycle.
   b. Mesocycle
      Medium-term training cycle that usually lasts between 2-8 weeks. The length of the macrocycle will determine the length of the mesocycles. Each semesterly macrocycle will encompass 3 mesocycles with different goals in mind. These goals will typically follow this pattern, but are subject to change at the suggestion of the Exercise Director:
      i. Mesocycle 1: Moderate volume to build conditioning (ex: 35-second intervals per exercise, paired with simple movements)
      ii. Mesocycle 2: Increased volume to allow for more complex and intense movements to be learned (ex: 40-second intervals per exercise, paired with multiple exercises fatiguing the same muscle group in the same circuit)
      iii. Mesocycle 3: Return to initial volume to allow for an integration of complex and simple movements leading up to the post testing date
   c. Microcycle
      Short term training cycles typically 3-7 days in length, will be three days for the 3-day per week programs, and two days for the programs that host two sessions per week. Volume can be altered every microcycle or mesocycle. These should be increases and decreases in volume, programmed well in advance or altered due to an observed need for change by the Exercise Director (ex: the final week before testing will include a progressive taper, in which there is a standardized reduction in training load where basic movements will be practiced at 30-second intervals per exercise. This is to ensure soreness will not factor into testing and there is an understanding of the testing variables).

4. Exercise Agenda Breakdown
   a. 7-Minute Warm-Up: a 100 Citizens warm-up is brief due to the limited amount of time per session, thus needing to be as effective as possible. To have an effective warm-up, the following principles must be followed:
i.  *Low intensity → High intensity:* The warm-up must allow participants to do exactly that, warm-up. Begin with movements such as light jogging to begin to raise the body temperature and heart rate. Couple this with low-demand movements such as walking knee hugs, carioca, skips etc. There should be constant movement.

ii.  *Simple → Complex:* All movement should be implemented in this manner. Simply put, start with the basic movements such as lunging before moving on to a lunge twist coupled with a skip. Assure that the most basic pattern is instructed first.

   1. A modified pattern may be the base for LGM.

iii.  *Movement Selection:* Before the warm-up is designed, the entire agenda must first be read. Only then will you be able to program the warm-up according to the movements to be performed that day (ex: if reverse lunges with a bag swing is an exercise in the lower body station, you will want to go over lunges in the warm-up with some type of rotational movement coupled with it).

b. 12-Minute Cardiovascular Station: Our target in this station is to maintain an elevated heart rate for the duration of the 12-minute period. There are many ways to accomplish this, such as obstacle courses, continuous running or even circuits containing movements that do not heavily fatigue any compound movement pattern. An example of a cardio circuit is as follows:

   i.  

<table>
<thead>
<tr>
<th>Jumping Jacks</th>
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<tbody>
<tr>
<td>Quick Feet</td>
</tr>
<tr>
<td>Suicides</td>
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</tbody>
</table>

   c. 12-Minute Lower Body Station: Emphasis on hinging and squatting

d. 12-Minute Core Station: Emphasis on carrying, planking, crawling and rotating/anti-rotating

e. 12-Minute Upper Body Station: Emphasis on pushing and pulling.

f. 5-Minute Cool-Down: Similar to the warm-up, the 100 Citizens cool-down is short. Gains in flexibility will likely not occur due to our cool-down, however, we use this time to return to levels of pre-exercise flexibility by stretching all major muscle groups used in that session.

5. Station Breakdown

   a. Three circuits per station

   i.
ii. If all three circuits are completed before the 12-minute period is over, cycle through the stations in order until time is called

b. Three exercises per circuit
   i.

<table>
<thead>
<tr>
<th>Circuit 1</th>
<th>Circuit 2</th>
<th>Circuit 3</th>
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</table>

   c. Duration: Varied depending on the volume determined by the Exercise Director for that specific session. In accordance with the Macro/Meso/Microycle scheme.
      i. Let’s Get Moving (LGM): Exercises will be instructed one at a time for greatest understanding. When appropriate, more than one exercise can be instructed in a row when not much comprehension needed (ex: quick feet, butt kickers, light jogging)
      ii. Active Lifestyle (AL): Exercises may be instructed one at a time or in multiples depending on the complexity of the movement and possibility of overwhelming the participant with too many cues. Familiar movements can likely be explained in couples, and new movements one at a time.
      iii. Performance (P): Exercises will be instructed all at once with no rest in between movements for most circuits. As movement comprehension has been developed in the previous two groups, less initial explanation will be required. Occasionally when new movements are being introduced, or when the group struggles with a particular movement, exercises can be explained one at a time.

d. Breaks: 30-second breaks are to be provided to the participants at the end of each circuit. This can take place while the Lead Instructor begins explaining the next circuit in order to most effectively use time.

