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ITCCCA- JAN 2020

DESIGNING TRAINING FOR JUMPING EVENTS





KEY TRAINING PRINCIPLES

#1 TRAINING V TECHNIQUE

- ▶ DIVORCE OR INTEGRATE?
 - ▶ TEACH AT DIFFERENT SPEEDS
 - ▶ LOTS OF OPPORTUNITIES
 - ▶ VETERAN ATHLETES

#2 GENERAL COORDINATION

- ▶ PROGRESS LIKE ANYTHING ELSE
- ▶ HIDDEN AT FAST SPEEDS

#3 PRIORITIZATION OF NEURO-MUSCULAR TRAINING

- ▶ HOW WELL WE RECRUIT MUSCLE TISSUE TO PRODUCE FORCE
- ▶ MORE EFFICIENT = MORE EFFICIENT DISPLAYS
 - ▶ SPEED
 - ▶ POWER
 - ▶ COORDINATION

#3 PRIORITIZATION OF NEURO-MUSCULAR TRAINING (CONT)

- ▶ **BIGGEST FACTOR IN PERFORMANCE**
- ▶ ~2/3 OF TRAINING- THEMED N/M
- ▶ ~1/3 OF TRAINING- BALANCE/ COMPLIMENT N/M

#4 QUALITY ASSURANCE

▶ DECREASE

- ▶ DISTANCE

- ▶ LOAD

- ▶ COMPLEXITY

▶ INCREASE

- ▶ REST

▶ MOVE ON

#5 DRILLS V PROGRESSIONS

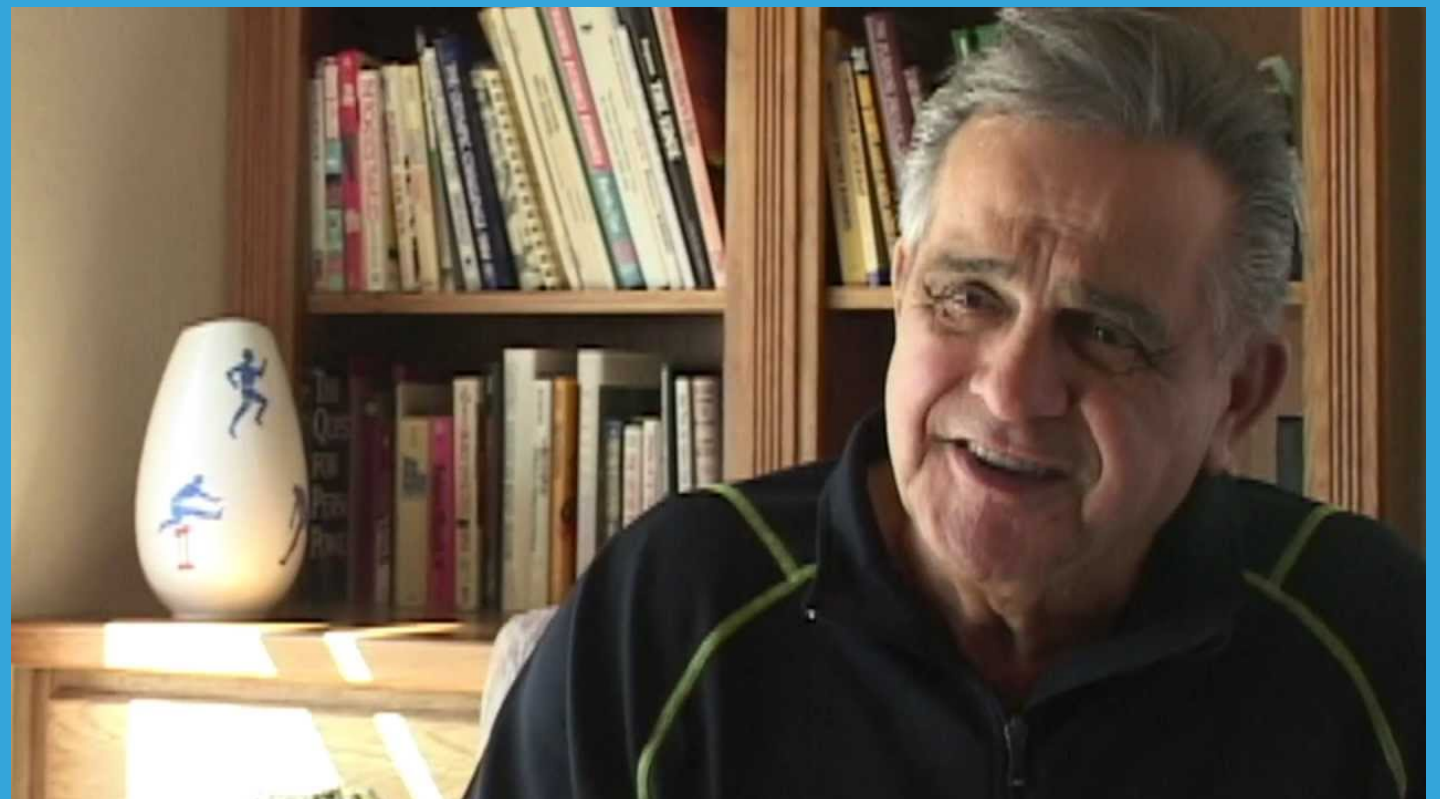
- ▶ DRILLS PROVIDE ENVIRONMENT TO TEACH
- ▶ PROGRESSIONS= SERIES OF INCREASING SPEEDS AND COMPLEXITIES

