



# Falls Church High School Cross Country

## 2021 Summer Training Guide

Welcome to Falls Church HS cross country! XC is a sport where patience, dedication and plain hard work can overcome an abundance of "talent". We know some of you are running to get in shape, some want to just be part of a team, and some of you have goals of running in college. Whatever your motivation and experience in running we will try to meet your running needs by challenging you at your fitness level. Cross country will test your physical, mental and emotional strength but when your goal is achieved you will have no better feeling. Be committed to yourself and your team. If you stay motivated, you will improve and your team will improve! You are simply cheating yourself if you do not take advantage of your summer vacation and return in August in good shape, because the kids who have been training will eat you alive. It really is that simple.

### Key dates:

Date: Pre-Season	Time	Location	Days of Week	Duration
July 12, 2021	8 am	Roundtree Park	Mondays	90 minutes
July 14, 2021	8 am	Falls Church High School	Wednesdays	2 hours with weight room
July 16th, 2021	8 am	Eakin Park	Fridays	90 minutes
August 2nd official practice starts Monday-Friday	8 am	Falls Church HS	Monday	90 Minutes

**\*\*Pre-Season Conditioning: Mondays@Roundtree, Wednesdays at FC, and Fridays at Eakin until official Practice starts. Then practice starts Monday-Friday- Locations to be determined.**

**Coach Smith has set up a club on Strava called Jaguars Run so he can share workouts and you can share your training. Join ASAP @ <https://www.strava.com/clubs/jaguars-run-699388>. Email Coach Smith at [msmith@fcps.edu](mailto:msmith@fcps.edu)**

Summer is the time to gain overall fitness and set the stage for progress later in the season and in subsequent phases of training. It is imperative that you make *steady, incremental* progress towards your goals. The following plan is a general guide and is individualized by applying the individualized training plan also provided. This plan gives you the general patterns that you should follow throughout the summer until practice begins on **August 2nd**. The summer program is all about the 'joy of running'. It's about building a base of miles, a training base, so that when the season officially starts, you're prepared and ready to make an impact right away. The summer is not about hard, gut wrenching workouts. It's not about hill repeats and track work. It is all about running easy to moderate paced miles, building up slowly over the summer. Think of it like the foundation of a house - you can't start with the roof!

The plan is broken down into two phases (phase 1 and 2, as you will note below) while you are on summer break. You must do the work in each phase in order to prepare you for the subsequent one. Take control of your own destiny and prepare well. Training in the summer may not be glamorous or even enjoyable at times, but if you want the glamour and accolades that come along with good performances at the end of the season, the work needs to get done starting now. **Cross country is a summer sport with its championships in the fall!**

## Summer Training Program

The training for this cross country season will be broken down into four basic phases (technically, mesocycles) starting shortly and progressing through the VHSL State Championships in the middle of November. Your individual starting dates will vary according to when you wrapped up your outdoor track season.

<b>Pre-phase 1:</b>	Recovery	Active Rest	1-2 weeks
<b>Phase 1:</b>	Building	June 21 (approximately) to July 11	4 weeks
<b>Phase 2:</b>	Pre-Competition	July 12 to September 5	8 weeks
<b>Phase 3:</b>	Competition	September 6 to October 17	6 weeks

#### **Phase 4:** Peaking

October 18 to VHSL States (Nov9/10) 4 weeks

Each phase has a specific objective and emphasis. During each phase, the plan here will prepare you for the upcoming phase and, ultimately, for the demands of a long cross country season. In general, **Phase 1 and Phase 2 have several objectives:**

1. to establish a strong and solid cardiovascular base in order to maintain fitness through the championship season in November.
2. to become accustomed to the regimen and patterns of the Falls Church High School program by gradually phasing in the components of endurance (aerobic conditioning), stamina (anaerobic conditioning), interval (aerobic capacity) and speed (anaerobic capacity) training.
3. to become more flexible in order to prevent chronic injuries and to increase range of motion.
4. to become physically stronger through both running and weight training to assist in handling the substantial workload of the cross country season.
5. to develop greater efficiency in running by increasing foot speed and developing proper running form.
6. to develop a positive outlook and sense of confidence in your preparation, racing strategy and team.

