# RUNNERS 

The Less-Is-More Marathon Plan

## The Less-Is-More Marathon Plan

Tired of the daily mileage slog? Here's how to run your best marathon ever on just 3 days a week.

## By Amby Burfoot

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Jimmy Brehm had completed four marathons, with a best time of 3:51. He wanted to run faster. Andy Goodwin had finished two marathons, with a best of 3:21, and he wanted to get faster, too.

Kim Halley had other issues. She had run two marathons 10 years ago, then eased off to recreational running, then had her first baby. She simply wanted to get back in shape, and to finish another marathon.

All three runners achieved their goals last December at the Kiawah Island Marathon. So did 18 others. The 13 veterans among those 21 runners improved on their most recent times by almost 20 minutes. Even more remarkably, they did so with a daring new marathon-training program from Furman University in Greenville, South Carolina. Daring because it defies the conventional wisdom. Daring because it limits participants to just three running workouts a week. And daring, in the extreme, because it tells runners they'll get faster on fewer workouts.
"Train Less, Run Faster," you've heard the refrain before. It's a long-time favorite of snake-oil coaches with credentials from Charlatan University. Of course, real runners know that to get faster, you have to log more miles and run intervals until your rear end is dragging on the track behind you.

Not this time. This time the "Train Less, Run Faster" claim is backed by the experiences of real runners who followed the program and got results. This time it's backed by scientist-runners with advanced degrees in physical education and exercise physiology.

This time, you should give the program a try. It just might work for you.

## Getting to FIRST

The Furman Institute of Running and Scientific Training (FIRST) marathon program was born, in a sense, when Bill Pierce and Scott Murr decided to enter a few triathlons way back in the mid-1980s. Just one problem: They hit the wall when they added biking and swimming to their running. The demands of three-sport training were too much, so they cut back their running from six days a week to four.

To their surprise, they didn't slow down in local road races. So they cut back to three days of running. "Lo and behold, our 10-K, half-marathon, and marathon times didn't suffer at all," says Pierce. "The more we discussed this--and we discussed it a lot--the more we became convinced that a three-day program, with some cross-training, was enough to maintain our running fitness."

Pierce, chair of Furman's Health and Exercise Science department, has run 31 marathons, with a best of 2:44:50. At 55, he still manages to knock out a 3:10 every fall by practicing what he preaches: running three
workouts a week. While Pierce has retired from triathlons, Murr, 42, with a doctorate in exercise physiology, still wants to complete another Hawaii Ironman, having already done five. He has run a 2:46 marathon, also on three training runs a week.

Pierce's and Murr's discussions, and personal successes, amounted to little more than that until early 2003 when Pierce got university permission to form FIRST. "It helped," he notes with a smile, "that I didn't ask for any funding." By that time, he had assembled a team of four FIRST cofounders, including Murr, Furman exercise physiologist Ray Moss, Ph.D., and former Greenville Track Club president Mickey McCauley.

In the fall of 2003, FIRST launched its training program. Applicants were told they would have to undergo pre- and postprogram physiological testing in Furman's Human Performance Lab, and run three very specific running workouts each week. There were no restrictions on additional running or cross-training workouts, and there was no "final exam" test race.

The postprogram lab tests showed that subjects had improved their running economy by two percent, their maximal oxygen uptake by 4.8 percent and their lactate-threshold running pace by 4.4 percent. In other words, the three workouts had led to better fitness and race potential. FIRST was off and running.

Fast forward to summer 2004. FIRST advertised a free marathon-training program that would last 16 weeks and culminate with the Kiawah Island Marathon on December 11. To enter the program, you had to be able to run 10 miles. All participants also had to agree to lab testing, and promise not to run more than three days a week. In other words, this time the program came with a clear running restriction. Partially as a counterbalance, participants were encouraged to do two additional days of cross-training, such as bicycling, strength training, rowing, or elliptical training.

From about 50 applicants, FIRST selected 25 subjects ( 17 with past marathon experience, eight first-timers), including engineers, accountants, managers, administrators, sales representatives, teachers, a nurse, an attorney, and a physician. They began training in August with individualized workouts that Pierce calculated from the lab testing and a questionnaire. Each participant ran just three days a week, doing one long run, one tempo run, and one speed workout. They trained on their own, in their own neighborhoods, according to their own daily/weekly schedules. (To adapt the program for you, see the training schedule and strategies featured in this article.)

In December, 23 of the original 25 ran at Kiawah. One had dropped out of the program because her house flooded, and one because of injury. "I had expected that we would lose at least five runners to injuries," says Pierce, "so I was very happy with this outcome. It seemed to prove that our workouts, which were harder than most of the runners were accustomed to, didn't lead to a rash of injuries."