   *encourage participants to keep water bottles next to them

6. Student Distribution
a. To have the program operating as envisioned, the ideal number of student volunteers/interns on a daily basis is 28. However, this is an ideal situation and it is likely that there will be considerably less students. If the amount of students and volunteers is less than this number there must be an equal distribution to each group. This would provide each station a Lead Instructor with an Assistant Instructor across all three fitness groups. This number also includes a Program Director, Exercise Director, Program Manager and a student intern to register new participants.

7. Essential Movements
   a. The movements that we have determined as essential are listed below. These essential movements should be addressed in each workout via multi-joint exercises to get the most amount of work done in the shortest amount of time
      i. Pushing
      ii. Pulling
      iii. Squatting
      iv. Hinging
      v. Carrying
      vi. Crawling/Planking
      vii. Rotating/Anti-Rotating

8. Exercise Environment
   a. The workout environment varies amongst 100 Citizens program locations (from park-to-park). Some groups are led indoors while others are led outdoors. The outdoor programs/groups are led on a variety of surfaces such as grass, turf, asphalt and concrete. All areas are inspected for safety each day of operation.
   b. Due to 100 Citizens being primarily an outdoor program, weather and time of day are considered. If applicable, the program will be moved indoors or cancelled due to extreme weather (heat, wind, rain, cold, etc.) at the discretion of the Program Director and Exercise Director.
Physical Fitness & Biometric Testing

1. Background/Group Pre-Establishment
   a. Prior to an 11-week intervention at El Cariso Community Regional Park in August 2015, 100 Citizens participants were pre-established amongst three groups (Let’s Get Moving, Active Lifestyle and Performance). Participants were placed within these groups based on the current Program Director or Exercise Director’s pure opinion, judgement, or observation at the time. In order to truly ensure all participants are being placed in the appropriate group, physical fitness norms were established amongst each group in Fall 2015. The norms aid in ensuring that participants are being appropriately challenged and that physical fitness progression is taking place.

2. Testing Protocols (Physical Fitness & Biometrics)
   a. Physical Fitness (to be used in the 100 Citizens Program as of August 2015):
      i. Core Endurance: Plank (Navy)
         1. Equipment: Plank Testing Apparatus, Accusplit Survivor A601X Stopwatch, Exercise Mat
         2. Participants will begin in the prone position, propped on forearms and toes
            a. Elbows shoulder-width apart
            b. Upper arms perpendicular to mat (90° at the elbow)
            c. Hands face down and fingertips touching to form a “V”
            d. Feet hip-width apart
         3. Maintain neutral positions from head to heels
         4. Have participant raise into a plank, rest reference rod on the lower back/hips (iliac crest), and clamp reference rod into place
            a. This will serve as the practice repetition (do this quickly and accurately)
            b. Rest participant for 30 seconds
         5. The test is stopped when the participant voluntarily drops down, when the lower back dips below the reference rod for >2 seconds, or the reference rod is raised for >2 seconds
         6. Record hold time in minutes/seconds. FOUR MINUTES MAX.
      ii. Cardiovascular Endurance: 12-Minute Walk/Run (ACSM)
         1. Equipment: Keson lightweight RoadRunner RR112 measuring wheel, Accusplit Survivor A601X Stopwatch
2. Participants will begin from the same start position, and walk, run or use a combination of both to cover as much distance as possible within a 12-minute period
   a. Announce time every minute until the 11-minute mark, after which a time update will be given at the 11:30 minute mark before “STOP” is called at 12 minutes
3. To keep track of laps completed, popsicle sticks will be administered as participants complete each lap
   a. If popsicle stick is dropped by participant, student will run it to participant
4. When the 12-minute period is over, students will have participants stop and remain in place until their distance is measured using the measuring wheel
5. From the start position, a student will walk around the running course with the measuring wheel and retrieve the popsicle sticks each participant has
6. Record the number of popsicle sticks (laps) for each participant
7. Record the distance traveled in feet

