

Training & Technique for 300/400 Hurdles

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Introduction To The 300/400 Hurdles

- One of the most demanding events in track and field
- Success in this event requires a great deal of determination, pain tolerance, and heart.
- ‘Quarter’ runners/hurdles are heralded for their tenacity and courage; this in turn makes them team leaders
- Truly an event where “hard work will pay off.”

Talent Identification

- There are no size requirements, but tall and thin predicts better than short and stocky
- During a 300m time trial, watch the athletes after crossing the line. The short sprinters stop shortly after they finish. The 300m runners run through the line for another 20-30m.(it's not scientific, just experience)



Pace

- Hurdlers need to develop a keen sense of pace during workouts
- Call splits at each interval
- Use buzzers or whistles at given increments
- Show athlete each 100m split/split between hurdles at the end of each run. (4.0 vs 4.2)
This prevents going out too slow or too fast in a race

Pace (cont...)

IMPORTANT!!!!

Pacing is established by proper execution, which 'can' lead to faster times. So, practice times and type workouts should correlate to the desired time. ('Why, What, and How.')

Ex: An athlete who wants to run 48s in the 400h should average: 11.6s/100m, 23s/200, 35.0/300, 41.0/350m(the more consistently they can hit these marks, the easier to hit 48s.

300h Race Strategy

- “**P**” is for **Push**, to push out blocks to get up to top speed by 50m
- “**P**” is for **Pace**, from 50 to 250m to get into good rhythm going to get on pace for how fast your looking to go.



300h Race Strategy(cont...)

- “**P**” is for **Positioning** for when you get to top of curve and see where you are to make a move... (Now you can race)
- “**P**” is for **Poise** for last 110m where you maintain your Form and Heart to get you home.

300 Hurdle Execution

- **Hurdles 1-3:** Use power(attack the ground) and speed to establish steps and rhythm(22-23/14-15)
(24-25/16-17)
- **Hurdles 3-5:** focus and maintain rhythm;
DON'T COMPETE

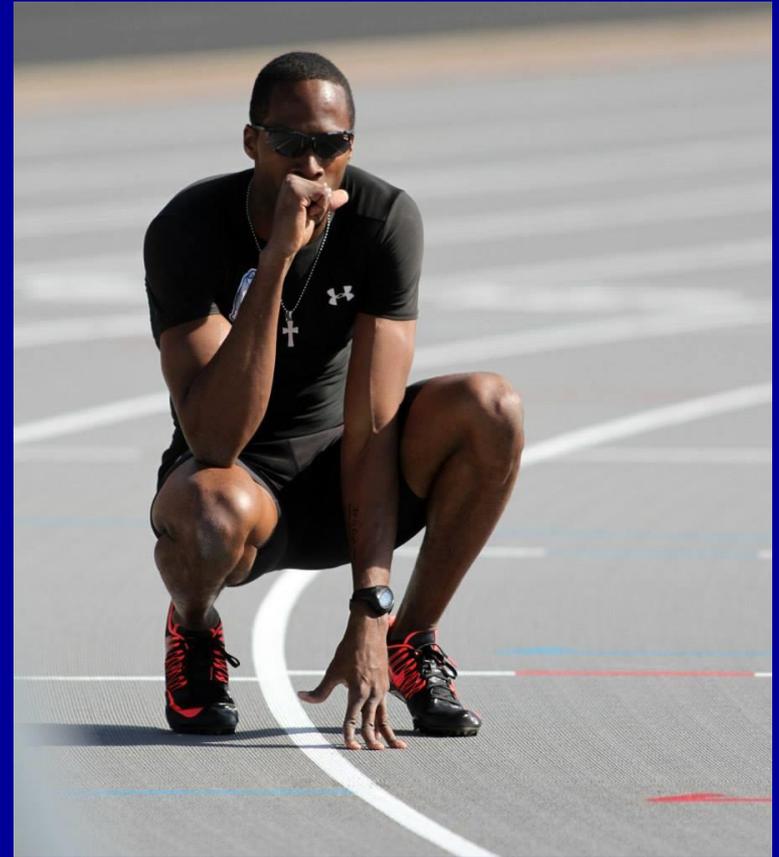


300 Hurdle Execution(cont...)

- **Hurdle 5-6:** Transition; Most important part of race; Do I stay or do I go? Hands up and maintain full range of motion.
- **Hurdle 6-8:** Heart; The most painful part of the race; maintain form as best as possible. Hands Up!
- **The Finish:** Finish the race; you can win it or lose it here.

Intensity

- High intensity is one of the most important aspects to the success of 300/400h training
 - High intensity helps to
 - Simulate race conditions
 - Simulate race recovery time
 - Give confidence to athlete
- (Quantity must go down with near max efforts)**



Intensity (cont...)

- Athletes can run near max intensity for a short time before injury, extreme fatigue, or cramping occurs
- The coach should never feel bad about cutting workouts because of fatigue
- The coach should also never feel bad about cutting workouts because of a great performance
- Always Err on the side of caution...