The first two objectives above are achieved largely through running or other structured cardiovascular work. The mileage quantities (outlined on your individual training guideline sheet or in the general plan) are just that - *guidelines*. Freshmen, do not panic if those numbers seem high. The reality of what I am asking you to do is not as daunting as this packet may make it seem. The numbers will vary by individual, however, I cannot emphasize enough the importance of a solid mileage base. The process is like building a pyramid. If the base is very narrow only a very short pyramid can be built safely. If one tries, nonetheless, to build a very tall, steeply pitched pyramid, it is likely to tip or come crashing down (ie. risk injury...).

Objectives 3 through 5 are achieved by effectively, conscientiously and consistently doing the stretching routine, the weight training program and the drills (plyometrics), respectively. Objective 6 will manifest itself as your inner strength grows, as you effectively handle challenging workouts, and as we all reap the rewards of racing well. Remember, one of our big goals this summer is to pay attention to the details. Please do so. The drills, weights, stretching, etc, are not optional. We can fine tune them, but they need to be included in some form. They are necessary supplements to your running, with the emphasis on *necessary!*

Phase 3 will emphasize event and race specific training in order to prepare for Phase 4, which will be focused almost exclusively on racing effectively during the championship portion of the season. We will set up and discuss more specific objectives for those phases while you are at school.

## **General Instructions**

### **Train aggressively, ambitiously and consistently but intelligently**

**Plan your progress** and workouts and **keep an accurate and complete training log** using **Strava**. Record your mileage, approximate pace, work out details, hours of sleep, weight and any other details that may be important about the workout. There should be no need to increase more than 5-8 miles per week over the previous week's total. If you begin on schedule, there will be plenty of time to build gradually. Again, you can adjust if things change later, but, at least, you have a plan and a vision of what the coming weeks hold.

**Do not make drastic changes in this training program.** If you have specific concerns, speak with me before going down a road on your own. This program is tight-knit. It specifically and systematically prepares you for the upcoming workouts and the demands of racing at the level we have set as our team goal. If you train with others, that is fine, but you need to follow the plan that is set for you, not another coaches or teams. Follow the training plan! It works.

It is important to **find the appropriate pace** for your workouts and follow it. Do not run too hard on training run days, nor too easy on workout days. If you do not already have one, getting and using **a heart rate monitor** can help determine these paces. Your effort/rate of work should be appropriate for the type of day you planned – heart rate ranges give you a good approximation, however they are only one clue, albeit a very good one.

Find the fine line between effective training and unnecessary stress – **eating right, hydrating properly, sleeping well and stretching regularly and thoroughly** can do wonders for the stress you put your body through. Eating and hydrating properly are extremely important and have an immediate impact on your training. **Monitor your weight** for drastic shifts, either up or down. Monitor your calorie intake, avoid excess fatty foods and emphasize a good balance of carbs, protein and fats. Plain water is best, but an electrolyte supplement is fine (Gatorade, Powerade, etc). Get used to carrying a water bottle and drinking regularly throughout the day. Get adequate rest. Your rate of recovery determines how much you can do each day/week, consequently **getting regular, substantial sleep is critical**. Studies show 8 hours per night is a minimum. You must get sleep throughout the summer if you want to be fit rested and healthy throughout the fall – it is unlikely that you will get more sleep when school starts. If you come in tired, it will be difficult to dig yourself out of that hole.

