## Cross Country Training and Workout Types

We do several types of workouts with each having their own purpose and design. This guide will give you a better understanding of the terminology used on your workout calendar. You will also understand the purpose of each workout at different stages of your training.

There is no secret, short cut, or quick fix to becoming a better distance runner! You have to run! Becoming a stronger runner is important to becoming a faster runner. Please note that when I say "strong" and "strength", l'm referring to aerobic strength. It doesn't matter what your ability or experience level is because the more you run, the better prepared you will be to handle a progression in your training. Every day you put on your running shoes, you're making a commitment to get better and are investing in your fitness and the competitive spirit of the sport. The hardest part is getting started and establishing a routine!

I like to divide the season into quarters. Our goal is to be at our best and sharpest when the meets count the most, and that is in late October and early November. The different quarters of our training are as follows:

## 1st Quarter: Base Training - June \& July ( $\sim 8$ weeks)

Our priority in this stage is to build your fitness. For new runners, especially freshmen, we're starting from square one and will teach you how to run. For some, that may mean being able to run 15-20 minutes without stopping as an initial goal. For more experienced runners, like upperclassmen, it's about adjusting back to training after a break.

Building an aerobic base is about building up your fitness, logging the miles, expanding your cardiovascular fitness, and preparing your threshold for longer and harder workouts that we'll do over the course of the regular season. This base will carry us through the season and a majority of our training volume will consist of these runs. Types of runs we do during this stage include maintenance runs (easy, moderate, and hard intensities), long runs, hill repeats, tempo runs, and fartleks. This stage is not about building speed but building stamina and eliciting the cardiovascular and muscular adaptations associated with continuous endurance training.

Our training over the summer is the most essential part of the season. Granted championships can't be won in the summer but failing to prepare is preparing to fail! Not putting in the work will put you in a disadvantageous position when we start practice in August.

## 2nd Quarter: Pre-Season - August (~4 weeks)

In this stage, we will continue to build on your aerobic strength after initially assessing each team member's current level of fitness. With the official start of practices, we will ramp up the intensity of our workouts. Trust that you've put in the work of the summer months to be prepared for these harder workouts! While we won't include pure speedwork, our workouts will be harder and more challenging. There may be a scrimmage and/or a low-key meet to evaluate our training before the regular season begins.

## 3rd Quarter: Regular Season - September \& Early October ( $\sim 6$ weeks)

In this stage, we will start competing! Some team members will race once a week, while others will race twice. We will still maintain a reasonably high volume of work until late September/early October. As we transition into a new school year, we will progressively incorporate more speedwork, mainly off of the track. We will focus on different parts of the 5 k race and as we get later in the season, workouts will progressively get shorter and faster! We will also have fewer hard workouts as we want to be relatively fresh for our races! Once we enter October, recovery and the quality of workouts will be of paramount importance!

Recovery is an important staple of our training. You will learn about Project 22 throughout the course of the season. Practices are two hours long and we will make every second of those two hours count! Project 22 refers to the other 22 hours of the day and what every member of the team does to make them count. We will prioritize getting 7-9 hours of sleep each night. We will prioritize refueling our bodies with nutritious food. We will prioritize being hydrated throughout the day. In short, Project 22 refers to doing all of the little things that are necessary to keeping our bodies at peak physical condition!

## 4th Quarter: Post-Season - Late October \& Early/Mid November ( $2-5$ weeks)

This is the part of the season where we will be at our best. For some runners, this may be the last invitational of the season. For others, the district, regional, or the state meet will be the key time to peak. Here, we will cut down our volume but keep our intensity high. We will work on shorter, top-end speed. In other words, QUALITY OVER QUANTITY! Come to practice, take care of what you need to take care of, go home and RECOVER! Project 22 is in full effect at this point of the season as we do whatever it takes to be rested and sharp. Maintaining a peak for more than a few weeks is difficult. Therefore, this part of the season may be catered towards individuals or groups of athletes, depending on how far they are anticipated to advance.