Percentage of Effort

- The intensity of the athlete's effort is expressed by percentage. (i.e..90%, 80%, etc.)
- It's very unlikely you will get 90% effort on every workout, based on the athletes personal best, so you must base the percentage on pace and how they are feeling.



Recovery

- A hard, easy, hard, easy daily training schedule is a good general way to maintain quality workouts and prevent injury.
- Our collegiate schedule is more like: medium, hard, technical, hard, easy with weekends off
- Proper sleep, nutrition, water intake, ice baths, foam rolling, and stretching(daily) are key components to effective recovery and better performances.

Recovery (cont...)

- The 300 and 400 hurdles are mostly anaerobic events. In fact, the breakdown seems to *90% anaerobic and *10% aerobic. The anaerobic 'lactic' system used during these two events usually produces a great deal of lactic acid with 35-40 seconds (and can continue on for around 60 seconds); this causes a great deal of fatigue. So we base our training around conditioning our bodies to last towards the upper end of 35 to 40 seconds.

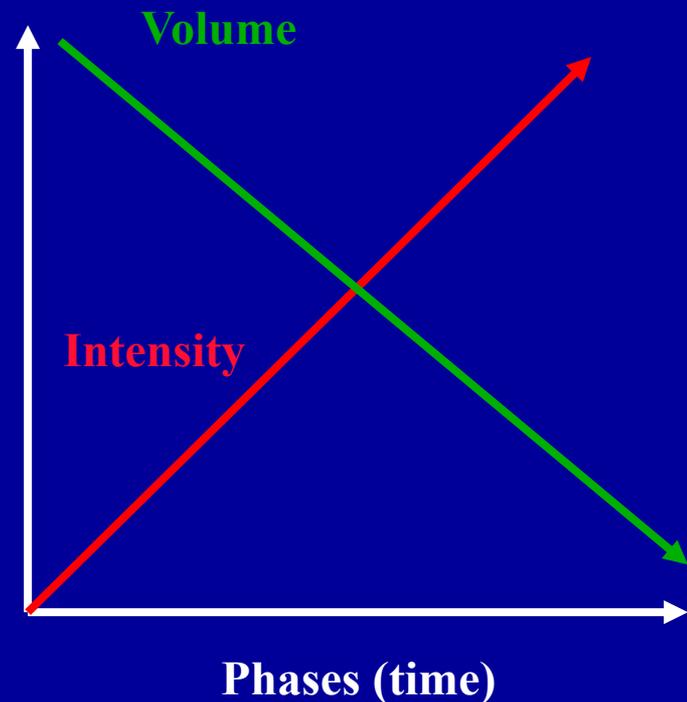
Periodization

- **General conditioning
Period (Aug-Oct)- 8
weeks**
 - Increase cardio-respiratory capacity
 - Increase tempo endurance
 - Develop blood circulation to main sprinting muscles



Periodization (cont...)

- **Pre-Competition Period (Oct-Dec) 8-10 weeks**
 - Develop sprint and hurdle technique and specific strengths
 - Develop speed, power, and speed endurance.
- **Competition Period (Jan - May) 12-16 weeks**
 - Develop speed/hurdling and racing ability



300/400h Training Methods

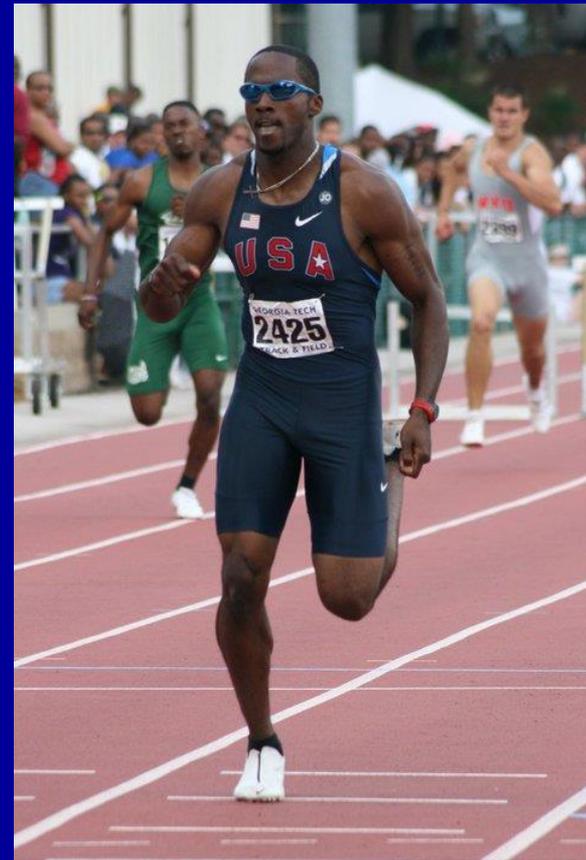
Physical Requirement	Means of Development
General Endurance	Distance runs, biking, swimming, continuous movement activities
Tempo Endurance	Segment runs 8x300m(w/100m walk) 10x250(w/100m walk) 12x 120m(w/100m jog back
Special Endurance	2x500m Full recovery 2x350m Full recovery 2x300m Full recovery

