Developing Three Season Athletes

Cross Country, Indoor and Outdoor Training



USTFCCCA Clinic 2016

Sean Graham
University of Kentucky
Assistant Track & Field / Cross Country Coach

Agenda

- Background
- Training Influences / Resources
- Three Season Training Program
 - 4 Phase Training Approach
 - XC Training Cycle
 - Mileage Progression
 - Training Progression
 - Active Rest
 - Indoor and Outdoor Training Cycle
 - Mileage Progression
 - Training Progression
- "Details"
- Questions

Sean Graham

- University of Kentucky Assistant Coach Men's Cross Country/Distance 4th Year
- Previous Coaching Experience:
 - 2012 American University
 - 2011 George Mason University
 - 2009-2011 American University
- Training/Racing Experience
 - 2006-2009 Nike OTC Elite
 - 2008 Olympic Trails Qualifier (5k, 1500)
 - 2003-2006 Nike Farm Team
 - 2004 Olympic Trials (11th 5k)
 - 1998-2003 William and Mary



Training Influences / Resources

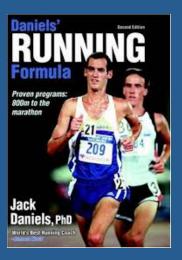
Training Influences:

- Matt Centrowitz American University
- Scott Christensen Stillwater Area High School
- Frank Gagliano Georgetown, Nike, NYNJTC
- Andrew Gerard William & Mary, Stanford George Mason
- Vin Lananna Stanford, Oregon, Farm Team, OTC

Resources:

- Daniels Running Formula Jack Daniels
- Run Faster Brad Hudson
- Better Training for Distance Runners David Martin, Peter Coe





3 Season Training Approach

- 2 x 4 Phased Training Approach
 - Attempting to "Peak" 3 times
 - Keep Athletes Healthy and Excited

1. Cross Country

- Phase 1 (Summer) Building Phase
 - Approximately 8-10 weeks; Ending Last week of August
- Phase 2 (In Season) Pre Competition
 - Approximately 4 weeks; August 2Xth September 2Xth
 - Wildcat 4k; Blue Grass 8k
- Phase 3 (In Season) Competition
 - Approximately 5 weeks; September 2Xth October 2Xth
 - Texas A&M Invitational; Louisville XC Classic; Alabama
- Phase 4 (Late Season) Championship
 - Approximately 4 weeks; October 2Xth November 2Xth
 - SEC's, NCAA Regionals 10k; NCAA Nationals 10k

3 Season Training Approach

- 2 x 4 Phased Training Approach
 - 2. Indoor & Outdoor Track
 - Phase 1 (XC and December) Building Phase
 - Short Active Rest (7-10 days ACTIVE) Physical and Mental rejuvenation
 - Approximately 4-6 Weeks
 - Steeper Mileage Gain through December to Peak
 - Phase 2 (In Season) Pre Competition/Competition
 - Approximately 8 weeks; December 1st March 2Xth
 - Complete Indoor Season Mini Peak for Indoor Champs
 - Phase 3 (In Season) Competition
 - Approximately 8 weeks; September 2Xth October 2Xth
 - Thrust of Outdoor Season (Qualifying Marks)
 - Phase 4 (Late Season) Championship
 - Approximately 6+ weeks; May 10th Late June...
 - SEC's, NCAA Regionals; NCAA Championships, USA Championships