Joe Vigil

Training Philosophy



**YOU'RE THE
COACH,
COACH!**



#6 REST IS PLANNED

▶ MACROCYCLE (ANNUAL)

- ▶ CLEAR END/BEGINNING

- ▶ "SUMMER HEROES" "GOOD SHAPE, NOT GREAT SHAPE"

- ▶ HOWEVER, 1X4 YRS, NOT 4X1 YRS

▶ MESOCYCLE (~4 WEEKS)

- ▶ "REST IS COMING"

▶ MICROCYCLE (WEEK)

- ▶ WED/THUR

▶ SESSION

- ▶ ANTECDOTE: BRITS

▶ UNIT

- ▶ COACH- MONITOR/CONTROL



WHAT TO INCLUDE

SPECIFIC TRAINING

- ▶ LOOKS LIKE THE EVENT
 - ▶ AGE/EXPERIENCE FACTORS

GENERAL TRAINING

- ▶ PREPARE TO DO MORE SPECIFIC TRAINING
- ▶ "TRAINING TO TRAIN"
- ▶ CAUTION

TRAINING

PROGRESSIONS

SPEED

- ▶ HIGH INTENSITY
- ▶ INVERT THE PYRAMID
 - ▶ ACCELERATION
 - ▶ PREPARE TO RUN FAST
 - ▶ DEVELOP N/M FOR SPEED
 - ▶ SPEED
 - ▶ ABSOLUTE SPEED
 - ▶ SPEED ENDURANCE
 - ▶ STABILIZATION OF SPEED
 - ▶ SPECIFIC COORDINATION
 - ▶ MATCHES COORDINATION LEVELS FOR JUMPS

