

Structuring the High School Cross Country Workout

OVERVIEW

Fitting in the most work possible in a week's period is a daunting task and must consider many variables. Questions such as how much training, what type of training, and what order the training is given always seem to conflict, particularly when the added complexities of a meet or two are thrown into the mix. Then combine the variables of early, mid, and late season philosophies of training and peaking, and you get a serious number of factors that make planning a workout week an incredibly difficult task, particularly if you are trying to get the most out of each workout.

Planning a 14-Workout Week requires a deliberate attempt be made by the coach to prevent *any* wasted effort from creeping into a program. Each workout must have its purpose, and, although the workouts follow the "hard-easy" approach, that approach is modified throughout the week so that different energy systems may be used to optimal effectiveness. So, an athlete may proceed through the week developing racing strength through *speed, resistance, and endurance* based training, getting the most "bang for the buck".

TRAINING REQUIREMENTS

The initial problem in construction of an effective training week for a distance runner is the definition of what training goals are necessary. These training goals will differ from coach-to-coach but for this discussion will include three *principal elements*:

SPEED

RESISTANCE

ENDURANCE

In addition to inclusion of the three principal elements, a coach should be aware of the need to prepare workouts in a microcycle within a "hard-easy" system, allowing the athlete to gain some measure of recovery before that principal element is taxed again. The coach **can** bend the hard-easy training rules occasionally in a serious microcycle **as long as the workouts do not repeat the same principal element in an intense manner**. In other words, workouts can be back-to-back in hard intensity within one microcycle as long as the principal elements change focus.

Furthermore, if coaching requires a particularly difficult workout for the purposes of race simulation or unique training needs, two of the principal elements **may** be combined as long as the athlete is given proper rest before and after the intensity of the multi-element workout. Sample workouts which demonstrate multi-element design include:

A short, fast fartlek over rolling hilly terrain	(speed, resistance)
A long, recovery-paced grass/beach/sandy/hilly run	(endurance, resistance)
A set of 8x800m at 1.5x rest and 100% 5k race pace	(speed, endurance)

To further prevent the onset of injury, it is wise to construct workouts in a 3-1 pattern of hard-easy microcycles, allowing one week of reduced intensity following three weeks of dynamic and serious training. Build this into your training by viewing the training season (macrocycle) from the final competitive effort backwards, placing reduced-intensity weeks (rest) appropriately. The fresh legs and perceived-effort the athlete feels will keep them mentally and physically able to increase workloads after a period during which the body can more deeply recover.

To recap training requirements:

- 1.) General workout planning should use the "hard-easy" training cycles.
- 2.) *Speed, Endurance, and Resistance* are the three principal elements of training.

- 3.) Back-to-back workouts may be intense, but sufficient recovery must be given before and after the back-to-back sessions.
- 4.) Back-to-back intense workouts should never include more than two of the principal training elements.
- 5.) Every 4th microcycle should be reduced 25% in all three principal elements of training to allow for deeper recovery during the macrocycle.

THE 14-WORKOUT WEEK SCHEDULES

By following training requirements the coach has a framework under which he or she can structure the week according to:

- 1.) Competitive (racing) demands.
- 2.) Unique training needs of the team or individual.
- 3.) Long-range training goals.

As we look at the following sample sets of workouts, the individual coach will need to always evaluate the structure according to the individual needs of their team. In many circumstances, conference or regional meets have no bearing upon the outcome of a championship and are used primarily for practice. In other cases, the conference meets are used solely to determine a conference or region champion. In other cases, regional or state qualifying may be done through conference meets. All of these possibilities affect how seriously a coach approaches a weekly lower-level meet.

It is ideal if the coach is able to structure the workout week so that the conference meets are used as a training situation, allowing the athlete to put race plans to the test, experiment with strategies, and sample harder pacing requirements. Those conferences that use duals and tri-meets as scored elements of a championship season obviously place more competitive stress on the athlete and require careful and individual planning on the part of the coach.

These notes will evaluate three potential situations (out of many possibilities) involving structuring the 14-workout week: no competition, one competition, and two competitions.

Microcycle with No Competitive Effort

Monday AM	Easy 3-4 and circuit weights.	(Base)
Monday PM	Long track speedwork.	(Speed-Endurance)
Tuesday AM	Easy 3-4 recovery.	(Recovery)
Tuesday PM	Easy-Medium 4-5 fartlek.	(Base)
Wednesday AM	Easy 3-4 and circuit weights.	(Base)
Wednesday PM	Hard 5-6 in hills.	(Endurance-Resistance)
Thursday AM	Easy 3-4 recovery.	(Recovery)
Thursday PM	Easy 3-5 fartlek.	(Base-Recovery)
Friday AM	Easy 3-4 and circuit weights.	(Base)
Friday PM	Grass intervals.	(Speed)
Saturday AM	Easy 2-3 recovery.	(Base-Recovery)
Saturday PM	Hard 5-7 in hills.	(Endurance-Resistance)
Sunday AM	Optional 3-4 recovery.	(Base-Recovery)
Sunday PM	Rest.	(Recovery)

ANALYSIS

Mileage totals for this microcycle are from 45-58.

