

Juvenile Institutions Core Training

Unit 17.0: Physical Tasks and Conditioning

Module(s): 17.1- Orientation-Physical Conditioning Basics

17.2-Conditioning Exercises

17.3-Initial Assessment

17.4-Conditioning Exercises

17.5-Conditioning Exercises

17.6-Conditioning Exercises

17.7-Conditioning Exercises

17.8-Conditioning Exercises

17.9-Conditioning Exercises

17.10-Final Assessment and Fitness Planning: Part One

17.11- Final Assessment and Fitness Planning: Part Two

Instructional Time: 17 hours, 30 minutes

1. Welcome and Introductions
2. Objectives
 - a. Module 17.1: Orientation-Physical Conditioning Basics
 - i. Explain key components of a performance-based fitness program and the ways each contributes to fitness.
 - ii. Define common terms used in physical conditioning, such as: core strength, cardiovascular exercises, resistance training, flexibility exercises, plyometrics, recovery time, duration, frequency, sets and reps.
 - iii. Explain the role of Rating of Perceived Exertion (RPE) in a physical conditioning program.
 - iv. Examine the Borg Perceived Exertion Scale as described in the Guidelines for Exercise Testing and Prescription, American College of Sports Medicine, Seventh Edition.
 - v. Identify common mistakes people make when participating in a physical conditioning program.
 - vi. Discuss equipment and clothing needed when participating in a fitness program.
 - vii. Explain the purpose and goals of performance-based conditioning for juvenile corrections officers.
 - viii. Identify common injuries during training that might disable a juvenile corrections officer.
 - ix. Identify signs of overexertion and/or potential dangers during a physical conditioning program.
 - x. Identify the importance of warm-up and cool-down during a physical conditioning program.
 - xi. Explain the difference between static stretching and dynamic stretching and the appropriate applications for each type of stretching.
 - b. Module 17.2: Conditioning Exercises
 - i. Participate in Dynamic Warm-up exercises as described in Segment A, Week 1, of the Physical Tasks Training Manual.