Two participants dropped down to the half-marathon, because they had developed minor injuries during training, but recovered in time to attempt the shorter distance. Both finished the half-marathon with good performances.

That left 21 FIRST marathoners on the starting line. How did they do? All 21 finished, with 15 setting personal bests. Four of the six who didn't set PRs ran faster than their most recent marathon. "It was so exhilarating to watch them come in, and it was quite a relief, too," says Pierce. "When you're responsible for 21 people who cut back their marathon training because you told them to, well, that can make you a little nervous."

What's more, as postrace lab testing showed, the FIRST participants had improved their maximal oxygen uptake by an average of 4.2 percent and their lactate threshold running speed by 2.3 percent. Bonus: They also reduced their body fat by an average of 8.7 percent. "We think the results show that our program was a big success," says Pierce. "Our people didn't get hurt, and most ran their best-ever marathon. I think we showed that you can teach people to train more efficiently."

## Be a FIRST-Timer

Official participants in Furman's marathon program undergo lab testing, attend monthly meetings, and receive individualized advice, and sometimes even daily e-mails. But anyone can adapt and use the program's basic principles. Just follow the eight rules below, and the 16-week FIRST training plan (at left). For more information, check out www.furman.edu/FIRST.

## 1. Run Efficiently, Run for Life

Bill Pierce is a tough, performance-oriented guy, but he insists on explaining the FIRST program from a fitness and philosophical perspective. He believes that a three-day running week will make running easier and more accessible to many potential runners and marathoners. It will also limit overtraining and burnout. Finally, with several days of cross-training, it should cut your injury-risk substantially. This may lead to faster race times. More importantly to Pierce, it adds up to a program that many time-stressed people can follow healthfully for years. "Our most important objective is to help runners develop and maintain lifelong participation in running," says Pierce. "Our second goal is to help them achieve as much as possible on a minimum of run training."

## 2. Run Three Times a Week...And No More

This is the centerpiece of the entire FIRST program. FIRST runners do only three running workouts a week. This decreases the overall time commitment of the program, and the risk of injuries--important considerations to many runners. Each of the three workouts has a specific goal. That's something few runners have considered. "With most runners, when I ask them what they're hoping to accomplish on a given run, they look back at me with a blank stare," says Pierce. "I don't think they've ever thought about this question before. We have." The three FIRST workouts?a long run, a tempo run, and a speed workout?are designed to improve your endurance, lactate-threshold running pace, and leg speed.

## 3. Build Your Long Run to 20 Miles

The FIRST marathon training program builds up to two 20-mile workouts, the second one taking place three weeks before your marathon race date. But covering 20 miles is the easy part of the FIRST program. The harder part is the pace--60 to 75 seconds slower per mile than your 10-K race pace. Many other marathon programs allow you to run slower than this, by as much as 30 to 40 seconds per mile. "It's true that our long runs won't let you admire the scenery as much," says Pierce. "But they aren't painful either. They just push you a little beyond the comfort zone. If you're going to race a marathon, you have to do some hard long runs to get the toughness and focus you'll need on race day."

## 4. Run Three Different Kinds of Tempo Runs

The tempo run has become a mainstay of many training programs, but the FIRST program carries the concept a little farther than most, adding more variety and nuance. FIRST runners do three different kinds of tempo runs?short tempos (three to four miles), mid tempos (five to seven miles) and long tempos (eight to 10 miles). Each of these is run at a different pace. "We've found that the long tempo run is particularly helpful," says Pierce. "You're basically running at your marathon goal pace, so you're getting maximum specificity of training, and improving your efficiency at the pace you want to run in your marathon."

## Be a FIRST-Timer 2

## 5. Put More Variety in Your Speedwork

Many runners do no speedwork at all. Those who do often fall into a rut, running the same workout time after time. Pierce learned long ago that this approach makes speedwork much harder than it should be. "I used to run the same speed workout week after week," he recalls. "After a while, I would start to dread that workout. Speedwork is much easier when you change it around a lot." The FIRST runners do many different speed workouts at different paces, generally taking just a 400-meter jog between the fast repeats. For the sake of simplicity, we've narrowed the selection to four distances at four paces. (See "The FIRST Paces"). But be creative. Pierce has just one more rule for speed training: Start modestly, but after a month, try to get
the total distance of all the fast repeats to equal about three miles or 5000 meters (i.e., running $5 \times 1000$ meters, or 12 to $13 \times 400$ meters).

## 6. Cross-Train Twice a Week...Hard

Last fall the FIRST coaches asked their subjects to cross-train twice a week, but they didn't provide any additional instruction. This fall, they will, because they think too many of the runners lollygagged through the cross-training last year. This caused them to miss out on some potential training benefits. "We believe that if you do cross-training correctly, you can use it to increase your overall training intensity, without increasing your injury risk," says Pierce. "At the same time, you can still go out and run hard the next day." But the point is this: Even though last year's test group didn't cross-train as hard as they could have or should have, they still set a slew of PRs.