TEMPO

- ▶ SUBMAXIMAL RUNS

 - ▶ EXTENSIVE

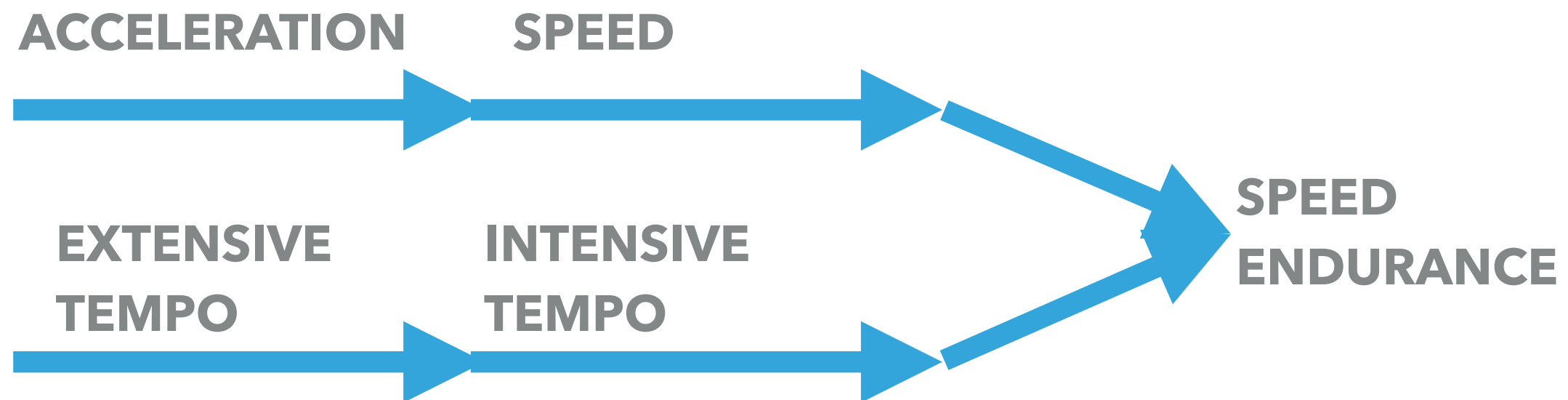
 - ▶ INTENSIVE

- ▶ DISTANCES

- ▶ REST

- ▶ WHAT I ASK FOR

SPRINT TRAINING



MULTI-JUMP TRAINING

- ▶ Build Capacity
 - ▶ In-Place Jumps
 - ▶ Circuits

MULTI-JUMP TRAINING (CONT)

▶ Horizontally-Directed Jumps

▶ Simple to Complex

▶ Double Leg to Single Leg

▶ Alternate to Combo

MULTI-JUMP TRAINING (CONT)

- ▶ Vertically-Directed Jumps
 - ▶ Simple to Complex
 - ▶ Double Leg to Single Leg
 - ▶ Alternate to Combo
 - ▶ Include Multi-Directional

KEY POINT

BIG 12/SEC LEVEL

LOTS AND LOTS OF RUDIMENTARY AND INTERMEDIATE JUMPS



MULTI-JUMP TRAINING (CONT)

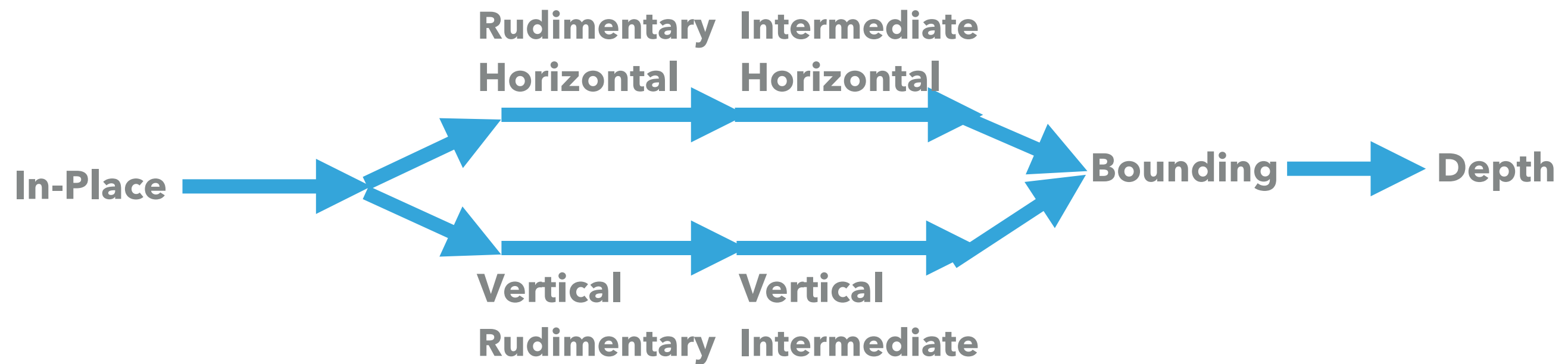
- ▶ ADVANCED

- ▶ BOUNDING

- ▶ DEPTH JUMPS

- ▶ *Lots of monitoring*

MULTI-JUMP TRAINING



**** Note: Also used for Periodization***

EVENT TECHNIQUE

- ▶ Drills/Progressions
- ▶ Short Run Jumps
- ▶ HJ- Approaches/ Full Approach Jumps
- ▶ LJ/TJ- Approaches (Run-through or Modified Takeoff only/ No Full Approach Jumps)
- ▶ PV- Approaches/ Full Approach Jump (?)