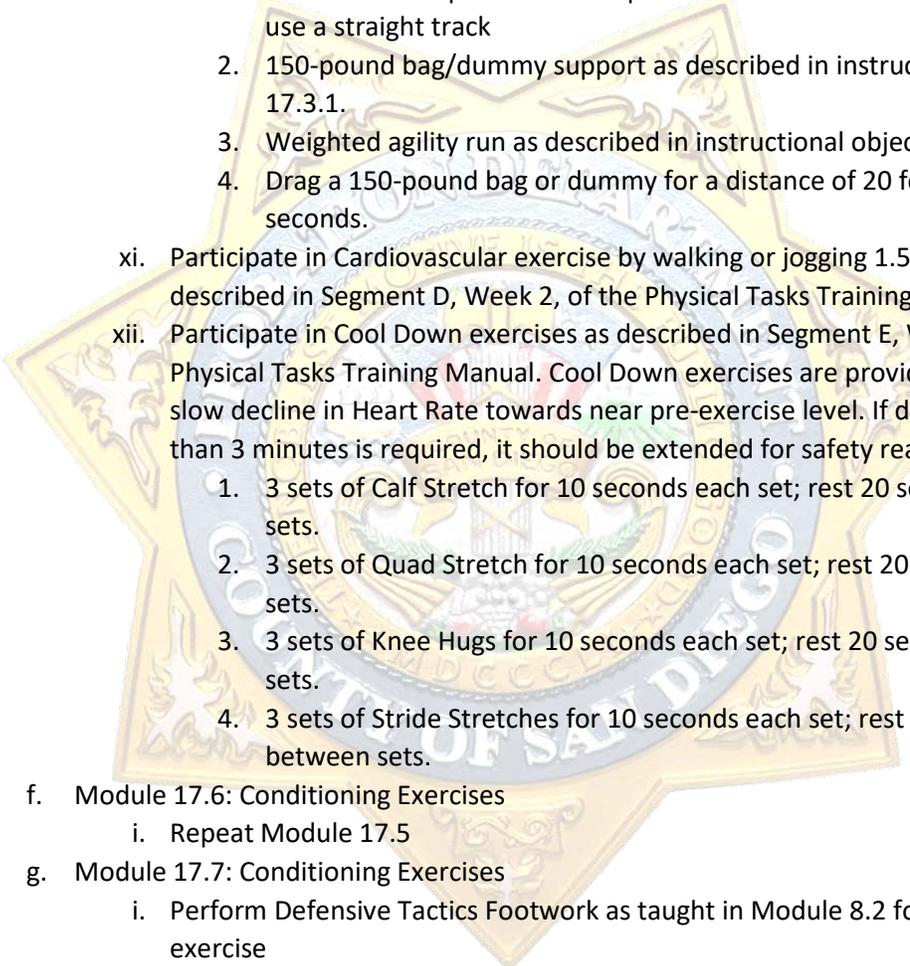
1. 10 complete Arm Circles in each direction
 2. 2-3 Side Bends per side
 3. 10-20 Windmills
 4. One set Trunk Twists, 8 reps per side
- ii. Participate in Low Intensity Strength exercises as described in Segment A, Week 1, of the Physical Tasks Training Manual.
1. One set Stomach Flutter Kicks for 7 reps
 2. One set Knee-to-Forehead for 5-7 reps per leg
 3. One set (up to 20 reps) Push-ups (military or modified)
 4. One set Sit-ups for 10-20 reps
 5. One set Side Leg Raises for 10-12 reps per leg
- iii. Participate in Core Strength exercises as described in Segment A, Week 1, of the Physical Tasks Training Manual.
1. 3 sets of Prone Planks for 10 seconds each set; rest 10 seconds between each set
 2. 3 sets of Right-Side Hover for 10 seconds each set; rest 10 seconds between each set
 3. 3 sets of Left Side Hover for 10 seconds each; rest 10 seconds between each set.
- iv. Participate in Low Intensity Plyometric exercises as described in Segment A, Week 1, of the Physical Tasks Training Manual.
1. 3 sets of warm-up Skipping for 10 skips each set; rest 30 seconds in between each set.
 2. 3 sets of Skipping-for-Height for 10 skips each set; rest 1 minute between each set.
- v. Participate in Upper Body Strength exercises as described in Segment B, Week 1, of the Physical Tasks Training Manual.
1. One set Wrist Curls for 3 reps with weight of “somewhat hard.”
 2. One to three sets of Arm Curls for 6 reps with weight of “somewhat hard.”
- vi. Participate in Lower Body Plyometric exercises as described in Segment B, Week 1, of the Physical Tasks Training Manual.
1. One set of Two-Foot Hops 10 times.
 2. One set of Single-foot, Side-to-Side Hops 10 times.
 3. One set of Two-Foot, Side-to-Side Hops 10 times.
- vii. Participate in Lower Body Strength exercises as described in Segment B, Week 1, of the Physical Tasks Training Manual.
1. One to three sets of 6 reps Leg Press with a weight that feels “somewhat hard”, or Modified Wall Sits (up to 30-40 second hold), 2 reps
- viii. Participate in Cardiovascular exercise by walking or jogging 1 mile as described in Segment D of the Physical Tasks Training Manual.

