



Master Class Group Ride: 4 Hills

Created by Tom Scotto, ICA Master Instructor
Training Type: Tempo / Muscular Endurance
Working HR Zones: Zones 3-5
Total Class Length: 60 minutes

Profile Objective and Intensity:

This profile has a little of everything including some nice tempo riding, rolling hills, 4 bigger hills, and of course the resulting downhills. Many of the cyclists in the Arlington, Massachusetts's area will embark on this route when they want to maximize an hour of riding. The flat and rolling sections require a steady high Zone 3/Zone 4 intensity; each of the hills will require a Zone 5 effort if you want to continue in the company of your riding buddies. Although this profile has a varied terrain, the frequent hills emphasis muscular endurance.

About the Route:

Outdoor cyclists use the term “group ride” to describe organized (and not so organized) rides that often leave from predetermined destinations. These rides often start at a local bike shop or a convenient coffee shop. In many cases, group rides run on a regular weekly schedule, each with their own specific route. This profile follows one of the many routes my club and I use. Riding at a moderate to hard pace, it literally takes an hour to complete. With the exception of the warm-up and cool-down on Massachusetts Avenue, it is a loop. The first hill (Grove Street), third hill (Woods Street), and last hill (Mass Ave) are between a 5.5% and 6% grade. The second hill (South Road) is a 2.5% to 3% grade. The smaller grades make for very aggressive and fast climbing; one needs to be on alert for random attacks of kindness.

