

## Queens College Step Test

### Purpose

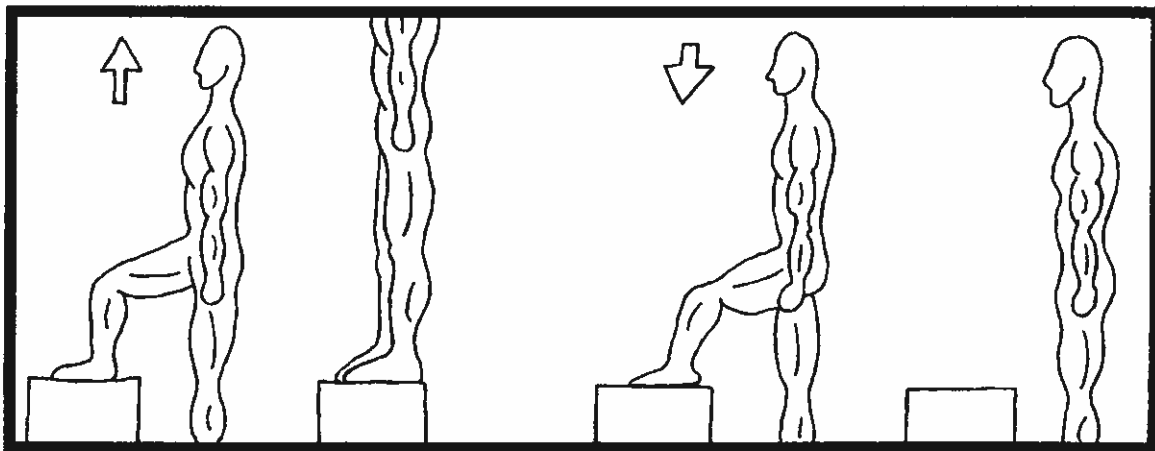
The Step test provides an estimate of maximal aerobic power or cardiovascular endurance while at the same time assessing the applicant's ability to climb stairs.

### Equipment

- A 16 inch step (most gymnasium bleachers are this height)
- A metronome or cassette tape and player

### Procedures

1. Applicants start by facing the bench.
2. With the metronome set at 96 beats per minute for all applicants, the examiner tells the applicants to begin.
3. To a four step cadence the subjects step up on the bench with one leg (*count 1*), bring the other leg to the top of the bench (*count 2*), return the first leg to the floor (*count 3*) and return the other leg to the floor (*count 4*).
4. Each beat of the metronome corresponds to one count. The tester should count aloud, "up-one, up-two, down-one, down-two," to help the subjects stay on the beat.
5. Most of the applicant's foot should contact the top of the step (not just the balls of the foot), and the legs should be nearly straight at the knee at the top of the step.
6. The applicant continues stepping at this cadence for three minutes.



### Scoring

Applicants who complete the three minutes will pass this exam.