iii. Upper Extremity Muscular Endurance: Push-Up (ACSM)
1. Equipment: Push-Up Counter and mat
2. Participants begin with body in the prone position, hands pointing forward and under the shoulder (shoulder-width apart)
3. High plank position for males, modified high plank for females (watch for hips to dip/raise)
   a. Legs hip-width apart
   b. Ankles dorsi-flexed and pressed into floor
4. Place push-up counter in between participant’s hands
5. Participant will practice 1-5 repetitions, then rest for 30 seconds
6. Complete push-ups will be when chest contacts Push-Up Counter, and full extension of arms in plank position (this will be denoted by a beep from the push-up counter)
   a. Count the total number of missed reps on scratch paper
   b. Subtract from total number of reps on Push-Up Counter
Maximal number of push-ups performed consecutively without rest (>2 second pause)

The test is stopped when the participant strains forcibly and/or is unable to maintain correct form for two repetitions

Record number of successful repetitions

**Lower Extremity Muscular Endurance: 1-Minute Squat (Top End Sports)**

1. Equipment: National Public Seating 50 Series All Steel Standard Folding Chair
2. Participants will begin by having their back facing the chair in a position that is comfortable for them to squat (ex: feet shoulder-width apart, chest facing forward, and arms crossed over shoulders or directly in front parallel to the floor)
   a. Chair should be pushed against wall to secure it in place
3. Tester will position him/herself at a 45° angle in relation to participant for greatest view of movement
4. Participant will practice 1-5 repetitions, then rest for 30 seconds
5. The repetition will not be counted if contact is not made with the edge of the chair with their bottoms
6. Instruct participants to complete as many squats as possible in 1-minute without rest (>2 second pause)
7. The test is stopped when the participant strains forcibly, is unable to maintain correct form for two repetitions, or 1-minute elapses
8. Record number of successful repetitions

**Biometrics (to be used in the 100 Citizens Program as of August 2015):**

- **Weight**
  1. Equipment: Detecto 439 Balance Beam Doctor/Physician Scale with Height Rod
  2. Shoes off (no sweaters/jackets, and pockets empty)
  3. Adjust weight on rod until it is in equilibrium
  4. Record WEIGHT in POUNDS (to the nearest ½ pound)

- **Height**
  1. Equipment: Detecto 439 Balance Beam Doctor/Physician Scale with Height Rod
  2. Shoes off (no sweaters/jackets, and pockets empty)
3. Have participant stand straight with heels together
4. Head level (chin parallel to floor)
5. Record HEIGHT in INCHES (to the nearest ½ inch)

iii. BIA/BMI
1. Equipment: Omron HBF-306C BodyLogic Pro Hand Held Body Fat Monitor
2. Press “on” button, press “set” for guest, and press “set” for normal
3. Enter height, weight, age, and sex using the up/down buttons, and press “set”
4. Have the participant stand with both feet slightly apart
5. Place both hands on the monitory by correctly holding the grip electrodes
6. While holding the monitor, extend the arms straight out at a 90° to the body
7. Press the “start” button for the participant
8. Record FAT MASS PERCENTAGE (top) and BMI (bottom)

iv. Waist-to-Hip (Fall 2015 only)
1. Equipment: MyoTape Body Tape Measure
2. Have participant stand straight up, with feet slightly apart
3. Have the participant raise their arms high enough only to allow for measurements. Relax arms once tape is in position.
4. Tape is horizontal around the entire circumference and pulled snugly against the skin
5. Locate the following areas to take measurements:
   a. Waist: Measure at the smallest site above the umbilicus and below the xiphoid process. If the participant does not have a natural waist, measure at the level of the umbilicus
   b. Hip: Measure at the largest circumference around the gluteal muscles
6. Take measurement facing side of participant
7. Record measurements down to 16th of an inch (ex: 42” 4/16)

c. Student Training
   i. All students must engage in two 60-minute sessions of training prior to conducting testing with participants. The first training should consist of reviewing all testing protocols above,
expectations, and proper use of testing equipment. The second training should consist of retention testing amongst students, testing knowledge of testing protocols and use of equipment. All feedback and training sessions should be provided by the Program Director, Exercise Director, and Program Manager.