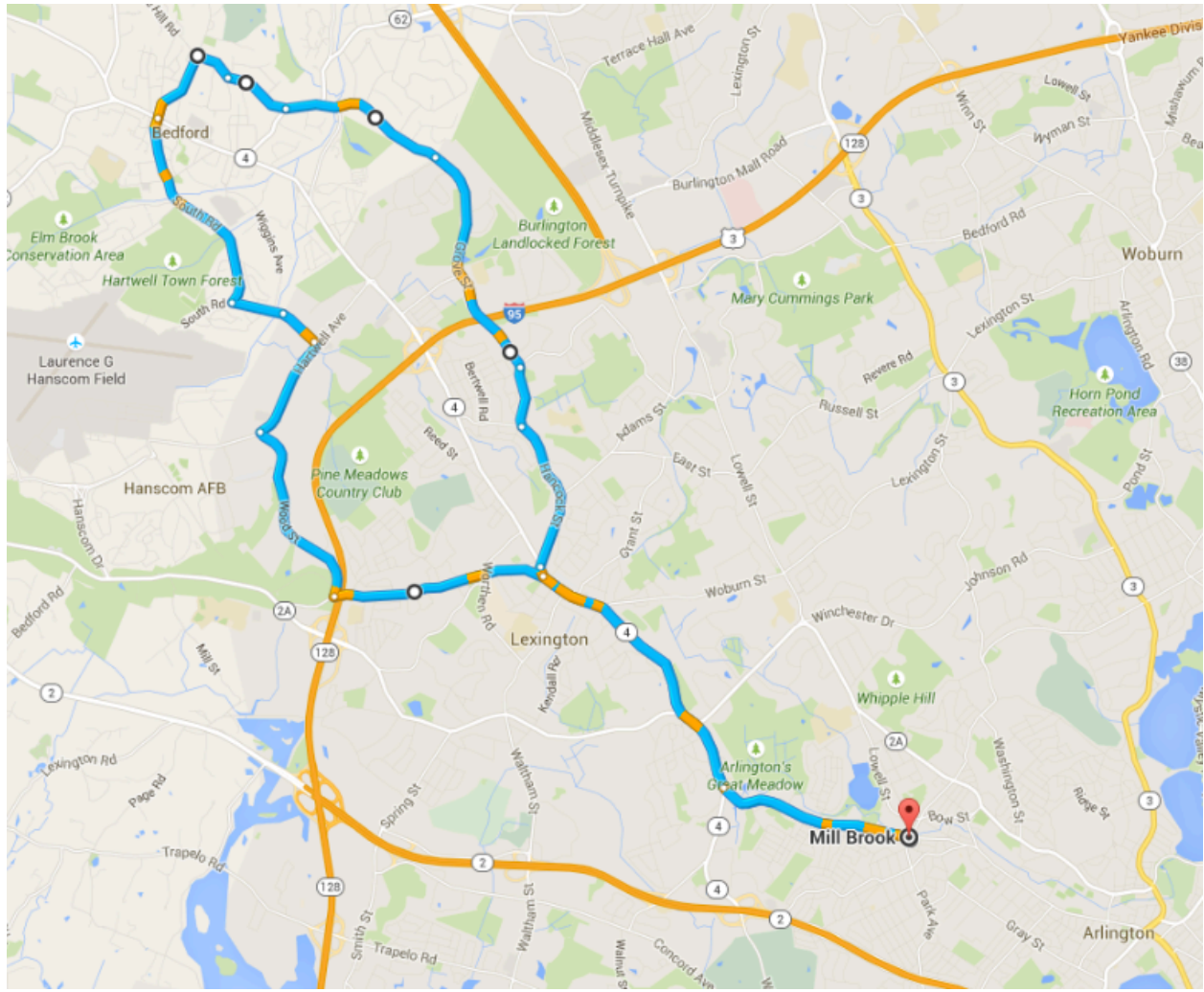
This is a Template

Some of you may look at a profile like this and think, “I can teach this; it looks like fun.” Others may feel disconnected from the roads and towns because they do not know the area. Regardless of how you perceive this profile, ICA's goal is to provide you with a template to build your own indoor group ride.

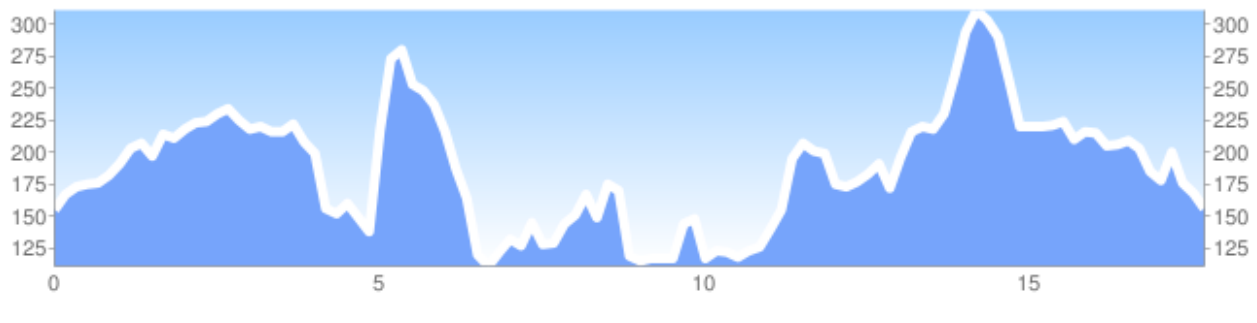
Even if you are not an outdoor rider, it can fun to design a route that meanders around local and famous attractions while providing interesting facts about the area you live in and around.

And if you create your own indoor group ride, let us know about it. We would love to highlight your profile and town or city.

Graphic Profile (Google Maps)



Elevation Profile (veloroutes.org)



Coaching

Intro / Warm-Up

Who Spends Money On Candygirls & Chocolate Chips, Hardfloor, 7:10, 105 bpm

The ride starts in Arlington, Massachusetts on the corner of Massachusetts Avenue (known as Mass Ave.) and Park Street.

The Town of Arlington was settled by European colonists in 1635 as a village within the boundaries of Cambridge, Massachusetts under the name Menotomy, an Algonquian word meaning "swift running water".

Paul Revere's famous midnight ride to alert colonists took him through Menotomy, now known as Arlington. Later on that first day of the American Revolution, more blood was shed in Menotomy than in the battles of Lexington and Concord combined. Minutemen from surrounding towns converged on Menotomy to ambush the British on their retreat from Concord and Lexington.