As far as actual training, protecting your legs from undue stress is a key idea. **Run on grass, trail or other soft surfaces** as much as possible. The soft surfaces will avoid pounding on joints, bones, tendons and ligaments. In addition, the lighter the pounding, the more quickly your muscles will recover, and, correspondingly, the better off you will be the next workout. **Checking and rotating your shoes regularly** will also diminish the impact your body must absorb. If your shoes *appear* worn or beaten up, most likely they are well overdue to be replaced. Most major shoe brands lose a significant percentage of their cushioning ability after about 300-400 miles even if they don't look broken down. Try to track the mileage on a particular pair of shoes and look for warning

signs such as nagging aches and pains in the knees, feet or ankles. I know shoes are expensive, but look at the cost as an investment in keeping you on your feet. If you get hurt, how much would you be willing to pay to get back on your feet?

A packet of general stretches is included, however, this list is not all-inclusive. Feel free to add stretches that you feel are particularly helpful for you. You should be **stretching for at least twice a day for no less than 20 minutes** each time in order to effectively hit all major muscle groups and any problem areas. Remember, even the name ‘stretching’ implies going beyond boundaries – in other words, an effective stretching routine may not always be comfortable. To achieve functional increases in your flexibility, you have to push yourself to go beyond your current flexibility level.

Finally, **communicate with me** on a regular basis if you have questions or concerns. The best way to contact me is through email at [msmith@fcps.edu](mailto:msmith@fcps.edu) I will get back to you as soon as possible

## General Training Plan

Before beginning this summer training program, you should be finished with your racing for the 2021 outdoor track season. Any further racing (road races, summer track meets, etc.) that you do this summer should be done in the context of and while doing the training outlined below. It is not recommended that you race at all in the summertime, but if you have an important race it can possibly be worked into the training regimen if you follow the program and are ready for the upcoming season and year, you will have plenty of opportunities to race and will reap rewards.

## **Training Paces/Effort level**

For those of you who have worked with me before or are familiar with heart rate training, some of this will be repetitive but well worth reviewing. For those new to the program, a knowledge of the following scale of approximate paces, heart rate ranges, effort levels and my terms will be extremely valuable in finding the right level at which to train this summer. These numbers are *guidelines* and will vary for each individual. Remember, training too hard can be as harmful as not training hard enough. If you do not have a heart rate monitor, I would urge you to get one and start using it over the course of the summer to become accustomed to training in the prescribed ranges. In addition to monitoring your heart rate when you train, charting your resting heart rate each morning and logging it will help you to track your state of restedness and recovery from day to day.

<u>Term(s)</u>	<u>Technical term</u>	<u>Effort level</u>	<u>Heart rate range</u>
<b>Easy/Recovery day</b> (EZ/Rec)	<i>Easy</i>	Very manageable, completely comfortable pace, a slow run	<140bpm
<b>Training run</b> (TR) daily running pace	<i>Aerobic conditioning</i>	Controlled, conversational	145-165bpm
<b>Threshold type runs</b> (Moderate) (Pace) (Tempo)	<i>Anaerobic conditioning</i>	On the edge of lactate buildup, a pace just :15-:30 seconds faster per mile than TRpace Pace sustainable for longer (~20:00+ minutes) duration Pace sustainable for shorter (<20:00 minutes), "hard" run pace	170-185bpm
<b>Interval/Race pace</b> (Date pace) (Goal pace)	<i>Aerobic capacity</i>	Lactate buildup begins, burns A pace you could run today for that distance A pace you want to run at the end of the season for the distance	185-195bpm
<b>Speed work</b>	<i>Anaerobic capacity</i>	Significant lactate buildup, close to maximal pace for short distances	195+bpm

**Note: nothing you will be asked to do this summer except strides will be at anaerobic capacity paces...**

As you will notice, all of these values are approximate or fall in broad ranges. The actual numbers, paces and efforts will vary depending on internal (state of restedness, hydration, etc.) and external factors (temperature, running surface, terrain, etc.) There are no absolutes, however, heart rate is generally the most objective, scientific guide to how hard you are working – *not* pace or effort. Be intelligent and judicious. Work hard when you set out to work hard, but, by the same token, when you are supposed to do a training run (TR) or have a recovery day (Rec), do that and not more.