EVENT TECHNIQUE (CONT)

► BLEEDING



STRENGTH

- ▶ Not Separate
- ▶ Part of Training Plan
- ▶ Needs to Match Progressions
- ▶ **** Note: In my programs- good barometer of our overall intensities***

KEY POINTS

- ▶ Identify Time Available
- ▶ Identify Key Meets
- ▶ Work Backwards
 - ▶ ***Common Mistake- Working Forward***

PHASES/PERIODS

- ▶ Preparation Phase
 - ▶ General Prep Period
 - ▶ Specific Prep Period
- ▶ Competition Phase
 - ▶ Early Competition Period
 - ▶ Late Competition Period

PHASES (CONT)

Key Point

- ▶ No matter the # of Weeks
 - ▶ 1/2 of Time in PREP
 - ▶ 1/2 of PREP time in General Prep
 - ▶ 1/2 of PREP time in Specific Prep

PHASES (CONT)

- ▶ Importance of General Prep
- ▶ Importance of Specific Prep
 - ▶ Synthesis
 - ▶ Problem-Solving
 - ▶ Common Mistake- not enough time in Specific Prep

PHASES (CONT)

► Multi-Sport Athletes



VOLUMES & INTENSITIES

- ▶ Begin

- ▶ High Volume/ Low Intensity

- ▶ Progress

- ▶ Decreasing Volumes/ Increasing Intensities

- ▶ Thus, Overload- Intensity (not volume based)

PHASES OF SKILL LEARNING

- ▶ Acquisition
- ▶ Refinement
- ▶ Stabilization
 - ▶ Key
 - ▶ MOTOR LEARNING
 - ▶ WHEN TO ADVANCE?

SPECIAL CONSIDERATIONS

- ▶ Squats
- ▶ Lactate Training
 - ▶ Delay
 - ▶ Minimized

PLANNING
WEEKLY TRAINING

GROUPING

- ▶ Neuro-muscular v General
 - ▶ Hard/Easy Concept, but by N/M demand
 - ▶ Ratio
 - ▶ Time of Year
 - ▶ Stage of Athlete
- ▶ Compatible
 - ▶ Clear Message
- ▶ Complimentary

SPECIAL CONSIDERATIONS

- ▶ The Meets Count
- ▶ Squats
- ▶ Lactate
- ▶ Event-Specific
 - ▶ No Mondays For Me (and Them)
 - ▶ Density
 - ▶ Experience Level
 - ▶ The “Hot” Jumper
 - ▶ The Meet Counts
 - ▶ Don’t Be Afraid to Omit
 - ▶ Triple Jump

PLANNING THE TRAINING SESSION

WARMUPS

- ▶ Primary purpose- prepares the body for the main units
 - ▶ Note: modern society dictates this even more
 - ▶ T&F- Posture/Large ROM
 - ▶ Teenagers- Slumped/Small ROM
- ▶ Secondary purpose- general coordination/technical development
 - ▶ Example: Heel-Toe
- ▶ Other purposes
 - ▶ Athlete- develop awareness
 - ▶ Coach- monitoring
 - ▶ Communication- Verbal/Non-Verbal

ORDERING TRAINING UNITS

- ▶ TECHNICAL
- ▶ SPEED/POWER
- ▶ STATIC/ENDURANCE

CONCLUDING ACTIVITIES

- ▶ Resting State
- ▶ Composure
- ▶ Prepare for Next Session
- ▶ Stretching



SAMPLE TRAINING WEEKS

GENERAL PREP- MONDAY

THEMES: N/M- HIGH, SHORTER DURATION, HZ/LONGER CONTACTS

- ▶ Warmup
- ▶ Acceleration
 - ▶ Crouch Starts: 4x10,20,30m
- ▶ Multi-Jumps
 - ▶ Remedial Hz (SLJ, 3DLB, STJ): x 6 each
- ▶ Weights
 - ▶ Snatch Complex: 6x6
 - ▶ Deep Squat: 4x8
 - ▶ Bench Press: 4x8
- ▶ Multi-Throws
 - ▶ Chest/OH Throws from Step/Lunge Position: ~18
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

GENERAL PREP- TUESDAY

THEMES: GENERAL, ENERGY & ENDOCRINE SYSTEM DEVELOPMENT

- ▶ Warmup
- ▶ Technique
 - ▶ Takeoff Series (Skips/Repetitive Takeoffs)
- ▶ General Strength Circuits
 - ▶ General Calisthenics into Sprint: 12 exercises x 20"/40"
 - ▶ General Calisthenics: 12 exercises x 20"/20"
- ▶ Weights
 - ▶ Circuit: 2 sets of 12 exercises x 10 each/ R=60"
- ▶ Specialized Calisthenic
 - ▶ Variety of Special Walks: BAREFOOTED on Grass or Sandpit