Notable residents

Michael Bowman, actor *Me, Myself and Irene*

Dane Cook, comedian & actor

Timothy Hutton, Actor, youngest winner of an Academy Award, Best Supporting Actor

Herb Reed, vocalist and founding member of *The Platters*

The road is predominately flat which makes it a perfect stretch for warming up.

Spin the legs and remain in Zone 2 until we get to the next town.

We are in route to the Lexington Battle Green in the center of Lexington, Massachusetts.

Rolling Road

Trouble, Kalabi, 3:56, 97 bpm

Welcome to the town of Lexington Massachusetts.

Settled in 1641, this town is prominent for being the site of the first shot of the American Revolutionary War, in the Battle of Lexington on April 19, 1775, colloquially known as the "Shot heard round the world" when news spread about the revolution.

We are going to veer off Mass Ave, to the right of the Lexington Battle Green and turn right onto Hancock St.

The Lexington Battle Green, properly known as Lexington Common, is the historic town common of Lexington, Massachusetts. It was at this site that the opening shots of the Battles of Lexington and Concord were fired on April 19, 1775, starting the American Revolutionary War. Now a public park, the common is a National Historic Landmark.

The road is relatively flat with a few rolling hills, but it is time to pickup the pace and bring our heart rate into Zone 3.

[At Instructors Discretion: 2 to 3 times]

We have a 30-second rolling hill approaching. Add some resistance and slow your legs slightly as you stand and maintain your momentum and speed.

1:19 – We ride into a rotary (traffic circle) and take the second exit onto Burlington Street.

1:53 – The group veers left onto Grove Street.

3:12 – Crossing over Interstate 95 (Yankee Division Hwy). You can see the start of the hill just up the road.

Hill – Grove Street (5.5% - 6%)

Guardian Angel – Dino Psaras Remix, Juno Reactor, 6:00, 66 bpm

The hill begins slowly rising to 5.5% within a minute of climbing.

The road has a number of bends and turns making it hard to see the top. This also plays on the mind as we wonder how long we need to sustain this effort.

If you managed to remain in Zone 3 when you arrived on Grove Street, you will quickly moved through Zone 4 and now find yourself in Zone 5 trying to settle your breathing.

One of the great things about indoor cycling is that you can ride and climb at your own pace regardless of what people are doing around you. However, as we struggle toward the top, some riders in the group decide to pickup the pace, placing everyone in difficulty.

What is beyond Zone 5?

5:15 – A final push to the top! Add resistance and jump out of the saddle to accelerate.

Fast Downhill

4321, Manafest, 2:38, 107 bpm

Back off the resistance and experience a fast downhill!

Spin up your legs and flush out those spanked muscles.

The road changes from Grove Street to Page Road as we leave Lexington, Massachusetts and enter Bedford, Massachusetts.

Bedford was first settled by Europeans around 1640.

The Bedford flag on display at the Bedford Free Public Library is the oldest known surviving intact battle flag in the United States. It is celebrated for having been the first U.S. flag flown during the American Revolutionary War, as it is believed to have been carried by Nathaniel Page's outfit of Minutemen to the Old North Bridge in Concord for the Battle of Concord on April 19, 1775.

As we arrive at the bottom of the descent, allow your heart rate to return to Zone 3 or Zone 2. Once we hit the bottom, and the flat road, we are going to bring the tempo back to Zone 3.

Rolling Road / Slight Uphill

Under Siege, John Fitzpatrick, 4:52, 90 bpm

The descent is over. Return to a fast flat road and slowly return to a steady Zone 3 tempo pace.

2:29 – We take a left onto Spring Street. The road is slightly uphill. Add resistance and imagine you are riding into a headwind.

If you are maintaining a steady tempo, adding resistance will bring you into Zone 4. Breathing is strong but sustainable.

Keep your breathing steady and work in and out of the saddle as needed to keep the legs fresh and to maintain your speed on the road.

Keep in mind that 3 hills remain. We want to stay in the group, but need to make sure we do not burn ourselves out too early.