## Types of Runs <br> Maintenance Runs

* Easy - These are faster than a jog but an easy day is used to mainly build up mileage in the early parts of the season or as recovery from a longer or harder workout from the day before. Easy runs should be done at a "conversational pace." You should be able to carry on a conversation with your teammates without too much trouble.
* Moderate - These are a bit faster than easy runs but it's not a tempo run. Sometimes I'll tell you these are "date pace" or "as you feel" runs, meaning that if your group is feeling good and want to push the pace, by all means! I also like to call these "negative split" runs. Negative splitting means a runner goes out on their run under control, but returns faster than how they started. Runners really need to gauge how they feel on these runs and develop the confidence to push themselves and get stronger every step!
* Long Runs - Long runs increase the mitochondrial density in your muscles' cells, increase capillary density, improve cardiac output, teach the body to use fat over glycogen as a fuel source, and make you a more efficient runner. Basically, long runs build your endurance. Depending on your training group, current level of performance, and stage in the season, this may be anywhere from 50-80 minutes. You should strive
to run at an even pace, starting out easier, so that you can finish the entire run without struggling towards the end. Long runs are especially important as you're building your base during the first and second quarters of the season.


## Hills

* Hills will become your best friends as most courses we will race on have them!
* Hills range from short and steep (50-100 meters) to long and either gradual or steep inclines that can take several minutes to complete.
* Hills will help you build your stamina, confidence, and mental toughness.
* We do not view hills as obstacles! Hills are opportunities to break weaker opponents.
* Hill workouts come in different formats.
$>$ Some training routes on your maintenance runs may be hillier than others.
$>$ Hill Repeats - We start at the bottom of the hill and run hard from the bottom to the summit. It is, in some ways, speed work in disguise. Pick a pace you can sustain and adapt your form to the steepness of the grade. Lean slightly into the hill and drive with your knees and pump your arms! "Pop the top" of the hill as you approach the top and push all the way through the finish line. Once a rep is finished, you will walk/jog back to the bottom and do it all over again!
* Always remember that you can't get to the top of the hill right when you start running up it. If you do, you'll tire yourself out and be miserable going up it. Start controlled and tell yourself "One step at a time, one stride at a time" and get stronger as you near the summit and "pop the top!"


## Tempo

* A tempo in its simplest form is a hard and controlled run. It's typically done at $80 \%$ of your 5 k race pace or using the Jack Daniels VDOT training intensity tables for an extended period or distance.
* Runners doing a tempo run should strive to maintain an even or accelerating pace.
* A test for this is if you can answer a simple question with a short sentence (i.e. - "I'm fine") you're running it the right way!
$>$ If you're too much out of breath to answer a short question, you may be going too fast and if you can easily carry on a conversation, you're not going hard enough.
* Tempo runs are usually done for longer distances or times such as for example, 20 minutes or 3 miles. They may also be done in interval format such as $3 \times 5$ minutes/1 mile with 2 minutes rest.
* While tempo runs should be hard, they should not produce a great amount of lactic acid and are reasonably easy from which to recover.
* They also stimulate a race situation, as you will be keeping a steady effort for an extended period of time.