## Pre-Phase 1 (Active Rest)

Dates will vary...

Following your competitive season, I encourage you to take 1-3 weeks of active rest prior to beginning Phase 1. Active rest entails 3-5 days of relaxed running and 1-2 days of some other form of cardiovascular exercise (hiking, biking, swimming) per week. You should attempt to take 1-2 days off from strenuous activity per week. The days off are designed to give your body and mind time to adequately recover 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 45 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. Please do not take an extended time away from training in the early summer unless we have discussed it, but regroup before you focus on the season ahead.

## Phase 1 (Building): June 21 to July 11

In Phase 1 you should begin at a reasonable number of weekly miles (generally somewhere in the 20-40 mile per week range) and **build each week** by approximately 3-10 miles per week. The number of miles per day will gradually and generally climb a bit each week throughout this phase. In addition, your long run each week should be approximately 20% of your total weekly mileage so it, too, will lengthen over the course of this phase, reflecting your gradually climbing total weekly mileage. One day per week, add in a set of drills and 10 x 150m or 200m strides at your 5,000 meter date pace (your SWO). These longer strides should be done with whatever rest is necessary on a soft, grassy surface. Note that these “strides” are in addition to the strides that I ask you to do 1-2 other times during the week. This SWO will evolve over the course of the phases into an interval workout when you return. One day per week, do a hilly run at a steady, threshold-type pace as your Primary Workout (PWO). Consult the effort guide for the approximate heart rate range (170-180bpm) and a subjective description of the effort level. Late in this phase many of you will also begin gradually introducing ‘**morning**’ runs of no less than 20 minutes and no more than 30 minutes duration

Also, and extremely importantly, please pay attention to the prescribed effort levels for the different workouts. Refer to the chart of training paces/effort levels if you need to refresh your memory about how hard a certain workout should be. The patterns progress over the summer, so please follow the progression – a ‘moderate’ run is easier than a ‘pace’ run is easier than a ‘tempo’ run

## Phase 2 (Pre-competition): July 12 to September 5

You will be arriving back at school towards the later stages of this phase, so much of this will lead directly into what we will be undertaking when you are here on campus training with the team. You will notice that while the “name” for this phase is “Pre-competition,” there is no focus on actual racing in this phase. Our focus and emphasis will be on getting ready for the important competitions that hit during the next two, later phases. We will not lessen our training this phase, nor will we back off training in anticipation of upcoming races. On the contrary, all components will continue to lengthen and intensity will begin to increase in Phase 2. There should be a continued gradual mileage buildup. **By the week 8/13 or 8/20, you should be hitting your top mileage for the entire fall.**

## Optional Meetings over the Summer

There has been a lot of interest in getting together over the summer to train. Often running on your own becomes monotonous and boring. We are planning on meeting multiple times per week to do the summer training program. We will simply be doing the summer training program as distributed on these dates, so if you can't make it, don't worry just make sure you do the workout. **The plan is to meet at Roundtree Park @ 8am on Mondays starting on JULY 12TH, Wednesdays at Falls Church High School@8am July 14th, and Fridays at Eakin Park@8am July 16th.** We will be about 90 minutes most days (possibly shorter in the beginning).

Please make sure you are using STRAVA (I will be closely monitoring your progress) and if there are any issues feel free to send an email.

### How much to run?

Experienced runners (those with at least six months of consistent distance training) should aim to reach 30-55 miles a week of running, on average, by September. Newer runners should shoot for an average of 20-25 miles a week by September. Novice runners should attempt to reach an average of 15-20 miles a week of running by this time. **When increasing your distance over a period of weeks, it's wise to "cut back" every third week to allow your body to adapt to the stress.** Understand that these are general guidelines and that the basic idea is for you to run, then run a little farther, never worrying about increasing the pace until you're comfortable with the distance. Again, whatever your goals in cross-country are, your destiny is almost entirely in your hands.

