## 400m Race

## 400 Race Strategy

Get out and get nose into race
2 different strategies

1. Broken by $1 / 3$

- $1^{\text {st }} 100 \mathrm{~m}$
- $2^{\text {nd }} 150 \mathrm{~m}$
- $3^{\text {rd }} 150 \mathrm{~m}$

2. Broken by $1 / 2$

- $1^{\text {st }} 2000.9-1.2 \mathrm{sec}$ off 200 PR
- $\quad 2^{\text {nd }} 2003.003 .5 \mathrm{sec}$ off 200 PR

The 400 meters can be broken down into four sections which must flow together for athletes to achieve peak performance.

The four sections are:

- Accelerate to sprint: Explode out of the blocks. Athletes maximize speed over the first 60 to 80 meters of the race. This sprint action allows the athlete to get out of the blocks and sets up the second phase. "Attack the curve" is an effective cue phrase for section 1.
- Freewheel the backstretch: After accelerating and reaching full speed in the first curve, athletes should relax the upper body and enter a mindset that allows them to run with less perceived effort from the curve to the 200 m mark. In reality, sprint speed is maintained in a "freewheel" manner with maximum stride length and relaxation of tension above the hips. Many coaches refer to this a checking-out phase for relaxation and race awareness. Heavy emphasis is placed on relaxation while maintaining speed.
- Build the curve. Athletes should visualize pressing down on a car accelerator at this point in the race. The ability to cover ground will take more effort as lactic acid kicks into high gear. It is important to run on the inside of the lane and push to make up the staggers on the other competitors in this second curve. Quickly increasing arm cadence and driving the arms complements to "building the curve"
- Lift to the finish. This phase requires running through the greatest accumulation of lactic acid. While arm carriage and knee lift are rising together, there is still a required focus on turnover. The main emphasis is lifting with straight ahead form towards the finish line. Maintaining correct running form will allow athletes to move efficiently through the finish line. The can use cues such as "head up, chest up, hips up, knees up, toes up" or "lift to the finish" to remind the athlete to concentrate on form.

The phrase "sprint-freewheel-build-lift" is useful self-talk and race visualization for the athlete to learn.

As the season progresses, the athlete should strive to reach the 200 m mark to 1 to 1.5 seconds above their best 200 m time.

| 400 m Race Splits |  |  |  |
| :---: | :---: | :---: | :---: |
| Best 200 m | First 200 m | Second 200 m | Final Time |
| 21.5 | 23 | 25 | 48 |
| 22 | 23.5 | 25.5 | 49 |
| 22.5 | 24.0 | 26.0 | 50 |
| 23.0 | 24.5 | 26.5 | 51 |
| 23.5 | 25.0 | 27.0 | 52 |
| 24.0 | 25.5 | 27.5 | 53 |
| 24.5 | 26.0 | 28.0 | 54 |
| 25.0 | 26.5 | 28.5 | 55 |
| 25.5 | 27.0 | 29.0 | 56 |
| 26.0 | 27.5 | 29.5 | 57 |
| 26.5 | 28.0 | 30.0 | 58 |
| 27.0 | 28.5 | 30.5 | 59 |
| 27.5 | 29.0 | 31.0 | 60 |
| 28.0 | 29.5 | 31.5 | 61 |
| 28.5 | 30.0 | 32.0 | 62 |
| 29.0 | 30.5 | 32.5 | 63 |
| 29.5 | 31.0 | 33.0 | 64 |
| 30.0 | 31.5 | 33.5 | 65 |


| Energy Requirements |  |  |
| :--- | :---: | :---: |
|  | Aerobic | Anaerobic |
| $\mathbf{4 0 0}$ | $\mathbf{4 3} \%$ | $\mathbf{5 7 \%}$ |
| $\mathbf{8 0 0}$ | $60 \%$ | $40 \%$ |
| $\mathbf{1 6 0 0}$ | $77 \%$ | $23 \%$ |
| $\mathbf{3 2 0 0}$ | $84 \%$ | $16 \%$ |
| $\mathbf{5 0 0 0}$ | $88 \%$ | $12 \%$ |