## Fartlek

* Fartlek (don't snicker) is a Swedish word that means "speed play."
* A fartlek typically involves a series of shorter, faster intervals interspersed with short rest periods.
* Intervals may range from 20-30 seconds hard to as much as 4-5 minutes.
* Usually the rest between intervals ranges from 30 seconds to 2 minutes, depending on the length of the interval.
* Each interval will be run hard, maybe even faster than race pace.
* The purpose of a fartlek is to control your speed based on the length of the interval.
* Fartleks may have different formats:
$>$ A workout may have a standard length such as $8 \times 2$ minutes hard, 1 minute easy or $12 \times 1$ minute hard, 1 minute easy
$>$ Intervals run at a descending pace (i.e. $-3 x$ ( 2 minutes hard/ 1 minute easy, 1 minute hard/1 minute easy, 30 seconds hard/1 minute easy)
$>$ Ladder - Start shorter and work up to longer intervals and then back down to shorter intervals (i.e. - 1 minute hard/1 minute easy, 2 minutes hard/1 minute easy, 3 minutes hard/1 minute easy, 4 minutes hard/ 2 minutes easy, 3 minutes hard/1 minute easy, 2 minutes hard/1 minute easy, 1 minute hard/1 minute easy)
* The key to fartleks is you are in constant motion; you never stop running!
* What's fun is we can mix these up depending on the part of the season we're in. Earlier in the season, we'll prioritize going hard for longer intervals or working on top-end speed later in the season.
* Fartleks can also be a nice way to break up a longer run. By throwing in some short intervals (like 10x 30 seconds hard/30 seconds easy), fartleks lend themselves to more creativity than traditional workouts.


## Intervals

* The purpose of interval training is to maximize aerobic power, or $\mathrm{VO}_{2} \mathrm{Max}$.
* It takes about 90 seconds to 2 minutes to build up to $\mathrm{VO}_{2} \mathrm{Max}$, from complete recovery.
* A good amount of time to spend running intervals is between 3 and 5 minutes, or approximately 1000 meters to a mile.
* It is important to understand that when a runner is prescribed a certain pace for these intervals, that they should not run faster than what's been laid out for them.
$>$ While that may sound counterintuitive to what we're trying to accomplish, working beyond your $\mathrm{VO}_{2}$ Max pace will not give you any more benefit relative to the purpose of the workout.
$>$ Running too fast, especially too early, may result in the subsequent intervals being too slow because you're too fatigued. No matter how much you're hurting during these later intervals, they're still too slow because you spent so much time doing anaerobic work while overworking your first interval. Therefore, you're not spending any time at your max aerobic power!
* Interval workouts will gradually be incorporated during the season, mainly in the 3rd quarter of the season.
* Total volume of interval work will usually be between 3 and 5 miles, depending on the ability level of the athlete.
* We will do most of our interval training off the track, preferably on grass, and over varying terrains.


## Repetition Training

* The purpose of repetition training to improve anaerobic power, speed, and running economy.
* If you want to improve your speed, you have to practice running FAST!
* In order to run fast, you have to be recovered enough to run fast and with good technique.
* Recovery time is about 2 or 3 times as long (in time, not distance covered). For example, if we run 200's in about 30 seconds, rest is between 60 and 90 seconds.
* The total amount of volume running at repetition pace is usually no more than $5 \%$ of our weekly mileage. If we're running 40 miles a week, for example, a repetition training session will consist of no more than 2 miles worth of work.
* Repetition training is about stressing quality over quantity.
* This type of training will be incorporated beginning at the end of the 3rd quarter but will take priority over the 4th quarter.
* Like with interval training, because this is cross country, this type of training will take place off the track as much as possible!

Hopefully, this guide will help you get a basic understanding of how we're going to accomplish our goals this season! These are types of workouts we will incorporate because they're tried and true. There are also other forms of training that can compliment these workouts, such as strength training in the weight room and general strength, flexibility, warm-ups, etc. but that will be explained in more detail in a separate document.

There are no short cuts! Every person's challenge is the same...to do your best every day and try to improve on the day before. We will do everything in our power to get better every day in every single way. As you grow physically, hopefully your mental toughness and confidence will improve as well, and you will find it easier to get through your workouts.

It is important to remember that while each of you will be responsible for the individual work you put in, you don't have to do it alone! You're encouraged to use your teammates to help you push through days when it might not be as easy for you and you will also be there to return the favor. Cross country is a team sport and the teams that train together (over the summer, on the weekends, etc.) are those who succeed together.

The best teams have a great sense of family. Within that family is tremendous culture. Behind that culture, there's extraordinary character. We are in this together and we will triumph as ONE!

Coach Fanale