3. Overview of Testing Days
   a. Participants
      i. Testing Day Agendas
         1. Pre and Post Testing should ideally take place over the span of three days (varies park-to-park). Each physical fitness test is dispersed and performed on specific days to ensure that there is no pre-exhaustion to any particular muscle group prior to performing an exercise. Depending on the number of participants per group, groups should be split into two (ex: Active Lifestyle and Performance as one group, and Let’s Get Moving as the other group). Testing days per group (Active Lifestyle/Performance and Let’s Get Moving) will be as follows:

Active Lifestyle & Performance Testing Agenda Example:

<table>
<thead>
<tr>
<th>Day 1 (Mon.)</th>
<th>Day 2 (Wed.)</th>
<th>Day 3 (Fri.)</th>
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<tbody>
<tr>
<td>Check-In</td>
<td>Check-In</td>
<td>Check-In</td>
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<tr>
<td>Paperwork*</td>
<td>Paperwork*</td>
<td>Paperwork*</td>
</tr>
<tr>
<td>Biometrics*</td>
<td>Biometrics*</td>
<td>Biometrics*</td>
</tr>
<tr>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up</td>
</tr>
<tr>
<td>Plank Test</td>
<td>1-Minute Squat Test**</td>
<td>Make-Up of All Tests***</td>
</tr>
<tr>
<td>12-Minute Walk/Run</td>
<td>Push-Up Test**</td>
<td></td>
</tr>
</tbody>
</table>

*Only needs to be completed on one testing day
**1-Minute Squat Test & Push-Up Test may be performed in any order
***Tests performed in the same order as Day 1 and Day 2 to prevent fatiguing of muscle groups tested
**Let's Get Moving Testing Agenda Example:**

<table>
<thead>
<tr>
<th></th>
<th>Day 1 (Mon.)</th>
<th>Day 2 (Wed.)</th>
<th>Day 3 (Fri.)</th>
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<tbody>
<tr>
<td>Check-In</td>
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<td>Biometrics*</td>
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<tr>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up #1 &amp; #2</td>
<td>Warm-Up</td>
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<td>1-Minute Squat Test**</td>
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<tr>
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<td>12-Minute Walk/Run</td>
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</tr>
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</table>

*Only needs to be completed on one testing day  
**1-Minute Squat Test & Push-Up Test may be performed in any order  
***Tests performed in the same order as Day 1 and Day 2 to prevent fatiguing of muscle groups tested

**ii. Check-In**
1. Upon arrival, participants will be directed to check-in amongst their respective groups

**iii. Paperwork**
1. Adult Consent Form — English or Spanish  
2. Bill of Rights — English or Spanish  
3. Questionnaire — English or Spanish  
   a. Fall 2015 only

**iv. Biometrics**
1. Weight  
2. Height  
3. BIA/BMI  
4. Waist-to-Hip Ratio  
   a. Fall 2015 only

**v. Warm-Up**
1. Warm-Ups prior to physical fitness testing should be tailored specifically to what tests the participants will be performing that day. Two warm-ups, each lasting five minutes long, should be provided per group in the case of any late-comers

**vi. Physical Fitness Tests**
1. All tests will be explained to the entire group by designated leaders (provided concurrently in both English and
Spanish). Afterwards, participants will proceed to an individual student testers to begin
   a. 1-5 practice reps will be allowed to ensure correct form and understanding of test
   b. After practice reps are performed, participants will have 30 seconds of rest. Important cues will be provided during this time.