- ix. Participate in Cool Down exercises as described in Segment E, Week 1, of the Physical Tasks Training Manual. Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If duration of more than 3 minutes is required, it should be extended for safety reasons.
 - 1. 3 sets of Calf Stretch for 5 seconds each set; rest 15 seconds between sets.
 - 2. 3 sets of Quad Stretch for 5 seconds each set; rest 15 seconds between sets.
 - 3. 3 sets of Knee Hugs for 5 seconds each set; rest 15 seconds between sets.
 - 4. 3 sets of Stride Stretches for 5 seconds each set; rest 15 seconds between sets.
- c. Module 17.3: Initial Assessment
 - i. Practice the following two Work Sample Tests as described in the Physical Tasks Training Manual.
 - 1. Dummy Lift: With knees bent, wrap arms around a hanging bag or dummy weighing up to 150 pounds, get a firm hold on it, then straighten legs to lift the bag or dummy high enough to create slack in the rope/chain; aim to hold for 30 seconds. Start with a 120-130 pound bag or dummy. As able to support bag or dummy successfully, increase weight in 10-20 pound increments and/or time spent supporting the bag or dummy.
 - 2. Weighted Agility Run: Walk briskly or jog through a 150-foot zigzag barrier course consisting of three sharp turns, pick up a 20-pound fire extinguisher or weighted tube bag at the 75 foot mark and carry it back through the course, walking briskly. Aim for completing the full course in 30 seconds.
- d. Module 17.4: Conditioning Exercises
 - i. Repeat Module 17.2
- e. Module 17.5: Conditioning Exercises
 - i. Perform Defensive Tactics Footwork as taught in Module 8.2 as cardiovascular exercise.
 - ii. Participate in Dynamic Warm-up exercises as described in Segment A, Week 2, of the Physical Tasks Training Manual.
 - 1. 10 complete Arm Circles in each direction
 - 2. 2-3 Side Bends per side
 - 3. 10-20 Windmills
 - 4. One set Trunk Twists, 8 reps per side
 - iii. Participate in Low Intensity Strength exercises as described in Segment A, Week 2, of the Physical Tasks Training Manual.
 - 1. Two sets Stomach Flutter Kicks for 7 reps
 - 2. One set Knee-to-Forehead for 8-10 reps per leg
 - 3. One set (up to 20 reps) Push-ups (military or modified)
 - 4. One set Sit-ups for 10-20 reps

5. Two sets Side Leg Raises for 13-15 reps per leg
- iv. Participate in Core Strength exercises as described in Segment A, Week 2, of the Physical Tasks Training Manual.
 1. 3 sets of Prone Planks for 15 seconds each set; rest 15 seconds between each set.
 2. 3 sets of Right-Side Hover for 15 seconds each set; rest 15 seconds between each set.
 3. 3 sets of Left Side Hover for 15 seconds each; rest 15 seconds between each set.
- v. Participate in Low Intensity Plyometric exercises as described in Segment A, Week 2, of the Physical Tasks Training Manual.
 1. 3 sets of warm-up Skipping for 10 skips each set; rest 20 seconds in between each set.
 2. 3 sets of Skipping-for-Height for 10 skips each set; rest 1 minute between each set.
- vi. Participate in two Upper Body Plyometric exercises as described in Segment B, Week 2, of the Physical Tasks Training Manual.
 1. 3 sets of Wheel Barrow for 16 steps*
 2. 3 sets of Explosive Wall Push-ups for 10 reps**

*If equipment is available, choose one of two options below:
Alternative: Overhead throw with medicine ball or basketball (same # sets and reps), or
Alternative: Supine single arm overhead throw with medicine ball or basketball (same # sets and reps)

**If equipment is available, choose one of two options below:
Alternative: Chest pass with medicine ball or basketball (same # sets and reps), or
Alternative: Chest push with medicine ball or basketball (same # sets and reps)
- vii. Participate in Upper Body Strength exercises as described in Segment B, Week 2, of the Physical Tasks Training Manual.
 1. One set Wrist Curls for 6-8 reps with weight of "somewhat hard"
 2. One to three sets of Arm Curls for 6-8reps with weight of "somewhat hard."
- viii. Participate in Lower Body Plyometric exercises as described in Segment B, Week 2, of the Physical Tasks Training Manual.
 1. One set of Single-foot, Side-to-Side Hops 10 times.
 2. One set of Two-Foot, Side-to-Side Hops 10 times.
 3. One set of Standing Long Jump for 10 times
 4. One set of Standing Jump/Reach for 10 times.
 5. One set of Jump Over Barrier not exceeding 1.5 feet for 10 times.