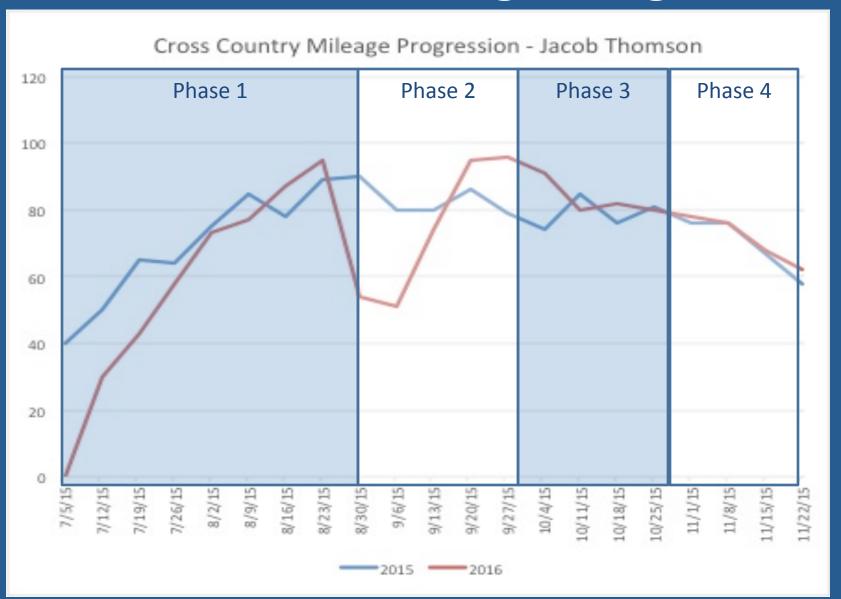
Training Terms & Effort Levels

Term(s)	Technical term	Effort level	Approx. pace
Easy/Recovery day	Easy (EZ/Rec)	Very manageable, completely comfortable pace, a slow run	Varies
Maintenance run	Aerobic conditioning (MR)	Controlled, conversational daily running pace	~5:50-6:40/mile
Threshold type runs	Anaerobic conditioning		
	(Moderate)	On the edge of lactate buildup, a pace just :15-:30 seconds faster	~5:25-6:00/mile
	(Pace)	per mile than MR pace -Pace sustainable for longer	
		(~20:00+ minutes) duration	~5:05-5:40/mile
	(Tempo)	-Pace sustainable for shorter	
		(<20:00 minutes), "hard" run pace	~4:45-5:25/mile
	(Cut-down)	-Pace steadily progressing from	
		Moderate through Tempo pace	Varies
Interval/Race pace	Aerobic capacity	-Lactate buildup begins, burns	
(Date pace)		-A pace you could run today	
		for that distance	Varies
(Goal pace)		-A pace you want to run at the end of the season for the distance	
Speed/Rep work	Anaerobic capacity	Significant lactate buildup, close to maximal pace for short distances	Varies by distance

Seasonal Mileage Progression

- Training History Dependent Critical mass of 75-100mpw
 - Many younger athletes lower mileage out of HS
 - Do not increase mileage to greatly with intensity
 - MD Guys can be significantly lower.
- Building through Phase 1 and 2 to Highest Mileage
- Slight decrease then steady Phase 3
- Continued Slight decrease Phase 4
 - Does not bottom out
 - 20-30% Decrease through peak
- Two up weeks/1 Down week general pattern in season
 - Race weeks down slightly (5-10 mpw)
 - Workout dependent
 - Pre race single day
- CROSS TRAINING
 - Bike/Pool (Aqua Jog or Swim depending on ability)
 - ElliptiGO/Elliptical
 - AlterG

XC - Seasonal Mileage Progression



XC - Seasonal Training Progression

Phase 1						
Building Phase						

Phase 2 & 3 Pre Comp. and Comp. Phase

Phase 4 Championship Phase

Workouts:

Primary (Hard Tempo Pace):

- Fartleks Ladder/Steady
 - 2,3,4,4,3,2,1
 - 6-8x3min, 5-6x5min
- Hills
 - 8-12 x 200-300M

Secondary (Threshold):

- Up Tempo's (Hammer)
- Tempo's (4-8 Miles)
- Cutdown's (6-10 miles)

Speed

- Strides 6x100m 2x/week
- 200 or 300's following threshold at 5k Goal Pace

Workouts:

Primary: 10k-5k Date Pace

- Intervals 800/1000/Miles
 - 6-10x1000 or 800
 - 4-6x Mile 10k-5k Date
- Hills
 - 10-12 x 300-400M

Secondary (Threshold):

- Tempo's (6-8 Miles)
- 1000s on a Minute (8-12)
- Cutdown's (6-10 miles)

<u>Speed</u>

- Strides 6x100m 2x/week
- 200 or 300's following threshold at 5k Goal Pace

MD Alterations

- Decrease Interval Volume by 20%
- Increase Speed Volume
 - 4x300 3k to Mile pace
 - 6x200 3k to Mile Pace

Workouts:

Primary: 10k-3k Date Pace

- Intervals 800/1000/Miles
 - 6-8x1000 or 800
 - Breakdown 4/4/2
 - 4-6x Mile 10k-5k Date
 - Breakdown 8/8/4

Secondary (Threshold):

- Tempo's (4-6 Miles)
- 1000's on a Minute (6-8)

Speed

- Strides 6x100m 2x/week
- 200 or 300's following threshold at 5k-Mile Goal Pace

MD Alterations

- Decrease Interval Volume by 20%
- Increase Speed Volume
 - 4x300 3k to Mile pace
 - 6x200 3k to Mile Pace

In Season Training (Phase 2+3)

- 14 Day Training Cycle (Race every other week)
- On Grass as much as possible

Monday – AM: Distance run / PM: Shake-out with strides, drills, circuit, abs, weights

Tuesday – Secondary Workout (Threshold/Pace Run and Intervals)
Wednesday – Distance Run Plus/Long Run Minus, Circuit, Abs, Weights

Thursday – Moderate distance run or Easy day, Drills, Strides

Friday – Primary Workout (often in AM) (Interval/Race Pace)