b. Students
   i. **Station #1: Check-In (four students)**
      1. One student assigned to each check-in station, and one Spanish-speaking students assigned as a floater to assist with translations. Upon check-in, participants receive a paperwork packet denoted with their pre-assigned number (including participant testing flashcard, Adult Consent Form, Bill of Rights, and questionnaire*)
      a. *Fall 2015 only

   ii. **Station #2: Paperwork (two students)**
      1. Two students (one Spanish-speaking) assigned to this station for participants to complete their Adult Consent Form, Bill of Rights, and questionnaire*
      a. *Fall 2015 only

   iii. **Station #3: Biometrics (ten students)**
       1. Four biometric measurements will occurring in this station. English and Spanish speaking students should be evenly dispersed, as well as an assigned floater to ensure proper flow of the participants. Below is the order of the biometric measurement stations:
          a. Weight (one student)
          b. Height (two students)
          c. BIA/BMI (four students, one per BIA)
          d. Waist-to-Hip* (three students, one per myotape)
       i. *Fall 2015 only

   iv. **Station #4: Fitness Tests**
       1. Leaders
          a. Participants will be split into two groups (English-speaking and Spanish-speaking). Two designated leaders (one English-speaking and one Spanish-speaking) will instruct the testing protocols to their respective groups by reading through the provided
script. Designated leaders should understand the testing protocols in their entirety.

2. Testers
   a. Each student is paired with a participant (after having receiving instruction from designated leader). These students are responsible for ensuring that the testing protocols are being followed. Testers must be strict in following the testing protocols to have accurate assessment. Pre and Post Data will not hold value if the assessments are inaccurate.
   b. Students must ask participants if they have any questions before beginning the test
   c. No motivation or encouragement can be provided while the participant is engaging in a test. This is to ensure uniformity and standardization during test conduction amongst various students.
   d. Responsible for recording data legibly on participant flashcards and sign initials next to each test measured on flashcard. Required to include notes of any testing errors or important participant information that may be pertinent to those analyzing data, such as:
      i. A participant hurt his/her (body part) recently
      ii. Test was terminated early due to _______
      iii. Participant looks as if he/she does not understand instructions or test
   e. Be sensitive to participants’ privacy (students may not announce results or private information).

Normative Data

1. Physical Fitness
   a. The norms established amongst each group are based upon the Fall 2015 Pre-Testing results from El Cariso Community Regional Park. Upon the completion of Fall 2015 Pre-Testing, averages were taken of each test amongst each group.
   b. The norms are subject to change based on an increase in sample size (more participants tested at El Cariso Community Regional Park and other 100 Citizens Program locations)
<table>
<thead>
<tr>
<th></th>
<th>Let’s Get Moving</th>
<th>Active Lifestyle</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>0 - 1:00 minute</td>
<td>1:01 - 1:45 minute</td>
<td>1:46+ minute</td>
</tr>
<tr>
<td>1-Minute Squat</td>
<td>0 - 25</td>
<td>26 - 40</td>
<td>41+</td>
</tr>
<tr>
<td>Push-Up</td>
<td>0 - 15</td>
<td>16 - 30</td>
<td>31+</td>
</tr>
<tr>
<td>12-Minute Walk/Run</td>
<td>0 - 15</td>
<td>16 - 25</td>
<td>26+</td>
</tr>
</tbody>
</table>

2. Challenge Course

   a. The challenge course is a biweekly test administered to participants to track progress throughout the course of the intervention. It is solely available to Active Lifestyle and Performance participants, as they will have the requisite movement capabilities to successfully complete the test. The test consists of a 457 meter run, 10 push-ups, 10 mountain climbers, 10 squats and another 457 meter run. Distance for the lap was the length of one lap around the park running path.

<table>
<thead>
<tr>
<th></th>
<th>Active Lifestyle</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Course</td>
<td>&gt; 6:00 minutes</td>
<td>≤ 6:00 minutes</td>
</tr>
</tbody>
</table>

3. Testing Into Groups

   a. In order to properly place a participant into a group upon registration or when a participant is interested in progressing to the next group, he/she must engage in the following four physical fitness tests (based on interest):
      i. Let’s Get Moving: Plank, 1-Minute Squat, Push-Up, and 12-Minute Walk/Run
      ii. Active Lifestyle or Performance: Plank, 1-Minute Squat, Push-Up, and Challenge Course
   b. The participant’s results must fall within three out of four fitness testing norms in order to be placed into their group of interest
   c. Participant testing upon registration or interest must be administered by a Program Director, Exercise Director, or Program Manager