4:05 - We approach a streetlight and continue straight over Great Road where the road changes to South Road.

Ease off some resistance and continue downhill.

Hill – South Road (2.5% - 3%)

Almost Dark, John Fitzpatrick, 3:45, 79 bpm

At the bottom, the road levels. We pass the Bedford Depot at the end of the Minuteman Bike Path. The bike path was created in 1977 after a major snowstorm blocked the train line that previously existed in its place. The Massachusetts Bay Transportation Authority (MBTA) agreed to help construct the Minuteman Bike Path in exchange for being released from requirements to restore service.

There are usually many riders at the freight house. It is a great meeting place. Cyclists leave their cars in the parking area and can ride the bike path straight back to Arlington.

We instead are going to continue on South Road and start to climb.

This hill is not as steep as the others. It is only 2.5% to 3%.

In place of steepness, we are going to push the tempo.

Settle into a 75-80 rpm cadence. Now add enough resistance to allow you to stand and still maintain your leg speed. Yes, we are going to climb at this tempo all the way to the top.

There will be no attacks on this hill, only a relentless pace.

Say hello to our friend Zone 5....again.

2:41 - Near the top of the hill the road takes a sharp sweeping left-hand bend and becomes Summer Street.

3:29 – Over the top!

Downhill

Trippin' On A Hole In A Paper Heart, Stone Temple Pilots, 2:56, 108 bpm

Time to go downhill again!

Increase your cadence and flush out those tired legs. Two more hills to go and they are very close together and very hard.

1:50 – Summer Street becomes Maquire Road. Welcome back to Lexington, MA.

Add a small amount of resistance. You are still going downhill, but you can now begin to feel a connection with the road.

Do your best to return to Zone 3. It will be short-lived, and your last break until the cool-down.

Long Hill – Hartwell Avenue to Woods Street (5.5% - 6%)

Out of the Dark, Hybrid, 7:18, 67 bpm

As we approach Hartwell Ave, we can see the FLAT Minuteman Bike Path teasing us on the left. Instead we turn right and begin a very long hill.

The hill builds gradually to a 2.5% grade as we climb our way toward Hanscom Air Force Base.

A non-flying base, Hanscom Air Force Base is named after Laurence G. Hanscom (1906–1941), a pilot, aviation enthusiast, and State House reporter who was killed in a plane crash at Saugus, Massachusetts. Hanscom was a reporter for the Boston Globe, Worcester Telegram & Gazette and the Wilmington (MA) News. Hanscom was active in early aviation, founding the Massachusetts Civil Air Reserve.

We are not going to ride into the base, unless of course you want to get shot by the guards.

3:45 – Instead we take a left on Woods Street and the road kicks up to 6%! Considering the pain that has now enveloped our legs, riding through the Air Force base has become an appealing option.

Zone 5, We've missed you!

4:27 – The Road levels but the climbing is not over. Back off some resistance but maintain an aggressive pace. Mentally you need to be prepared to kick again. Try to find your lost Zone 4.

5:38 – As advertised, the road kicks up again, this time to about 4.5% to 5%. Add resistance and stand to push over the top. Zone 5!

6:48 – This is a very disappointing top indeed. Instead of a descent, the road levels.

Fast Rolling Road

So What, Jeff Beck, 4:19, 67 bpm

We continue on Woods Street, which becomes a fast rolling road.

Allow your legs to spin faster than the rhythm of the music (67 bpm). With each rolling hill, add resistance until your legs match the rhythm and you can come out of the saddle.

[At Instructors Discretion: 3 – 4 Times]

You are approaching a rolling hill; let's maintain our intensity and momentum over it. Add resistance until your legs slow down. Jump out of the saddle and power over the top (20-30 seconds). Then return to the seat, back off the resistance, and spin up the legs.

Each rolling hill should bring you into Zone 4.

3:35 - The road is about to end. We are going to take a left turn.

Hill – Massachusetts Avenue (5.5% - 6%)

Strange Dream, Andy Hunter, 6:23, 70 bpm

Welcome back to Mass Ave and the last climb!