## 7. Don't Try to Make up for Lost Time

Stuff happens. During a 16-week marathon program, lots of stuff happens. You get sick; you sprain your ankle; you have to go on several last-minute business trips. And so on. Result: You miss some key workouts, maybe even several weeks of workouts. Then what? "You can't make up what you missed," says Pierce, "and you certainly shouldn't double up on your workouts to catch up with your program. Often, if you had a slight cold or too much travel, you can recover and get back where you want to be relatively quickly. But if you have foot pain or ITB syndrome or something like that, you've got to take care of your injury first, and get healthy again." This can take weeks, and it's really tough if you've been looking forward to a big race. You have to accept it, though, and oftentimes you get better and can run an accompanying half-marathon. But you shouldn't try the marathon until you're fully prepared for it. Reschedule another in a few months' time.

## 8. Follow a 3-Week Taper

The FIRST program builds for 13 weeks, with the second 20 -mile long run coming at the end of the thirteenth week. After that, the program begins to taper off, with 15- and 10 -mile long runs during weeks 14 and 15. The speedwork and tempo runs taper down just a little, with a final eight-mile tempo run at marathon goal pace coming 10 days before the marathon. "The marathon taper has tripled in length during my career," Pierce notes. "When I first started out in the 1970s, we only did a six-day taper for our marathons. Now the conventional wisdom is three weeks, and that makes sense to me. It seems about the right amount of time to make sure you've got the maximum spring back in your step." If you feel sluggish doing just the easy running in the final week (this is very common, by the way), do five or six 100-meter strides or pickups after the Tuesday and Thursday workouts. Get in some extra stretching afterward as well.

The FIRST marathon program includes three running workouts per week-a speed workout, a tempo run, and a long run. Here's the full, 16 -week marathon training program. Participants are also encouraged to cross-train for 40 to 45 minutes on two other days per week.

| Week | Tuesday <br> Speed | Thursday <br> Tempo | Saturday Long |
| :--- | :--- | :--- | :--- |
| 1 | $8 \times 400$ meters | 3 miles | 10 miles |
| 2 | $4 \times 1200 \mathrm{~m}$ | 5 miles | 12 miles |
| 3 | $6 \times 800 \mathrm{~m}$ | 7 miles | 13 miles |
| 4 | $3 \times 1600 \mathrm{~m}$ | 3 miles | 10 miles |
| 5 | $10 \times 400 \mathrm{~m}$ | 5 miles | 14 miles |
| 6 | $5 \times 1200 \mathrm{~m}$ | 5 miles | 15 miles |
| 7 | $7 \times 800 \mathrm{~m}$ | 8 miles | 17 miles |
| 8 | $3 \times 1600 \mathrm{~m}$ | 10 miles | 13 miles |
| 9 | $12 \times 400 \mathrm{~m}$ | 3 miles | 18 miles |
| 10 | $8 \times 800 \mathrm{~m}$ | 5 miles | 15 miles |
| 11 | $4 \times 1600 \mathrm{~m}$ | 8 miles | 20 miles |
| 12 | $12 \times 400 \mathrm{~m}$ | 5 miles | 15 miles |
| 13 | $6 \times 1200 \mathrm{~m}$ | 5 miles | 20 miles |
| 14 | $7 \times 800 \mathrm{~m}$ | 4 miles | 15 miles |
| 15 | $3 \times 1600 \mathrm{~m}$ | 8 miles | 10 miles |
|  |  | 20 min |  |
| 16 | 30 min easy w | easy w 3 | Marathon |
|  | $5 \times 60 \mathrm{~s}$ | or 4 |  |
|  |  | pickups |  |

## The FIRST Paces

The training paces recommended by the FIRST program are somewhat faster than those recommended by other training plans. Of course, with just three running days a week, you should be well rested for each workout. Here are the paces you'll need to run, each expressed relative to your current $10-\mathrm{K}$ race pace.

| Long Run | $10-\mathrm{K}$ pace +60 to 75 <br> seconds/mile |
| :--- | :--- |
| Long Tempo | $10-\mathrm{K}+30$ to 35 seconds |
| Mid Tempo | $10-\mathrm{K}+15$ to 20 seconds |
| Short Tempo | $10-\mathrm{K}$ pace |
| 1600 m Repeats | $10-\mathrm{K}-35$ to 40 seconds |
| 1200 m Repeats | $10-\mathrm{K}-40$ to 45 seconds |
| 800 m Repeats | $10-\mathrm{K}-45$ to 50 seconds |
| 400 m Repeats | $10-\mathrm{K}-55$ to 60 seconds |