Saturday – Long Run – SOF T SURFACE

Sunday – 1 or 2 Runs based on your mileage needs, core

Monday – Primary Workout (Interval/Race Pace), weights

Tuesday – AM: Distance run / PM: Shake-out with strides, drills, circuit

Wednesday – Moderate Pre-race workout, weights

Thursday – Travel day with a distance run Friday – Pre-Meet Run Plus Strides

Saturday – Competition Sunday – Long Run



"In Season" Active Rest

- As you've now reached the end of the 2016 Cross Country training and racing cycle it is time to rest and recover prior to beginning our preparation for a very important 2016/17 Track season.
- Active Rest begins tomorrow morning... You'll have 5 days of active rest prior to beginning Phase 1 of our training. Active rest entails 1-3 days of relaxed running and 1-2 days of some other form of cardiovascular exercise (hiking, biking, swimming).
- You should attempt to take 1-2 additional days off from strenuous activity as well. The days off are
 designed to give your body and mind time to adequately recovery and rejuvenate prior to beginning the
 next cycle.
- On the days you do run, the pace and duration is up to you; simply run as you feel on those days. With the alternate days of exercise, you should look to be active for about 30-40 minutes.
- Most importantly, the time allotted for active rest should give you the opportunity to recover mentally and feel refreshed and excited about resuming training in preparation for the upcoming track season. The climb back up to high intensity training is steeper and quicker than over the summer so please take advantage of this time off from practice. We have some improvements we need to make in your training and racing to get back to the level we were at last spring. Let yourself recover this week and run as you see fit. From there, we're getting going again.

"In Season" – Active Rest

- Activity
 - 7-10 Day Period
 - 3-5 Days of relaxed running
 - Pace and duration at their discretion "Run as you feel"
 - DO NOT HAMMER
 - 1-2 Days of cross training
 - 1-3 days completely off
- Ultimate Goals
 - Physically and mentally recovered
 - Ready and excited to resume training

3 Season Training Approach

- 2 x 4 Phased Training Approach
 - 2. Indoor & Outdoor Track
 - Phase 1 (XC and December) Building Phase
 - Short Active Rest (7-10 days ACTIVE) Physical and Mental rejuvenation
 - Approximately 4-6 Weeks
 - Steeper Mileage Gain through December to Peak
 - Phase 2 (In Season) Pre Competition/Competition
 - Approximately 8 weeks; December 1st March 2Xth
 - Complete Indoor Season Mini Peak for Indoor Champs
 - Phase 3 (In Season) Competition
 - Approximately 8 weeks; September 2Xth October 2Xth
 - Thrust of Outdoor Season (Qualifying Marks)
 - Phase 4 (Late Season) Championship
 - Approximately 6+ weeks; May 10th Late June...
 - SEC's, NCAA Regionals; NCAA Championships, USA Championships

Seasonal Mileage Progression





Track- Distance Training Progression

Phase 1						
Building Phase						

Phase 2 & 3
Pre Comp. and Comp. Phase

Phase 4
Championship Phase

Workouts:

Primary (Hard Tempo Pace):

- Fartleks/Interval
- Ladder To Track
 - 6,5,4,1000,800,400
 - 6-8x3min, 5-6x5min

<u>Secondary (Threshold):</u>

- Tempo's (4-8 Miles)
- Cutdown's (6-10 miles)

Speed

- Strides 6x100m 2x/week
- 200 or 300's following threshold at 5k- Mile Goal Pace
- Hills 6x 150-200M

Workouts:

Primary: 10k-3k Date Pace

- Intervals 800/1000/Miles
 - 6-10x1000 or 800
 - 4-6x Mile 10k-5k Date
 - Breakdown 5,3,2
- "Michigan"
 - 2000,1600,1200,800,4 00
 - Recover at Thresh +10

Secondary (Threshold):

- Tempo's (6-8 Miles)
- 1000s on a Minute (8-12)
- Cutdown's (6-10 miles)

Speed

- Strides 6x100m 2x/week
- 200 or 300's following threshold at 5k-Mile Goal Pace

Workouts:

Primary: 10k-3k Date Pace

- Intervals 800/1000/Miles
 - 4-6x1000 or 800
 - Breakdown 4/4/2
 - 3-5x Mile 10k-5k Date
 - Breakdown 8/8 or 8/4/4 or 4x4, 4x2

Secondary (Threshold):

- Tempo's (4-6 Miles)
- 1000's on a Minute (4-6)

Speed

- Strides 6x100m 2x/week
- 200 or 300's following threshold at Mile Goal Pace

Track-800/1500 Training Progression

Phase 1 Building Phase

Phase 2 & 3 Pre Comp. and Comp. Phase

Phase 4 Championship Phase

Workouts-Triple Workout Week: Primary (Interval 3k pace):