GENERAL PREP- WEDNESDAY

THEMES: N/M- MODERATE, MEDIUM DURATION, VT/SHORTER CONTACT TIMES

- ▶ Warmup
- ▶ Sprint Technique
 - ▶ Stadium Runs (Single Step)
- ▶ Multi-Jumps
 - ▶ "Baby Bounds": by contacts **example of high volume/low intensity/OPPORTUNITIES*
- ▶ Weights
 - ▶ Clean Complex: 6x6
 - ▶ Front Squat: 2x6
 - ▶ Snatch Squat: 2x6
 - ▶ Incline Press: 4x8
- ▶ Multi-Throws
 - ▶ Throws from Toeboard (OHB,BLF,HHT): ~18
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

GENERAL PREP- THURSDAY

THEMES: GENERAL, GENERAL/STRENGTH ENDURANCE

- ▶ Warmup
- ▶ Technique
 - ▶ Takeoff Series (Skips/Repetitive Takeoffs)
- ▶ Medicine Ball Circuit
 - ▶ Theme: Connective Tissue
- ▶ Weights
 - ▶ Circuit: 2 sets of 12 exercises x 10 each/ R=60"
- ▶ Specialized Calisthenic
 - ▶ Variety of Toe Raises/Squat/Lunge Movements
 - ▶ *Note: Evaluative*

GENERAL PREP- FRIDAY

THEMES: N/M- HIGH, ELASTIC/POWER CAPACITY

- ▶ Warmup
- ▶ Acceleration
 - ▶ Resisted Runs: 12x30m
- ▶ Multi-Jumps
 - ▶ In-Place Jump Circuit
- ▶ Weights
 - ▶ Clean: 6x5
 - ▶ Deep Squat: 4x8
 - ▶ Bench Press: 4x8
- ▶ Multi-Throws
 - ▶ Throws from Toeboard (OHB,BLF,HHT): ~18
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

GENERAL PREP- SATURDAY

THEMES: GENERAL, ENERGY/ENDOCRINE SYSTEM DEVELOPMENT

- ▶ Warmup
- ▶ Sprint Technique
 - ▶ Buildup Runs: 4x50m
- ▶ Tempo Running
 - ▶ 8x150m/ R=2'
- ▶ Hurdle Mobility
- ▶ Weights
 - ▶ Circuit: 2 sets of 12 exercises x 10 each/ R=60"
- ▶ Extending Jogging/Skipping

SAMPLE TRAINING WEEK

SPECIFIC PREP- MONDAY

THEMES: N/M- HIGH, SHORT DURATION, LONGER CONTACT TIMES, *ABSOLUTE STRENGTH

- ▶ Warmup
- ▶ Acceleration
 - ▶ Block Starts: 4x20,30,40m or 4x2h,3h,4h
- ▶ Multi-Jumps *** (***Alternate with MJ on Monday/Friday or on Wednesday***)
 - ▶ Special Hurdle Hops: 8x4h or more complex Standing Jumps series
- ▶ Weights
 - ▶ Hang Snatch: 6x3
 - ▶ Deep Squat: 6x5 (***Note: Heavy today to get away from Friday speed day***)
 - ▶ *Upper Body Exercise: 3x8
- ▶ Multi-Throws *** (***only if no MJ***)
 - ▶ Chest/OH Throws from Step/Lunge Position: ~18
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

SPECIFIC PREP- TUESDAY

THEMES: GENERAL, ENERGY/ENDOCRINE SYSTEM DEVELOPMENT

- ▶ Warmup
- ▶ Technique
 - ▶ Long Jump (SRJ- 10-12 Step) (if LJ/TJ or LJ/HJ combo)
 - ▶ High Jump (Full Approach Jump (if TJ/HJ combo)
- ▶ General Strength Circuits
 - ▶ Theme: Stability
- ▶ Weights
 - ▶ Circuit: 2 sets of 12 exercises x 10 each/ R=60"
- ▶ Specialized Calisthenic
 - ▶ Variety of Light Skips: BAREFOOTED on Grass or Sandpit

SPECIFIC PREP- WEDNESDAY

THEMES: N/M- HIGH, MEDIUM DURATION, SHORTER CONTACT TIMES

- ▶ Warmup
- ▶ Approach
 - ▶ LJ Full Approach Runs
 - ▶ ***Note: begin with run-throughs, progress to takeoff with one cycle***
 - ▶ ***Note: prefer LJ for LJ/TJ combos/ also I have HJ do LJ approaches***
- ▶ Multi-Jumps (****** Alternate with MJ on Monday/Friday***)
 - ▶ Bounding
- ▶ Weights
 - ▶ Hang Clean: 6x3
 - ▶ Weighted "Core: Work
 - ▶ Back Hypers, Crunch, Bar Twists
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

