

### What is the Core?

- Local Core
  - Pelvic Floor
  - Multifidi
  - Transverse Abdominus (TA)
- Global Core
  - Obliques, Rectus Abdominus
  - Gluteus Medius
  - Mid & Lower Traps, Serratus

### Spinal Movements

- Use All Options
  - Flexion
  - Extension
  - Lateral Flexion
  - Rotation
  - Neutral Stabilization

### Core Talk in Class

- Three Points of Postural Stability
  - Shoulder Girdle
  - Abdominals / Lumbar Spine
  - Lower Glutes / Upper Hamstrings
- Mobility
  - Move from a stable core
  - Limbs move separately from trunk
  - Start with hip (pelvis) stability

### 360° Resistance Training

- Muscles work in opposing groups or pairs to facilitate movement about a joint.
- Unlike resistance created by gravity, water resistance is equal and opposite in all directions.
- Due to the water's 360 degree resistance, water exercise involves a higher degree of strength and endurance training stimulus for the skeletal muscles.

### Hand Buoy Considerations

- Buoyancy and surface area
- Hand-held piece of equipment—
- Wrist and grip strength
- Shoulder joint vulnerability
- What muscles are stabilizing?

### TRAINING GUIDELINES

- Cue for gripping
  - Light grip
  - Thumb position
  - Automatic releases
  - Double hand hold
- Hand/Wrist positioning
  - Neutral
  - Supination
  - Pronation
- Neutral wrist
  - Avoid repetitive flexion & extension

### TRAINING GUIDELINES

- Develop exercises for static shoulder stabilization
  - Short lever
  - Watch cadence
  - Check surface area
- Progress to exercises for dynamic shoulder mobilization
  - Longer levers
  - Maintain cadence
  - Increase surface area appropriately
- Promote movement efficiency
  - Teach specifically and progressively

### KNEE HIGH JOG

Plunge - RIGHT

### ROCKING HORSE

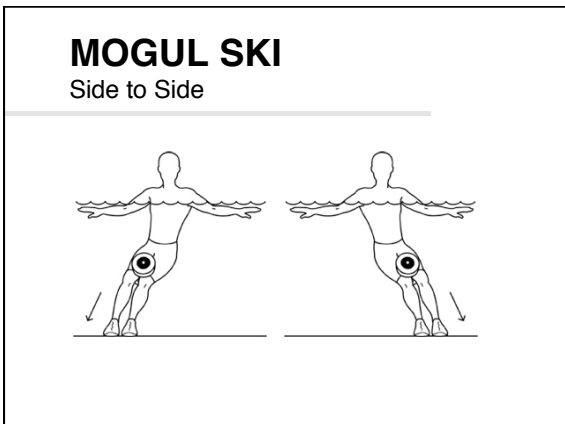
LEFT Leg / Sweep - RIGHT

### JACKS

Shoulder Press

### STRADDLE STANCE

Churn Figure 8



### Interval Training

- A 'type' of aerobic training
- Used to vary workout intensity
- Creates optimum training benefits
- *Modified* version used for water training

### Modified Interval Training

- An intensity varied workout format comprised of aerobic work cycles.
- Each cycle combines one high intensity training period with one low intensity training period.
- Heart rates fluctuate between min. and max. levels of THR and stay within the target training zone.

### Work to Recovery Ratio

- 1:3 - for Beginners
  - 30 sec' s work / 90 sec' s recovery
- 1:2 - for Intermediate
  - 30 sec' s work / 60 sec' s recovery
- 1:1 - for Advanced
  - (30 sec' s work / 30 sec' s recovery)

### Train within Limits

- Intersperse bouts of aggressive work with phases of 'active rest' and combine into sets repeating 2-3 times.
- Maintain 50-60% of age predicted max. HR during recovery periods.
- Raise intensity threshold to 85% of age predicted max. HR during work periods.

### The HYDRO-FIT Method

- Set Up Position and Posture
  - Alignment and Range of Motion
  - Stabilization and Impact Level
- Adjust Surface Area and Lever Length
  - Hand and Wrist Position
- Cue the Direction of Force
  - Power Phase / Recovery Phase
  - Assist or Resist
- Increase / Decrease Force (muscular effort)
  - De-emphasize Speed
  - Use levels of Force (20%-80%)
- Vary the Movement Pattern
  - Stationary or Travel
  - Movement Direction