- Fartleks- Tempo to Mile Pace
 Ladder to Track
- 4,3,3, 800, 4x400
 - 5-8x3min, 6-8x2:30min

<u>Secondary (Threshold): AM/PM</u> AM

- Lane 8 Tempo 3-4 Miles
- Tempo's (4-6 Miles)
 - 400's Before and After
- Cutdown's (6 miles)

PM

- Hills 6x150m
- 4-6 x 150-200-300M

<u>Speed Endurance</u> 400/400/200 at Mile to 800 300/200/100 at Mile to 800

Strides

- Strides 2x per week
- 200 or 300's following threshold at 3k to Mile Goal Pace

Workouts: Double OR Triple

Primary: 5k-3k Date Pace

- Intervals 800/1000/Miles
 - 6-8x1000 or 800
 - Breakdown 4/4/2 or 5/3/2
 - 4-5x Mile 10k-5k Date
 - Breakdown 8/8/4
 - "Michigan"
 - 1200.1000.800.600.400
 - Recover 1000 at Thresh+10

Secondary (Threshold): AM/PM

AM

- Lane 8 Tempo 3-4 Miles
- Tempo's (4-6 Miles)
 - 400's Before and After
- Cutdown's (6 miles)

PM

- Hills 6x150m
- 4-6 x 150-200-300M

Speed Endurance

600/400/400 at Mile -2 to 800 500/300/300 at Mile to 800

Stride

- Strides 2x6x100m/week
- 200 or 300's following threshold at Mile Goal Pace

Workouts: Double OR Triple Primary: 3k-Mile Date Pace

- Intervals 800/1000/Miles
 - 4-6x1000 or 800
 - Breakdown 4/4/2 or 5/3/2
 - 3-4x Mile 5k Date
 - Breakdown 8/8 or 8/4/4 or 4x4, 4x2

Secondary (Threshold): AM/PM

- Lane 8 Tempo 3-4 Miles
- Tempo's (4-6 Miles)
 - 400's Beforé and After
 - Hills 6x150m
 - 4-6 x 150-200-300M

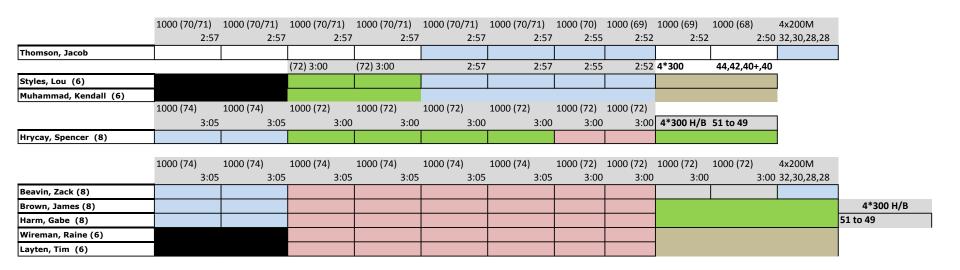
Speed Endurance

600/400/400 at Mile -2 to 800 500/300/300 at Mile to 800 400/400/400 at 800

Strides

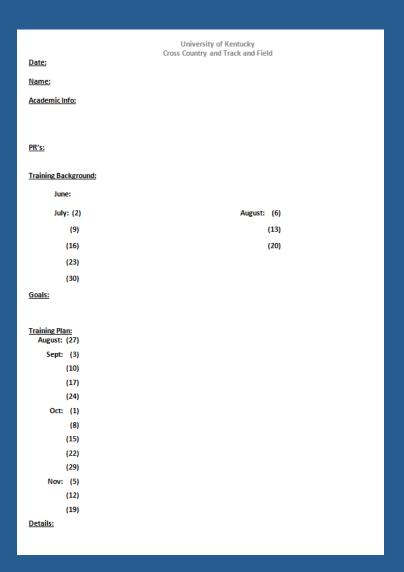
- Strides 2x6x100m/week
- 200 or 300's following threshold at Mile Goal Pace

Train The Top Together



Communication and The Details

- Individual Season Planning Meeting
 - Academics; PR's; Training Background;
 Goals; Season Mileage Progression;
 Workout Structure
- The Details
 - Core
 - Strength Circuit
 - Weights
 - Strides
 - Hurdle Drills
 - Recovery/Injury Prevention (Stretching, Ice, Roll, Food)
 - Nutrition (Variety, Colorful, Multivitamin, FLUIDS)
 - Rest and Recovery (SLEEP/NAPS)
 - Communication is key (Athletic, Academic, Personal)



Developing Three Season Athletes

Cross Country, Indoor and Outdoor Training



Sean Graham
University of Kentucky
Assistant Track & Field / Cross Country Coach
Sean.Graham@uky.edu