# Hand Grip Strength Test

## Purpose

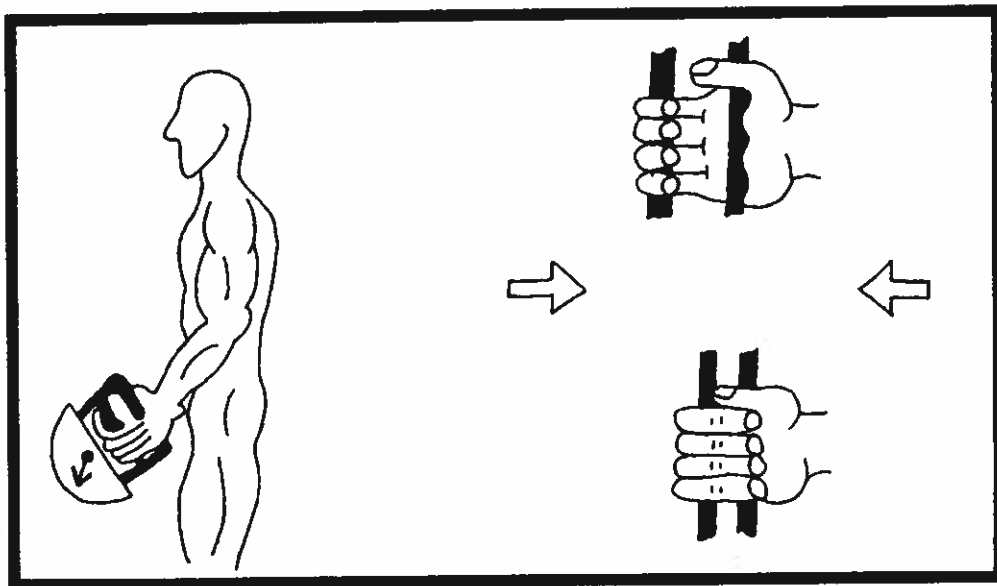
To measure combined gripping strength of the hands which is needed to fire weapons, apply restraints, and control or subdue violent inmates. Grip strength also has a moderately high correlation ( $r=0.69$ ) with the total strength of 22 other muscles of the body. Thus, measurement of hand grip strength gives an indication of the overall strength level of the individual.

## Equipment

- A Hand grip dynamometer

## Procedures

1. Applicants should be in the standing position with the head facing forward and the arms relaxed at the side.
2. The grip size of the dynamometer should be adjusted so that the middle finger's mid-knuckle is approximately at a right angle.
3. The applicant's forearm may be angled between 90-180 degrees (right angle to straight) of the upper arm. The upper arm is in a vertical position and the wrist is straight.
4. From this position, the applicant **squeezes the dynamometer maximally and quickly for up to 5 seconds.**
5. During the test there should be minimal waist, head, shoulder, elbow and wrist movement.
6. The applicant should perform two or three trials alternately with each hand with 10 to 30 seconds between trials for the same hand.



## Scoring

The applicant's score is the sum of the best trial for the right hand and the best trial for the left hand. To pass this test applicants must achieve a score a 51 kilograms.

## LSU Agility Test

### Purpose

Agility is a measure of a person's ability to rapidly change direction while maintaining balance and coordination. This test measures various kinds of agility in one test involving zigzag, dodging and shuttle running, and squat thrusts. Due to the specificity of agility, it is believed that the inclusion of several different types of agility in one test provides a more accurate assessment of overall agility performance. Agileness of movement is important for defense, control, and restraint of hostile inmates.

### Equipment

- A badminton court (if not available, a measuring tape will be needed to mark off the obstacle course; a badminton court is approximately 20 ft. by 44 ft.)
- Seven traffic cones (laid out as indicated on the following page)
- 2 stop watches

