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| --- | --- | --- |
| **Speed-Based Protocols**  Work phase: Speed up & maintain ROM Recovery phase: Slow down & decrease ROM | **Interval description**  All intervals apply effort and speed to gear up or gear down intensity and are performed between warm-up and cool down sets | **OMNI RPE Scale** |
| **SWEAT System**  Choose a basic move:  Walk, jog, rock, jump, scissors  (1) | 15 seconds @ Somewhat easy (develop ROM & currents)  15 seconds @ Somewhat hard to Extremely hard (as fast as possible, maintaining ROM)  15 seconds @ Somewhat easy (recovery, and/or change to new move)  45 seconds to complete each interval bout  Repeat move and/or change move and repeat interval:  2 X = 1.5 minutes  3 X = 2.25 minutes  4 X = 3 minutes | 3-5  6-10  3-5 |
| **Hover Jogs**  1 Hover jog = Combination of jump & 4-6 jogs suspended above the bottom (1) | 15 seconds @ Somewhat hard to Extremely hard (as many jump/jog combined moves as possible)  30 seconds @ Easy to Somewhat easy  45 seconds each interval bout  Repeat hover jog interval 4-8 X or more based on training objective & fitness. | 6-10  2-4 |
| **Arm Stroke Workout**  Shallow running, tethered to wall  1 stroke = every time the right arm is forward (2) | 1 set: 25 strokes @ Somewhat easy  1 set: Somewhat hard to Extremely hard (as fast as possible)  -Recover @ Easy, Somewhat easy, until breathing easy-  3 sets: 50 strokes @ Somewhat hard to Extremely hard  -Recover between each set –  1set: 100 strokes @ Somewhat hard  -Recover and cool down- | 3-5  6-10  1-3  6-10  1-3  6-7  1-2 |
| **Go Hard/Go Easy Timed Round** (Sanders , 2014)  Choose a move, work through the intervals creating a round of HIIT (3) | 1 round (~ 4 minutes) = preparation & all intervals:  - Preparation/practice 15 seconds@ Somewhat easy-  Interval intensities  Work @ Somewhat hard, Extremely hard: Recovery @ Somewhat easy  Interval times (Work:Recovery)  10:15, 15:30, 30:30  - Recover breathing@ Somewhat easy, then repeat-  30:30, 15:30, 10:15  Repeat the round with a new move, based on objective and fitness level. | 3-5  6-10:3-5  2-5 |
| **Deep Water Running Workout** (4)  Tethered to wall, with buoyancy belt support | 5 sets, 2 minutes each @ Somewhat hard  -Recover 30 seconds @ Easy-  8 sets, 1 minute each @ Hard to Extremely hard  -Recover 30 seconds @ Easy-  5 sets, 2 minutes each @ Somewhat hard  -Recover and cool down-  28 minutes to complete all interval bouts in workout | 6-7  1-2  8-10  1-2  6-7  1-2 |
| **Deep Water Running Program** (5)  Tethered to wall with buoyancy vest support | 1 minute active recovery between each set @ Somewhat easy  Weeks 1-4  - 6 sets, 4 minutes each @ Somewhat hard to Hard  Weeks 5-8  - 6 sets, 4 minutes each @ Hard, Extremely hard  Weeks 9-12  - 6 sets @ Extremely hard  30 minutes to complete all interval bouts in each workout | 4-5  6-7  7-8  9-10 |
| **HIIT Circuits (HIICT) (**1) Choose 4-5 exercises, 1 each per station. Ideas:  -Mix & match land sandbell work on deck with water work  -Combine exercises, i.e. Hover jogs + moving water buckets on/off deck + running | 1 round = 4-5 exercise stations  Complete 10 repetitions of each exercise at each station @ Somewhat hard to Extremely hard  -Recover 10 seconds between and/or move to next station@ Somewhat easy  Complete one round of all 4-5-exercise stations for time (as quickly as possible).  Repeat the round in less time. | 6-10  3-5 |

**Table References**

1. Sanders ME. On the floor: HIIT the pool. ACSM’s Health & Fitness Journal. 2014;18(22): 30-34. Available at <https://journals.lww.com/acsm-healthfitness/Fulltext/2014/04000/HIIT_the_Pool.10.aspx>
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4. Wilder, RP, Brennan, DK. Techniques of aqua running, Chapter;131, in Comprehensive Aquatic Therapy by Becker BE & Cole, AJ. 1997; Butterworth-Heinemann, Boston, MA.
5. Kanitz AC, Delvatti RS, Reichert T, et al. Effects of two deep water programs on cardiorespiratory and muscular strength responses in older adults. Exp Gerontol.2015; 64:55-61.



Tethered shallow water running