SPECIFIC PREP- THURSDAY

THEMES: GENERAL, GENERAL ENDURANCE, INJURY PREVENTION

- ▶ Warmup
- ▶ Technique
 - ▶ Triple Jump (7-9 Step)
 - ▶ High Jump (6 Step) (if LJ/TJ combo)
- ▶ General Strength
 - ▶ Circuit 1: Theme- Core
 - ▶ Circuit 2: Theme- Muscular Balance/Coordination
- ▶ Specialized Calisthenic
 - ▶ Variety of Toe Raises/Squat/Lunge Movements

SAMPLE TRAINING WEEK

SPECIFIC PREP- FRIDAY

THEME: N/M- HIGH, COORDINATION/ POWER DEVELOPMENT, *YIELDING

- ▶ WarmupSpeed Development ****Alternate S-F-S with Depth Jumps*
 - ▶ Sprint-Float-Sprint
 - ▶ Begin at 90m (50-20-20) Note: (first ~40m on curve) x ~5/ R= 6-10' ???
 - ▶ **Note: quality assurance- rest- balancing enough to assure quality, but also factoring excitation levels**
 - ▶ **Note: quality assurance- shoot for 5, but don't be afraid to cut it short if you perceive effort is there, but quality is fading. 4 good ones is okay.**
- ▶ Multi-Jumps ****Alternate Depth Jumps with S-F-S*
 - ▶ Depth Jumps x ~20 *** *Alternate MJ's on Mon-Fri or Wed)*
 - ▶ Box+SLJ, Box+HH, Box+Box+SLJ, Box+Box+HH
- ▶ Weights
 - ▶ Clean: 6x3 **Note: Heavy Today after being "Primed" by Heavy N/M work on the Track**
 - ▶ Stepups: 4x6 **Note: Getting closer to season so introduces some unilateral exercises**
 - ▶ Dumbbell Incline Press: 4x6
- ▶ Multi-Throws *****Only if no MJ**
 - ▶ Throws from Toeboard (OHB,BLF,HHT): ~18
- ▶ Myofascial Stretching
 - ▶ 3-4 Selected Stretches: 3x30" each

SPECIFIC PREP- SATURDAY

THEME: GENERAL, ENERGY/ENDOCRINE SYSTEM DEVELOPMENT, INJURY PREVENTION

- ▶ Warmup
- ▶ Sprint Technique
 - ▶ Buildup Runs: 4x50m
- ▶ Tempo Running
 - ▶ "Breakdown" 1x300, 2x250, 2x200m / R=5'
- ▶ Medicine Ball Circuit
- ▶ **Or**
- ▶ General Strength
 - ▶ I. "Core"
 - ▶ II. Connective Tissue

EARLY COMPETITION II- EXAMPLE

- ▶ MONDAY- THEMES: N/M- HIGH, SHORT DURATION
 - ▶ WU + ACCELS + WEIGHTS
- ▶ TUESDAY- THEMES: GENERAL, ENDOCRINE SYSTEM
 - ▶ WU + TECH + GS CIRCUITS
- ▶ WEDNESDAY- THEMES: N/M- HIGH, LONG
 - ▶ WU + APPROACH + SPEED ENDURANCE + WEIGHTS
- ▶ THURSDAY- THEMES: GENERAL, REHAB
 - ▶ WU + TECH + GS FOR EVALUATION
- ▶ FRIDAY- THEMES: N/M- COMP PR
 - ▶ WU + BLOCKS + CLEANS
- ▶ SATURDAY- COMP

LATE COMPETITION II- EXAMPLE

- ▶ MONDAY- THEMES: GENERAL, REHABILITATION
 - ▶ WARMUP + THERAPY
- ▶ TUESDAY- THEMES: N/M- HIGH, SHORT DURATION
 - ▶ WU + ACCELS + MJ + WEIGHTS
- ▶ WEDNESDAY- THEMES: N/M (HIGH TECH) >GENERAL, ENDOCRINE SYST.
 - ▶ WU + APPROACH + MED BALL CIRCUIT + WEIGHT CIRCUIT
- ▶ THURSDAY- THEMES: GENERAL, REST
 - ▶ WU ONLY
- ▶ FRIDAY- THEMES: N/M- COMP PREP
 - ▶ REMEDIAL BOUNDS + MULTI-THROW
- ▶ SATURDAY- COMP



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