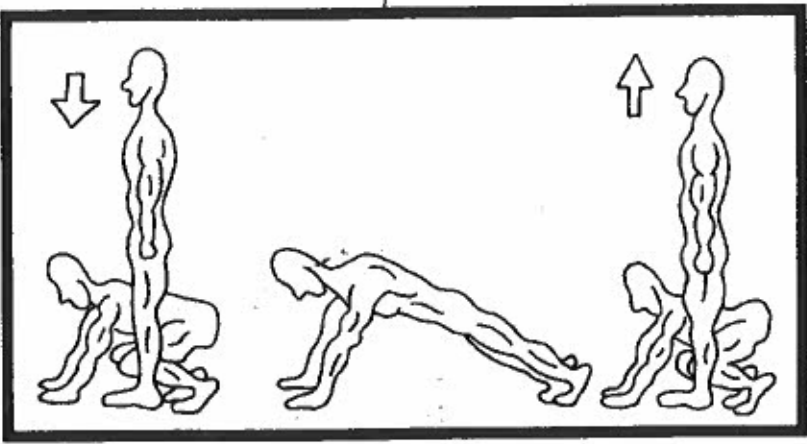
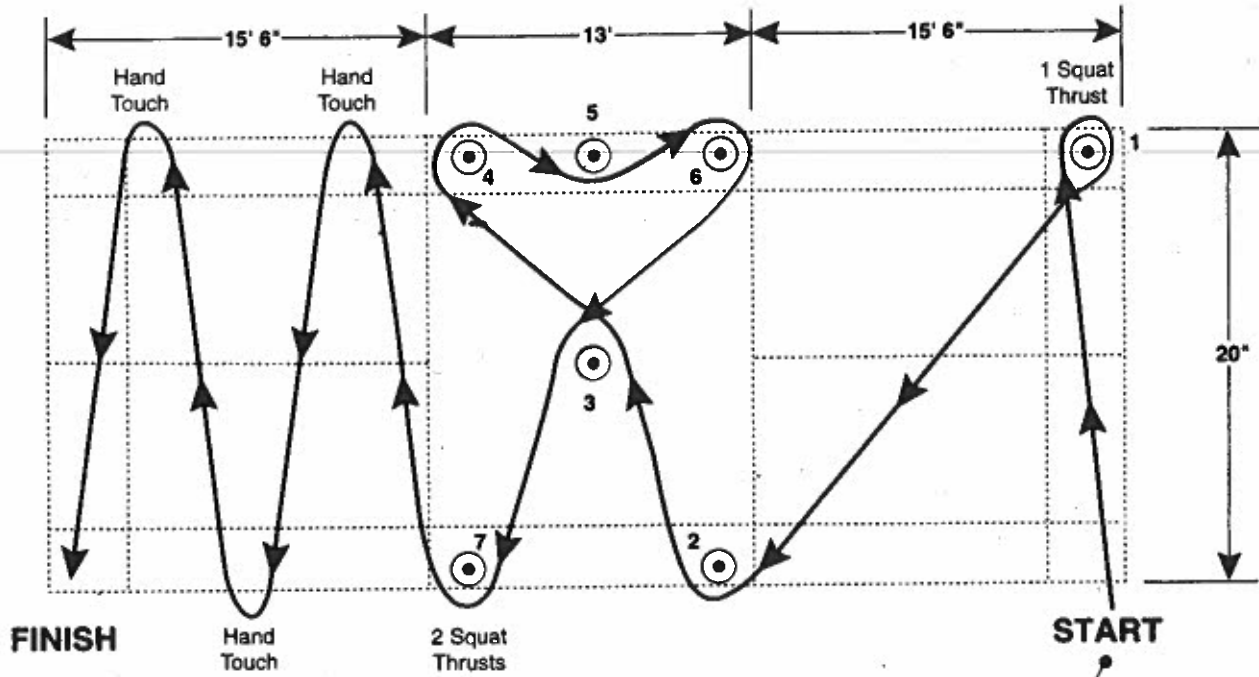
### Procedures

1. The applicant lies on his back with feet behind the end line.
2. When ready, the applicant scrambles to his feet and runs to the left of and all the way around cone 1.
3. The applicant performs one squat thrust, then runs to the left of cone 2, to the right of cone 3, etc.
4. After passing cone 7, the applicant performs two squat thrusts (three squat thrusts in all), then races to the opposite sideline and touches his hand to the floor just over the line.
5. The applicant shuttles back and forth, touching the floor twice more (three hand touches in all).
6. The applicant then races across the finish line.
7. The applicant should practice the test one or two times for familiarization prior to testing. Correct form for the squat thrust is:
  - From an erect standing position, the applicant goes into a squat position by bending at the hips and knees and placing the hands flat on the floor in front of the body.
  - The applicant then kicks both legs out behind and assumes a pushup position.
  - The applicant then returns his legs to the squat position, followed by standing up.