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- ix. Participate in Lower Body Strength exercises as described in Segment B, Week 2, of the Physical Tasks Training Manual.
 - 1. One to three sets of 6-8 reps Leg Press with a weight that feels “somewhat hard”, or
 - 2. Modified Wall Sits (up to 30-40 second hold), 2 reps. (Work up to 2-3 sets if previously at one set.)
 - x. Practice the four Work Sample Tests as described in the Physical Tasks Training Manual in the following order:
 - 1. 75 yard Sprint in 30 seconds or less: (Segment C)
use moderate speed in initial sprints to avoid hamstring injury
use a straight track
 - 2. 150-pound bag/dummy support as described in instructional objective 17.3.1.
 - 3. Weighted agility run as described in instructional objective 17.3.1.
 - 4. Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.
 - xi. Participate in Cardiovascular exercise by walking or jogging 1.5 miles as described in Segment D, Week 2, of the Physical Tasks Training Manual.
 - xii. Participate in Cool Down exercises as described in Segment E, Week 2, of the Physical Tasks Training Manual. Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If duration of more than 3 minutes is required, it should be extended for safety reasons.
 - 1. 3 sets of Calf Stretch for 10 seconds each set; rest 20 seconds between sets.
 - 2. 3 sets of Quad Stretch for 10 seconds each set; rest 20 seconds between sets.
 - 3. 3 sets of Knee Hugs for 10 seconds each set; rest 20 seconds between sets.
 - 4. 3 sets of Stride Stretches for 10 seconds each set; rest 20 seconds between sets.
 - f. Module 17.6: Conditioning Exercises
 - i. Repeat Module 17.5
 - g. Module 17.7: Conditioning Exercises
 - i. Perform Defensive Tactics Footwork as taught in Module 8.2 for cardiovascular exercise
 - ii. Participate in Dynamic Warm-up exercises as described in Segment A, Week 3, of the Physical Tasks Training Manual.
 - 1. 10 complete Arm Circles in each direction
 - 2. 2-3 Side Bends per side
 - 3. 10-20 Windmills
 - 4. One set Trunk Twists, 8 reps per side
 - iii. Participate in Low Intensity Strength exercises as described in Segment A, Week 3, of the Physical Tasks Training Manual.
 - 1. Three sets Stomach Flutter Kicks for 7 reps

2. One set Knee-to-Forehead for 11-13 reps per leg
 3. One set (up to 20 reps) Push-Ups (military or modified)
 4. One set Sit-ups for 10-20 reps
 5. Two sets Side Leg Raises for 16-18 reps per leg
- iv. Participate in Core Strength exercises as described in Segment A, Week 3, of the Physical Tasks Training Manual.
1. 3 sets of Prone Planks for 20 seconds each set; rest 20 seconds between each set
 2. 3 sets of Right-Side Hover for 20 seconds each set; rest 20 seconds between each set
 3. 3 sets of Left Side Hover for 20 seconds each; rest 20 seconds between each set.
- v. Participate in Lower Body Strength exercises as described in Segment B, Week 3, of the Physical Tasks Training Manual.
1. One to three sets of 6-8 reps Leg Press with a weight that feels “somewhat hard”, or
 2. Modified Wall Sits (up to 30-40 second hold), 2 reps
- vi. Participate in Lower Body Plyometric exercises as described in Segment B, Week 3, of the Physical Tasks Training Manual.
1. 2 Hexagon Drills for 24 touches each drill
 - a. Flexing knees, jump forward to 12 o’clock position, then back to starting point; repeat to 2, 4, 6, 8, and 10 o’clock positions.
 2. 2 Multi Jumps for Height for 10 jumps each set
 - a. Flexing knees, jump into the air as high as possible, reaching up with arm extended upward
- vii. Participate in one of three Lower Body Plyometric Circuits as described in Segment B, Week 3, of the Physical Tasks Training Manual. See diagrams. Perform 3 circuits. Take 5-minute rest between 17.7.7 and 17.7.8.
1. Plyo Circuit I:
 - a. 3 Two Footed Hops
 - b. fast Jog or Run for 25 to 75 yards
 - c. 3 Single Foot Side-to-side Hops
 - d. fast Jog or Run for 25 to 75 yards
 - e. 3 Standing Long Jumps
 - f. fast Jog or Run for 25 to 75 yards
 - g. 3 Two Footed Side-to-side Hops
 - h. Six 25 to 75 yard Sprints; walk back to start between each sprint
 2. Plyo Circuit II:
 - a. 3 Two Footed Hops
 - b. fast Jog or Run for 25 to 75 yards
 - c. 3 Single Foot Side-to-side Hops
 - d. fast Jog or Run for 25 to 75 yards
 - e. 3 Jump Over Barriers
 - f. fast Jog or Run for 25 to 75 yards

