12/1/2021























## WHAT'S THE MAKEUP OF A SPRINTER ?

- Desire to be elite
- Fearless
- Hates to lose
- Coachable
- Wants to be educated about the sprints
- Pushes and challenges teammates
- Illustrates power
- Shows quickness
- Wants to be that "GIRL OR GUY"

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## DEVELOPING AN ABOVE AVEREGE TO ELITE HIGH SCHOOL SPRINTER

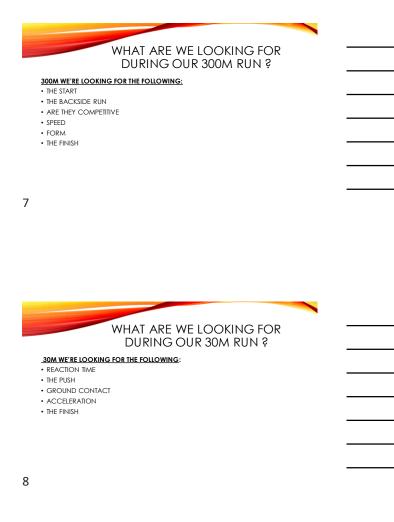
- · COMITTED TO THE SPORT
- WILLINGNESS TO BE COACHED
- READY TO BE CHALLENGED MENTALLY
- ARE THEY READY TO WORK PHYSICALLY
- ARE THEY WILLING TO SACRAFICE
- ARE THEY LOOKING BEYOND THE STATE OF MISSOURI

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## WHERE DO WE START ?

### TESTING

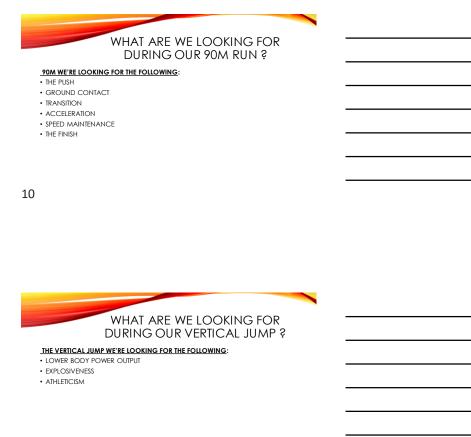
- 300M
- 30M
- 60M • 90M
- VERTICAL JUMP
- STANDING BROAD JUMP
- HURDLE CLEARENCE





#### 60M WE'RE LOOKING FOR THE FOLLOWING:

- REACTION TIME THE PUSH
- GROUND CONTACT
- ACCELERATION
- TRANSITION
- THE FINISH





- BALANCE
- EXPLOSIVENESS
- PRECISION
- PRECISION

## WHAT ARE WE LOOKING FOR DURING OUR HURDLE CLEARENCE TEST ?

#### THE HURDLE CLEARENCE WE'RE LOOKING FOR THE FOLLOWING:

- THE MOST "THEY HAVE TO WANT TO DO THE TEST"
- NO REGARD FOR HEIGHT
- FLEXIBILITY
- QUICKNESS
- SPEED
- NO FEAR
- AGGRESSIVENESS

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### WHAT ARE THE THREE STAGES OF SPRINTING?

- Drive- The sprinter begins in the drive phase, when he/she bursts from a dead still position into a sprint.
- Maximum Velocity- After the drive phase, the runner transitions to the maximum velocity phase.
- . Maintenance-The final phase of a sprint is the maintenance phase.

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• The drive phase is from the time where the sprinter comes out of the starting blocks to 20 meters down the track. During this phase the sprinter is keeping their head and upper body down." "The drive phase in sprinting occurs as you lean forward just after starting out of the blocks.

• The drive phase happens right after you react to the starting gun. Your **initial 8-10 steps** is considered your drive phase. The biggest problem seen with athletes in the drive phase is that they know that staying low will create better exit angles and set-up the ideal acceleration phase.



Maximum velocity is top-end speed. It's that moment when you can
no longer accelerate. Until that moment, the positive (forward)
horizontal force you've been generating has been larger than the
negative (opposing) force—the negative force is a combination of
braking force and drag (air resistance). At maximum velocity, these
positive and negative forces equal out, You can't get any faster. But
neither are the negative forces enough—yet—to slow you down.

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 It's physically impossible to maintain maximum velocity for a prolonged period of time. After maximum velocity is reached, generally at the end of the transition phase, the runner is now attempting to conserve force and power in order to maintain high speed. Although the body can not produce enough energy to do so for the whole race, there are ways to conserve momentum through specific biomechanical understandings.





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COURTNEY WILLIAMS CLEMSON UNIVERSITY



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PAICE MAGEE UNIVERSITY OF IOWA



## TRAINING TO SPRINT

### PACKAGING THE PRODUCT

- LEVEL OF COMMITMENT
- EDUCATE THE SPRINTER TO THEIR SPECIFIC SPRINT GROUP
- INDIVIDUAL/GROUP PLANNING
- STRENGTHS
- OPPURTUNITIES (WEAKNESS)
- GROUPING and TIME TRIALS

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#### THE TOUGH ROAD TO NUTRITION

WHAT ARE THEIR EATING HABITS (FORM FILLED OUT ON DAY ONE, THEY TELL ON THEMSELVES)

- WHY WE STAY AWAY FROM JUNK FOOD
- DEFICIENCIES (LISTEN TO THE ATHLETE THEY WILL TELL IT ALL)
- RACE/JUMP COMPETITION DAY
- UNDERSTANDING SHORT RECOVERY AS IT RELATES TO DISTRICT/SECTIONAL/STATE COMETITION

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#### TEACHING THE REASON FOR THERAPY

- Massage
- Chiropractic
- Flexibility
- Preventative Maintenance



#### UNDERSTANDING THE IMPORTANCE OF THE WARMUP

- DYNAMIC/STATIC
- DRILLS
- TECHNIQUE

• PRACTICE AND MEET SITUATIONAL AWARENESS (POSSIBLE DISTRACTIONS, MENTAL, STRESS ETC.)

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The Calm

The Commands

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## EXECUTION STARTS NOW !!! THE STARTING LINE

• The Blocks

- The Starter
- The Opponents
- The Crowd
- The Jitters
- The Calm
- The Commands



## ITS RACE TIME !!

#### PUTTING IT ALL TOGETHER

- REACTION
- BLOCK CLEARENCE
- DRIVE PHASE
   ACCELERATION
- TOP END/MAX VELOCITY
- THE FINISH

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## UNDERSTANDING YOUR CRITICAL ZONE

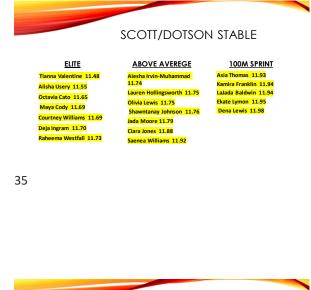
#### WANTING TO BE GREAT FROM TOP TO BOTTOM

- CRITICAL ZONE
- RELAXED AGGRESSION
- FOCUS ON OUR RACE MODELING
- PUTTING THE HAMMER DOWN
- THE WILL TO FINISH





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QUESTIONS?

# HAVE A GREAT YEAR !!!!