300/400h Training Methods

Physical Requirement	Means of Development
Speed Endurance	Runs from 20m to 150m Ex. 3-4 x 150m 6 x 60m(walk back)
Strength Endurance	Long Hill Runs(100m+) Sled Pulls
Speed	Block starts, Relay exchanges, runs under 60m
Power	Short Hills(10-30m), Short resistance runs, Plyometrics

Hurdle Warm-Up

- **The purpose of the warm-up is to elevate the body's core temperature, so that the muscles can use their full elasticity. This in turn will reduce and/or prevent injury, increase flexibility, and increase blood flow to the main muscles.**



Hurdle Warm-Up (cont...)

5 Components to the warm-up

- Jogging
- Static stretching
- Dynamic stretching
- Hurdle Drills
- Sprinting

Like a Pro Warm-Up

- 400m jog
- 5m static stretching and rolling out
- Dynamic stretching:
 - Leg swings
 - Toe Taps, Quick steps
 - A-skips, Dynamic A-skips
 - B-skips, Dynamic B-skips



Like a Pro Warm-Up(cont...)

- **Toe touches, reverse toe touches**
- **Fast-legs, skip-n-scoot**
- **High Knee, A-Runs**
- **Hurdle Drills**
- **Accelerations(20,30,50)**
- **2 x 150m @80%**
- **Total time..1.25hrs**



General Conditioning Sample

Week 1 and Week 3

Monday	Tuesday	Wednesday	Thursday	Friday
15min run	3m run x 2 2m run x 2 1m run x 2 (3m rest)	15min run	12 x 120m w/jog back recovery	Hurdle Mobility, 10 x 100 at 1min intervals
Monday	Tuesday	Wednesday	Thursday	Friday
10x 150m hill runs w/jog back recovery	20min run	10x 250m w/ 50m walk recovery	20min run	Hurdle Mobility, 10 x 100 at 1min intervals

Early Season Sample

Week 1 and Week 3

Monday	Tuesday	Wednesday	Thursday	Friday
Block work, Technical work, Ab work, cool down	3x600/300 w/ 1min rest between 600/300	12 x 100m @ 14s. 1min intervals	2 x 300-100- 100 (33-35s). Full recovery	6 x 60m Sled pulls
Monday	Tuesday	Wednesday	Thursday	Friday
3x 40m, 3 x60m	3 x 500m w/5min recovery	6 laps ins/outs, Ab work, roll out	4 x 200m @ 23-24s	4x4 exchanges, 3 x 60m sled pulls

Championship Week

Monday	Tuesday	Wednesday	Thursday	Friday-Saturday
3 x 150m(90%)	300-100- 100, (33sec)	Warm-up only	Block starts x 4	Compete



All workouts preceded with a full warm-up

Checkpoints



Mid and late October

2 x 500 with full recover



Early November

350's, 200's



Late November

300 time trial

2 x 500m



Torrin Lawrence

'08- 67.7, 67.3

'10- 62.0, 63.0



David Dickens

'05- 64.0, 63.4

'06- 62.4, 63.8



Justin Gaymon

'08- 64.0, 64.9

'09- 63.7, 63.9



LaRon Bennett

'03- 63.5, 61.9

'06- 62.5, 63.9

'09- 63.7, 63.9



Travis Marsh

'12- 65.4, 67.0



Kia Asberry

'13- 66.1, 66.3

500m

	LaRon Bennett	59.99
	Torrin Lawrence	61.0
	David Dickens	61.7
	Justin Gaymon	62.2
	Travis Marsh	64.4
	Kia Asberry	64.7

300m Time Trial

Athlete	300m Time	Personal Best
T. Lawrence	31.8 (official ncaa record 32.32)	54.03i, 20.55, (43.9spl)
D. Dickens	32.3	10.46, 20.6, 45.91, (44.8)
L. Bennett	32.7	13.86, 48.74,(44.6)
J. Gaymon	33.0	13.85, 48.46, 45.94i
K. Asberry	33.9	6.95i, 48.2i, 51.7
T. Marsh	34.7	47.8i, 14.4, 52.0

Hurdler Stats

Athlete	Year/Time	Place
Sarah Yeager	2013/ 8.43 (60h)	MVC Champ
Sarah Yeager	2014/13.60 (60h)	3 rd
	2014/1:00 (400h)	6 th
Mary Young	2015/ 8.33(60h)	3 rd
	2016/8.59(60h)	3 rd
Kai Asberry	2015/ 51.95 (400h)	MVC Champ
Bas Van Leersum	2016/51.66 (400h)	MVC Champ
Virginia Hill	2016/59.00 (400h)	3 rd

What's Your Why?

- Don't practice to get it Right, Practice so you can't get it Wrong
-Nick Saban



Thank You