**Experienced runners** (those with at least six months of consistent distance training) should aim to reach 45-60 minutes a day of running (**30-55 miles per week**), on average, by mid-August. **Newer runners** (those who participated in spring track or have done some running as part of another sport) should shoot for a daily average of 30-45 minutes (**20-25 miles per week**) by the time we re-convene in August. **Novice runners** should attempt to reach a daily average of 30 minutes of running by this time. **When increasing your distance over a period of weeks, it's wise to "cut back" every third week to allow your body to adapt to the stress.**

It is the coach's belief that the above guidelines will not only adequately prepare both boys and girls for the upcoming season; it will limit the potential for injury. Be your own judge of where you are at in terms of your running development.

**How to get there? Work backwards!** To avoid injury, miles/minutes must be built up with a steady increase, while following the well accepted rule of no more than 10% increases per week. So if you are trying to hit 40 miles per week with 11 weeks to go in the summer, then you might follow something like this:

Week 11 - 40  
Week 10 - 36  
Week 9 - 32  
Week 8 - 24 ( Cut back)  
Week 7 - 29  
Week 6 - 26  
Week 5 - 24  
Week 4 - 17 (cut back)  
Week 3 - 21  
Week 2 - 19  
Week 1 - 17

For a goal of 25 miles per week, if say only 8 weeks to go, you would do something like this:

Week 8-20 (cut back)  
Week 7 - 25  
Week 6 - 22.5  
Week 5 - 20  
Week 4 - 15 (cut back)  
Week 3 - 18  
Week 2 - 16  
Week 1 - 15

The above illustrations follow a straight-line methodology. However, your summer will have conflicts (trips, work, maybe an illness) and you will have to improvise. If you keep the above concept in mind, you can catch back up if you have a bad week. Just don't run 9 miles per week all summer (3 days of 3 miles) and then crank it to 25 or 40 at the last couple weeks (5 or 6 days of 6 or 7 miles per day) or you will get injured. Promise.

Take your ending goal, times .90 to get prior week. Then take that result times .90 for the previous week. (For example  $40 \times .90 = 36$ .  $36 \times .90 = 32$ ... etc.)

## The Anatomy of a Perfect Summer Running Week

No, this isn't a science class, and there will not be a test. But yes, there is an ideal running week for the summer. It basically looks the same for JV runners and Varsity. Here's how it breaks down:

- **One LONG RUN per week.** This run, at a comfortable pace (can carry on a conversation while running) should be 25% of the weekly total. So... if you are running 30 miles in a week, then the long run should be 7.5 miles. If you are running 40, your long run should be 10 miles. A 20 mile week is a 5 mile long run.

- **One day that has striders for speed maintenance.** Yes, speed! Not speed as in eight X 200 meters all out. But once a week, all XC runners need to work on stride and speed. Year round! So one day per week, you need to incorporate striders into your workout. These might be 8 X 50 meter striders at 80 to 90% of top speed. Or 4 to 6 X 100 meter striders at the same speed. Do them in the middle of a run, so that you can 'cool down' your legs afterwards.

- **"Filler miles"...** the rest of the week should just be "running". Do some **varied pace, tempo runs** as you fill your week with miles (or minutes). Do NOT run hard hill repeats. Do NOT go to the track and run repeat 800's on your own. There will be a time and place for that, and it's called "the regular XC season". After two of your longer runs you should do 5x100m striders preferably on grass and stretch between each strider as part of your cool down.

- **Core Work** - Two to three times a week, you need to work on your core - sit ups, planks, pushups, weight work, stretching. Don't wait for the season to start for this - stay in balance! **hasfit.com** has some great core and strength workouts that are planned and easy to follow. <https://hasfit.com/workouts/home/strength-weight-training/> or <https://www.runnersworld.com/training/g23341982/best-bodyweight-exercises/?slide=1>

- **Rest Day.** Regardless of your weekly goal, you need to have at least one day of complete recovery. It's that easy!