### Scoring

Examiners start the watches when the applicant begins to scramble to his feet. The time is stopped when the applicant crosses the finish line. The score is in seconds to the nearest tenth of a second. There is no penalty for accidentally hitting or tipping over a cone. A penalty of .5 seconds is added to the score each time an applicant fails to perform the squat thrust in the correct four-count sequence. All applicants must complete the obstacle course in less than 30 seconds.

# LSU Agility Obstacle Course



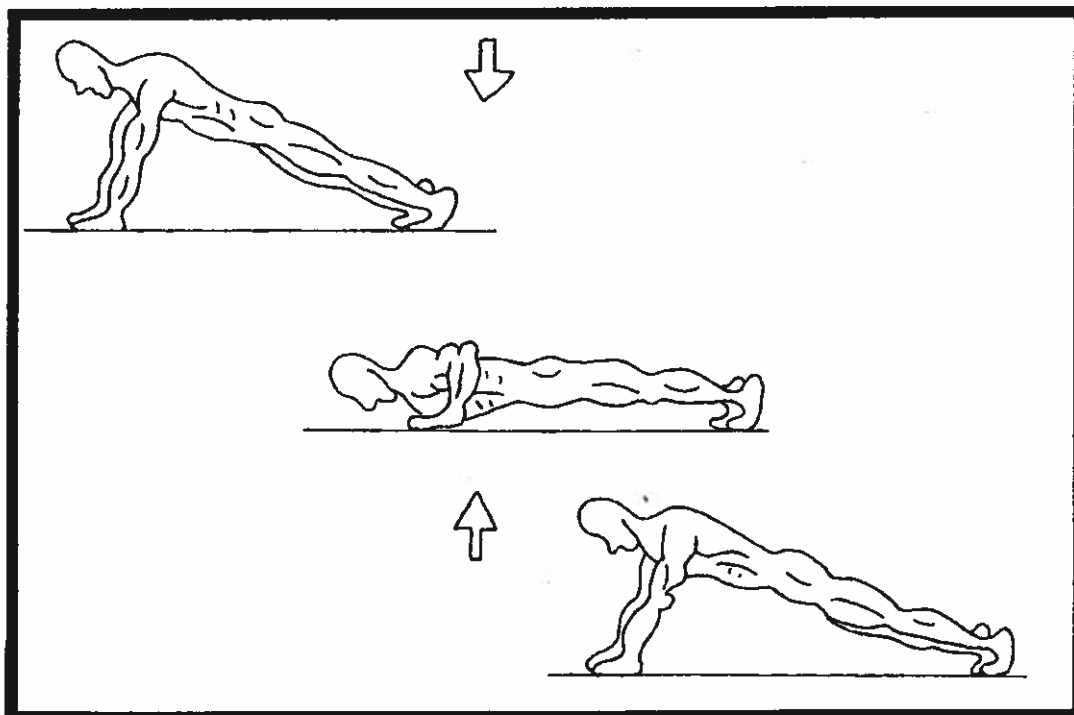
## Push Up Test

### Purpose

The push up test measures the muscular endurance of the chest, upper arm, and shoulder muscles which are required in restraining, subduing, separating, and defending.

### Procedures

1. In a prone (face down) position, the hands are placed at shoulder width and the upper body is elevated to a point where the arms are straight.
2. From this starting position, the applicant lowers the entire body as a unit until the upper arms (triceps and biceps) are parallel to the ground. Recovery includes pushing back upward to a straight arm position.
3. Men will perform the full version of push ups; women may perform either the full push up or modified (from the knees) (ankles crossed optional) push up.
4. The applicant continues to perform as many push ups as possible without stopping while the examiner counts the number of correctly performed push ups which constitutes:
  - straight body
  - straight arms while applicant is in the up position
  - upper arms are *parallel to the ground* in the down position



### Scoring

The applicant's score is the total number of correctly performed push ups (a faulty push up, described above, does not count). Applicants must perform a minimum of 17 push ups.