The hard-easy schedule is maintained with M-W-F being the primary hard days, followed by a long run on Saturday. The Friday-Saturday back-to-back sessions have one recovery run placed between and the easiest day of the week following. Depending upon local culture, the Sunday runs may be eliminated altogether if necessary.

Speed and resistance are both emphasized twice during the week, and endurance is a principal training goal three times during the microcycle.

Microcycle with One Competitive Effort

Monday AM	Easy 3-4 and circuit weights.	(Base)
Monday PM	Hard 5-7 in hills.	(Endurance-Resistance)
Tuesday AM	Easy 3.	(Base-Recovery)
Tuesday PM	Race.	(Speed-Endurance)
Wednesday AM	Easy 3-4 and circuit weights.	(Base-Recovery)
Wednesday PM	Easy 4-5 fartlek.	(Recovery)
Thursday AM	Easy 3.	(Base-Recovery)
Thursday PM	Grass intervals.	(Speed-Resistance)
Friday AM	Easy 3-4 and circuit weights.	(Base-Recovery)
Friday PM	Easy 3-4 fartlek or light stepdown.	(Base)
Saturday AM	Hard 5-6 power run in hills.	(Endurance-Resistance)
	-or-	
Saturday AM	Short speedwork on the track.	(Speed-Endurance)
Saturday PM	Easy 2-3.	(Recovery)
Sunday AM	Easy 3-4.	(Base-Recovery)
Sunday PM	Rest.	(Recovery)

ANALYSIS

Mileage totals for the microcycle are 44-56, including one race.

The athlete reaches Monday well rested from the Saturday afternoon and Sunday of easy work. Monday's hill work needs to be adjusted depending upon the level of the meet on Tuesday and the individual athlete. From Tuesday through Thursday the microcycle includes 48 hours (3 workouts) without principal training elements as we have done two strong workouts on Monday and Tuesday. Thursday's grass intervals should be done with some quick overspeed phase. Saturday the AM run is at the discretion of the coach depending upon whether the team or individual is more in need of resistance or a second shorter speed workout for legspeed.

This microcycle allows three workouts to push endurance, three to use a speed component, and 2-3 using resistance.

Microcycle with Two Competitive Efforts

Monday AM	Easy 2-3 and circuit weights.	(Base)
Monday PM	Medium 5-7 fartlek on hills.	(Endurance-Resistance)
Tuesday AM	Easy 3-4.	(Base-Recovery)
Tuesday PM	Race.	(Speed-Endurance)
Wednesday AM	Easy 2-3 and circuit weights.	(Base-Recovery)
Wednesday PM	Easy 4-5 fartlek or light stepdown.	(Base-Recovery)
Thursday AM	Easy 3-4.	(Base)
Thursday PM	Short speedwork on track.	(Speed)
Friday AM	Easy 2-3 and circuit weights.	(Base-Recovery)
Friday PM	Easy 4-5 fartlek.	(Base-Recovery)

Saturday AM	Race.	(Speed-Endurance)
Saturday PM	Easy 2-3.	(Recovery)
Sunday AM	Rest.	(Recovery)
Sunday PM	Easy 3-4.	(Base)

ANALYSIS

Mileage drops to 39-45 per microcycle.

Sunday again preps the athlete for a rested beginning to the week. The Monday fartlek can be as hard as the coach feels will not damage the ability to race on Tuesday. After Tuesday, the next intensive work is Thursday with short legspeed work, done precisely between the two racing efforts during the microcycle. 48 hours remain prior to the race on Saturday.

The addition of a second race does not allow for an extensive amount of work on resistance, endurance, or speed. Both races are included as speed oriented.

CONCLUSIONS

Workout structuring is a function of creativity, exercise physiology, and experience as it relates to the individual needs of the program and the athlete. Although it is almost impossible to "can" workouts and give them to a coach, the basic understanding of what types of effort and what types of workload are tolerated by an athlete will allow an individualized approach to succeed.

Each coach must take the understanding of what training can be completed and apply that to the performance schedule of the program. We are all fortunate if we do not have extreme requirements in local and regional competitions as they most certainly curtail the types of training that will benefit the athlete in the long run. Longer periods of several microcycles without competitive interruption are the best way for an athlete to improve.

Look at the types of workouts provided, but more importantly, look at the method used in their formulation. Evaluate principal training goals of your program, your competitive schedules, your long-range goals, and then schedule your workouts in order not to waste a minute!