The road surface is poor as we ride over Interstate 95 again.

0:33 – Start to add Resistance slowly.

0:47 – Add more resistance. Keep building the climb.

1:02 – Steeper – add resistance.

1:14 – Even steeper – yes, more resistance. You are creeping back up to Zone 5!

1:28 – Stand and find a rhythm.

1:57 – Ease off slightly and return to the saddle as you continue to climb.

2:38 – The hill kicks again. Out of the saddle!

3:31 – Return to the saddle and maintain your climbing tempo.

4:05 – Add resistance and stand again!

5:28 – An attack is launched! Can you follow?

*5:56 – The road eases slightly as we approach the top of the hill. Don't back down!
Accelerate over the top!*

Fast Downhill to Flat Road

Block Rockin' Beats – 2003 Digital Remaster, The Chemical Brothers, 4:54, 109 bpm

This is a short and super-fast descent. I prefer to ride in the center of the lane so cars are not tempted to pass me. There are also a couple of side-roads that approach on the left and right. Being in the middle of the road gives drivers approaching Mass Ave. a better chance of seeing you as you hit speeds of 30-40 mph.

1:00 – We are approaching the bottom of the descent, and a streetlight, as we prepare to cross Worthen Road in route back towards the Lexington Battle Green. This time we will approach from the opposite side.

1:18 – We are full on as we race into town. We mingle with traffic in the town center.

2:46 – As we carefully make our way through the town of Lexington, it is time to push it one more time back on the open road. It is a now a full-out drag race! Zone 5 one more time!

3:47 – Add resistance but maintain your cadence. It is about to get real!

4:22 – Add resistance again. Riders are now single-file waiting for the last acceleration to the finish.

4:40 – Final kick! As hard as you can go out of the saddle!

4:48 – Shut down the engines! With Tower Park on our left, it is time to call a truce and cool-down.

Cool-Down / Stretch

Sinequanon - Instrumental, 7:59, 108 bpm

Final Thoughts:

Whether you use this group ride or create one of your own, plan ahead and announce a time to grab coffee (or a drink if in the evening) after class.

It is very common for bike clubs to meet at a nearby coffee shop after the ride. This final gathering provides a great time for socializing, bragging about your performance, or making excuses for lack thereof.

My Friday class goes to breakfast once a month. A few riders from my Wednesday night class in the city goes out for drinks every 4-6 weeks.

Everyone may not ride outside or care to, but most people value time to socialize and get to know each other. When riders get together outside of class, it is even more fun when everyone comes back together inside to ride.

Music Profile

Section	Music	BPM	Time
Intro / Warm-Up (Mass Ave.)	Who Spends Money On Candygirls & Chocolate Chips, Hardfloor	105	7:10
Rolling Road (Burlington St.)	Trouble, Kalabi	97	3:56
Hill – 5.5% - 6% (Grove St. to Page Rd.)	Guardian Angel – Dino Psaras Remix, Juno Reactor	66	6:00
Fast Downhill (Page Rd.)	4321, Manafest	107	2:38
Rolling Road / Slight Uphill (Page Rd. to Spring St.)	Under Siege, John Fitzpatrick	90	4:52
Hill – 2.5% - 3% (South Rd.)	Almost Dark, John Fitzpatrick	79	3:45
Downhill (Summer St to Maquire Rd.)	Trippin' On A Hole In A Paper Heart, Stone Temple Pilots	108	2:56
Long Hill (Hartwell Ave. to Woods St.)	Out of the Dark, Hybrid	67	7:18
Fast Rolling Road (Woods St.)	So What, Jeff Beck	67	4:19
Hill – 5.5% - 6% (Massachusetts Ave.)	Strange Dream, Andy Hunter	70	6:23
Fast Downhill to Flat Road (Massachusetts Ave.)	Block Rockin' Beats – 2003 Digital Remaster, The Chemical Brothers	109	4:54
Cool-Down / Stretch (Massachusetts Ave.)	Sinequanon - Instrumental	108	7:59