

Intervals

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It costs more energy to raise the heart rate than maintain it, so interval training can maximize fitness gains by including both cardiorespiratory endurance and muscular strength and endurance activity while burning more calories. Once a base set of exercises has been established with correct technique, they can be reorganized to tweak fitness goals in a time efficient manner - less instruction, more activity.

The format can be changed to keep the activity from becoming rote and to adjust for fitness goals. Whole group instruction is important at the beginning to teach technique and check for understanding of objectives, but circuits or stations allow for more efficient use of equipment. Half group is useful for simple cardio activities but a need for greater supervision.

The time intervals can be adjusted for the fitness objective. Generally, cardio intervals are double the strength intervals. If the goal is to increase cardiorespiratory endurance, make the cardio interval longer. If the goal is muscular endurance, then the weights are lighter for a longer period of time.

BASE CARDIO ACTIVITIES

jump rope, jog, step, rebounder, heavy rope, agility ladder, dot drills, athletic movement, bosu, slide

BASE MUSCULAR GROUPS AND STRENGTH/ENDURANCE ACTIVITIES

Equipment: dumb bells, plates, resistance tubes, body bars

Lower Body: glutes - squat; quads - lunge; hamstrings - modified dead lift

Upper Body: deltoids - lateral raises, overhead press; pects - chest press, push ups, front flyes; trapezius - rear flyes, trap squeeze; biceps - curls; triceps - French press, kick back

Core: abdominals - curls, etc.; spinae erector muscles - back extensions

BASIC FORMATS

Whole group Cardio/whole group strength

Cardio activities or instructed patterns/instructional technique for strength work

Half group Cardio/ whole group strength

The class splits to 2 groups for cardio work and comes back to whole group for strength.

Cardio Stations/ whole group strength

Maximizes equipment use. Students rotate cardio stations, returning to whole group for strength.

Cardio stations/ strength stations

Students rotate the circuit. Maximizes equipment. Requires student understanding of all stations.

GETTING YOUR TWEAK ON

Cardio - lengthen the cardio interval

Cardio - anaerobic threshold training - during the cardio interval, rev up to top of THZ for 30-45 seconds, come down to bottom of THZ to recover. Do 2 or 3 sets.

Super setting - set up strength interval (either whole or station) to work opposing muscle groups with no rest between, i.e. biceps, triceps.

Compound setting - set up strength interval for two exercises for the same muscle group, i.e. hammer curls with dumbbells, bicep curls with bar.

Strength - one plane of movement for one muscle group using heavy weight, slow controlled movement, and eccentric contractions (negative work)

KEEPING IT FRESH

Tag team - Controlled by repetition, not time. Either in small groups or pairs, half the group performs cardio activity (i.e., 3 laps) while other performs strength activity. This requires a posted list of strength exercises, knowledge and trust.

Noah's ark - station work in groups of two.

Layers - a lot of set up but allows for control of movement.

Set up a grid of rows of cardio stations and alternating Strength stations. Students rotate through their column.

Rows - same as layers, but rotating through row

Core Stability - insert a balance or core strength station after each muscular strength station

Skill stations- insert a skilled movement station after each muscular strength station.