### - A few sample weeks:

#### **20 mile goal week:**

Mon: 4 miles, course with hills, easy striders after

Tues: 0 miles

Weds: 5 miles easy, perhaps 3 miles, 1/2 mile striders, 1.5 cool down.

Thurs: 3 miles easy (core)

Friday: 3 miles easy

Sat: 5 miles, easy striders after

Sun: 0 miles (core)

Total for the week 20. 1 long run, 1 day with harder course. 2 days of core. 1 day of striders. 2 rest days.

#### **25 mile goal week:**

Mon: 4 miles easy, core work afterward

Tues: 2 miles to park, 1/2 mile of striders, 2 miles back (4.5 total)

Weds: 3 miles easy

Thurs: 5 miles on a hilly course, easy striders after

Fri: 2 miles easy jog, core after

Sat: 6.5 mile,, easy striders after

Sun: rest

Total for week - 25. 1 long run, 1 strider day, 2 core days, one harder hill run.

### 40 mile goal week:

Mon: 6 miles easy to mod pace. Course with some hills. Easy striders after

Tues 4 miles easy, core afterward

Wed: AM - 5 miles PM - 3 miles easy, with striders

Thurs: 5 miles easy pace, core afterwards

Fri: AM - 5 miles PM - 2 miles easy.

Sat: 10 mile, easy striders after

Sun: Rest

Total for week - 40. 1 long run, 1 strider day, one harder hill run, 2 core days

Do these things first before you start summer running:

1. **Get new shoes** - unless you bought new trainers at the end of track, start the summer with new shoes. Let Mom and Dad know that you will probably need another pair as the season progresses.
2. **Track your training**-Don't hesitate - start this now. You can use the Strava app (join Jaguars Run), log book, a calendar, or a blank notebook. Record your workouts, where you ran, how you felt, special comments.
3. **Hydrate** - It is a no-brainer that you need to keep your body well hydrated over the summer. Drink all day long. Most runners can easily drink 6 or more, 12 oz bottles of water a day. Use your bladder as a guide - when you are constantly running to the restroom, and your urine is clear, you are hydrated. When your urine is dark yellow, you are still very dehydrated.
4. **Buy a sport watch** to measure "minutes run" **or, get to know how to use Google Maps** to track your routes and figure out your mileage. GPS watches are the best. You can map your run **mapmyrun** or connect your watch to **Strava**. I am on Strava so if you follow me I can follow you and see your runs. If you use Strava make sure you set your privacy settings so you're not totally public.

### **Common Sense Guidelines**

Some common sense stuff for running this summer, that we need to remind ourselves about occasionally. This is for new and veteran runners - follow these important rules and you'll make it to the start of the season just fine!

1. **Run with a buddy whenever possible** - not only is it easier for you to be seen by cars when you are with another runner... it is much easier to get the miles in when you are chatting away and not simply focused on "how great this feels"!
2. **Run off road as much as possible.** Running on dirt or grass is much better for your legs. Asphalt is better than concrete - avoid prolonged runs on concrete as much as possible.
3. **Wear bright colors. At night, wear white and some reflective material.**
4. **Carry an ID strap**, or some sort of ID. Even writing your name and phone # in Sharpie Marker on the sides of your shoes is a great idea. Carry your phone in a small running belt for added safety,
6. **Tell somebody** when you leave, the route you plan to take, and roughly when you plan on returning. If you roll an ankle 4 miles from home, you'll appreciate the fact that your parents knew what route you were running and can come

find you.

7. **NO head phones while out on the streets.** Cars weigh 3000 lbs or more. You weigh...less. You need all your senses while you are running, especially your hearing. Sing a song in your head, but don't plug your ears with headphones.

8. **Expect to have some bad runs** from time to time, especially as the weather heats up. Learn to tolerate them. The key is being consistent.