
HPS 206 - Fitness programmes for special populations

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Assignment

1. Analyze 5 fitness level tests for persons living with disability
2. Draw 8 weeks fitness program table

Fitness level tests for persons living with disability

Musculoskeletal Functioning, Muscular Strength/Endurance-

Trunk Lift — while lying face down, lift the upper body off the floor as high as you can using the muscles of the back.

Grip Strength — a measure of hand and arm strength, using the dominant hand to grip a dynamometer with as much force as possible.

Bench Press — perform as many bench presses as possible using a 35lb (15.9kg) barbell.

Isometric Push-up — hold a raised push-up position for up to 40 seconds.

Push-up — complete as many push-ups as possible at a rate of 1 push-up every 3 seconds.

Seated Push-up — extend the arms and raise the body out of a chair, and hold this position for as long as possible.

Dumbbell Press — lift a 15lb (6.8kg) dumbbell as many times as possible at a specific cadence while sitting in a chair.

Reverse Curl — a measure of hand, wrist, and arm strength. While sitting in a chair, the subject must perform one repetition of bringing a 1lb (0.5kg) dumbbell from the thigh to the flexed-arm position, holding it there for 2 seconds, then returning it to the thigh in a controlled manner.

Push/Walk (40m) — walk or push a wheelchair at a comfortable speed for 40m, with a 5m start zone. It is not a race, participants are encouraged to travel at the speed they usually use for mobility. To pass, they must cover the 40-meter distance in less than 60 seconds while keeping the heart rate below 120 bpm (walkers) or 114 bpm (wheelchair users).

Wheelchair Ramp Test — a test of upper-body strength and endurance, participants attempt to push their wheelchairs up a standard wheelchair ramp. The ramp must be at least 8 feet (2.4 meters) long, at a gradient of 8.3%.

Curl-Up — complete up to 75 curl-ups at a rate of 1 every 3 seconds. The hands slide 4.5 inches along the ground for a complete repetition.

Curl-Up (modified) — the curl-up test, though with the hands resting on the thighs rather than by the side.

Extended-Arm Hang — hanging from an overhead bar with straight arms for up to 40 seconds.

Body composition-

Skinfold Measures — calipers are used to measure the thickness of the skin at the triceps, subscapular, and calf measurement sites.

Body Mass Index — calculated by taking a person's weight and dividing by their height squared

Bioelectrical Impedance Analysis — a measure the resistance of body tissues to the flow of a small electrical signal, and from that the proportion of body fat is calculated

Aerobic Functioning-

PACER test (20m or 15m) — There is also a modified version for vision impaired children.

Target Aerobic Movement Test — test the ability to sustain a moderate intensity of (any) physical activity by maintaining a heart rate between 70 and 85 percent of maximal predicted heart rate for 15 minutes.

One-mile run/walk — run or walk as fast as possible over a one-mile distance

Flexibility-

Back-Saver Sit & Reach — performed with one leg bent, designed to measure the flexibility of the left and right legs separately.

Shoulder Stretch — touch the fingertips together behind the back by reaching over the shoulder and down the back with one arm and across the back with the other arm.

Apley Scratch Test (modified) — attempt to reach overhead with one hand and touch the top of the opposite shoulder blade.

Thomas Test (modified) — requires the subject to sit at the very edge of a bench, then roll back onto the bench while pulling both knees to the chest. Measures hip flexibility.

Target Stretch Test

Elbow extension, Forearm pronation, Forearm supination, Knee extension, Shoulder abduction, Shoulder extension, Shoulder external rotation, Wrist extension

8 week fitness timetable for person on a wheelchair/immobile

We ek 1	Monday- Tricep stretch, spinal twist, arm ergometer	Tuesday- Shoulder shrugs,side bends, pull buoy swimming	Wednesday- Forward flexion, back extensions, rowing	Thursday- Seated rotation, static away from body holds, paddle board	Friday- Neck stretch, crunches, arm aqua jogging
We ek 2	Monday- Side stretch, sit ups, boxing	Tuesday- Scapula activation, russian twists, hand cycling	Wednesday- Hip stretch, spinal twist, rope climbing	Thursday- Tricep stretch, side bends, rowing	Friday- Seated rotation, sit ups, arm ergometer
We ek 3	Monday-Shoulder shrugs,side bends, pull buoy swimming	Tuesday-Seated rotation, static away from body holds, paddle board	Wednesday-Neck stretch, crunches, arm aqua jogging	Thursday-Hip stretch, spinal twist, rope climbing	Friday-Forward flexion, back extensions, rowing
We ek 4	Monday-Forward flexion, back extensions, rowing	Tuesday-Tricep stretch, spinal twist, arm ergometer	Wednesday-Seated rotation, sit ups, arm ergometer	Thursday-Side stretch, sit ups, boxing	Friday-Tricep stretch, side bends, rowing
We ek 5	Monday-Seated rotation, static away from body holds, paddle board	Tuesday-Side stretch, sit ups, boxing	Wednesday-Seated rotation, sit ups, arm ergometer	Thursday-Scapula activation, russian twists, hand cycling	Friday-Hip stretch, spinal twist, rope climbing

We ek 6	Monday- Tricep stretch, spinal twist, arm ergometer	Tuesday- Shoulder shrugs,side bends, pull buoy swimming	Wednesday- Forward flexion, back extensions, rowing	Thursday- Seated rotation, static away from body holds, paddle board	Friday- Neck stretch, crunches, arm aqua jogging
We ek 7	Monday- Side stretch, sit ups, boxing	Tuesday- Scapula activation, russian twists, hand cycling	Wednesday- Hip stretch, spinal twist, rope climbing	Thursday- Tricep stretch, side bends, rowing	Friday- Seated rotation, sit ups, arm ergometer
We ek 8	Monday-Shoulder shrugs,side bends, pull buoy swimming	Tuesday-Seated rotation, static away from body holds, paddle board	Wednesday-Neck stretch, crunches, arm aqua jogging	Thursday-Hip stretch, spinal twist, rope climbing	Friday-Forward flexion, back extensions, rowing