- g. 3 Two Footed Side-to-side Hops
 - h. Six 25 to 75 yard Sprints; walk back to start between each sprint
3. Plyo Circuit III:
- a. 3 Two Footed Hops
 - b. fast Jog or Run for 25 to 75 yards
 - c. 3 Standing Long Jumps
 - d. fast Jog or Run for 25 to 75 yards
 - e. 3 Skips for Height
 - f. fast Jog or Run for 25 to 75 yards
 - g. 3 Single Foot Side-to-side Hops
 - h. Six 25 to 75 yard Sprints; walk back to start between each sprint
- viii. Participate in three Upper Body Plyometric exercises as described in Segment B, Week 3, of the Physical Tasks Training Manual.
- 1. 3 sets of Wheel Barrow for 16 steps
 - 2. 3 sets of Explosive Wall Push-ups for 10 reps
 - 3. One set Push-up Jump for 8 reps
- ix. Participate in Upper Body Strength exercises as described in Segment B, Week 3, of the Physical Tasks Training Manual.
- 1. One set Wrist Curls for 6-8 reps with weight of "somewhat hard."
 - 2. One to three sets of Arm Curls for 6-8 reps with weight of "somewhat hard."
- x. Practice the four Work Sample Tests as described in the Physical Tasks Training Manual in the following order:
- 1. Sprint 75-yards on a straight track in 30 seconds or less.
 - 2. Support the weight of a hanging 150-pound bag or dummy so that all the stress is taken off the rope or chain from which it is suspended for 30 seconds.
 - 3. Walk briskly or jog through a 150-foot zigzag barrier course consisting of three sharp turns, pick up a 20-pound fire extinguisher or weighted tube bag at the 75 foot mark and carry it back through the course, walking briskly. Complete the full course within 30 seconds.
 - 4. Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.
- xi. Participate in Cardiovascular exercises by walking or jogging 2 miles as described in Segment D, Week 3, of the Physical Tasks Training Manual.
- xii. Participate in Cool Down exercises as described in Segment E, Week 3, of the Physical Tasks Training Manual. Cool Down exercises are provided to bring a slow decline in Heart Rate towards near pre-exercise level. If a duration of more than 3 minutes is required, it should be for safety reasons.
- 1. 3 sets of Calf Stretch for 15 seconds each set; rest 25 seconds between sets.
 - 2. 3 sets of Quad Stretch for 15 seconds each set; rest 25 seconds between sets.

3. 3 sets of Knee Hugs for 15 seconds each set; rest 25 seconds between sets.
- xiii. ☑ 3 sets of Stride Stretches for 15 seconds each set; rest 25 seconds between sets.
- h. Module 17.8: Conditioning Exercises
 - i. Repeat Module 17.7
- i. Module 17.9: Conditioning Exercises
 - i. Repeat Module 17.7
- j. Module 17.10: Final Assessment and Fitness Planning: Part One
 - i. On a straight track, complete a 75-yard sprint within 30 seconds.
 - ii. For 30 seconds, support the weight of a hanging 150-pound bag or dummy so that all stress is taken off the rope or chain from which it is suspended.
 - iii. Within 30 seconds, jog or walk briskly 150 feet while maneuvering around obstacles; lift and carry a 20-pound weighted object (such as a fire extinguisher) for 75 feet of the 150 total feet.
 - iv. Drag a 150-pound bag or dummy for a distance of 20 feet within 30 seconds.
 - v. In pairs or small groups of trainees, exchange ideas and goals for on-going, performance-based fitness plans at the conclusion of training, such as the following:
 1. How many days per week can you schedule exercise?
 2. How much time per session can you exercise?
 3. Name 3 Lower Body strength or Plyometric exercises you plan to do.
 4. Name 3 Upper Body strength or Plyometric exercises you plan to do.
 5. Name a form of cardiovascular exercise you plan to do.
 6. What would keep you from adhering to this program?
 7. Name 3 ways to eliminate roadblocks to adhering to this program.

During class, trainees are to write up goals and plans using a structured work sheet or other suitable format.

Discussion and Report Out to Class

- k. Module 17.11: Final Assessment and Fitness Planning: Part Two
 - i. Repeat Module 17.10
3. ***Each day will begin with:
 - a. Warm up exercises and stretching
 - b. Review of prior class
4. ***Each day will close with:

Cleaning of mats (if mat room is used)
5. Evaluations