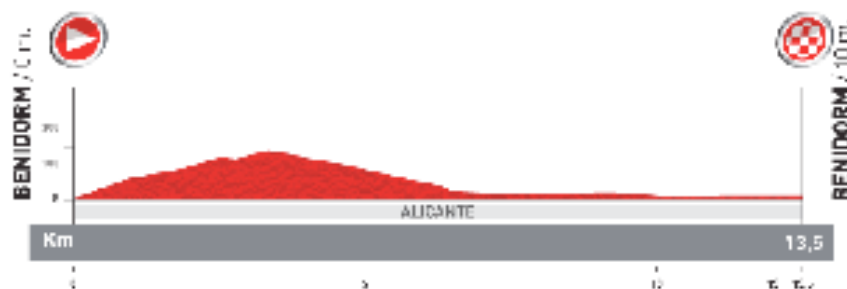


In 2010 I recorded an audio for the Team Time Trial of the Vuelta a Espana. I am repurposing that very same recording here for your use, with a few modifications.

The Team Time Trial for the 2011 Vuelta a Espana is very similar to last year's, and can be used almost exactly as it was taught for last year's event with a few small changes for slightly different terrain. Keep this in mind for every new edition of stage races like the Vuelta, the Tour de France or Giro d'Italia. You can take profiles you've used in the past, alter them slightly for different terrain, or sprinkle some different colorful descriptions of the new towns, but use the same music and coaching cues as before. The team strategy remains the same, the description of effort is the same as well - your students will never know the difference. As I've said many times, you can use these incredible and exciting stages any time of the year to add variety and challenge to your classes, you don't have to just teach Tour de France or Vuelta stages during those events.

On the following pages is the hardcopy transcript of the Audio Master Class recording for the 2010 Team Time Trail stage. That was a totally flat stage. For the 2011 stage, there is a slight uphill in the first 3km and a slight downhill in the next 3km, then it is perfectly flat. The 2011 profile looks like the following:



Therefore, the only modification you would need is having them climb right from the very start (after a good warmup), using a slower cadence in the 65-75rpm range for the first ¼ of the race, and then adding some cueing about perceived exertion of climbing – more stress on the leg muscles, feeling the challenge, etc. Then have them pedal faster for the downhill, then the second half is exactly like the coaching on the following pages.

For more information, go to www.lavuelta.com for profiles for each year. Enjoy the Vuelta a Espana Team Time Trial – no matter which year's profile you decide to use! It's a very fun class to teach.

Created by: Jennifer Sage
Training Type: Race simulation
Working HR Zones: Zone 4/5a (possible finish at 5b)
Total Class Length: 60 minutes

A Little Background on a Team Time Trial

The Team Time Trial is a road-based bicycle race in which teams race against the clock. It is one of the more challenging and exciting stages of a multi-stage race, such as the Tour de France, Giro d'Italia or Vuelta a Espana.

How is the Team Time Trial performed? Unlike individual time trials where the racers cannot draft (ride in the slipstream) behind other riders, in the Team Time Trial, the entire team goes at once, each team starting in 5-minute intervals. The team ride in formation, in a long pace line, each rider taking a turn at the front. The riders in the front are working harder than the riders in the slipstream. After their turn taking a “pull” at the front, they will move to one side, allowing the next rider to take the lead. The previous leader then slowly goes back to the back of the pace line and gets in place at the rear. This time going “backwards” allows him to rest for a moment. He must still catch the wheel of the last rider, which is still a sustained effort, but not until he is back at the front does he need to substantially ratchet up his effort again.

The main principle of the TTT is that a few riders can ride at the front of the formation slightly above their anaerobic threshold, while others in the back are riding at a slightly lower intensity. Accelerations require harder efforts, therefore it is desirable to have a smooth steady pace. Different riders have different power outputs, lactate thresholds and aerodynamics. In order to equalize the efforts so that some riders do not burn out too early, the weaker riders take shorter pulls and stronger riders take longer pulls, all at the same speed to minimize the change in pace. If their desire is to increase the speed, the riders take harder (higher intensity) but shorter pulls at the front so as to not burn themselves up.

For most stage races, the time of the 5th rider to pass the finish line is the time allotted to the whole team – that is provided everyone comes in at the same time. If a rider is dropped he is awarded his actual time, not the time of the team. If a strong rider is dropped or crashes, the team must make a quick decision whether to wait for him. Obviously, waiting will lower their overall time, but also, not waiting and continuing with fewer riders to take turns pulling means the riders that are left won't have as long to “recover”, and the entire team will fatigue faster.

This is an excerpt from Frankie Andreu's diary about the 2002 Tour de France Team Time Trial:

The Team Time Trial is one of the most exciting events in the sporting world. Nine riders all in formation, all riding the same bikes, wearing the same clothing, going as fast as they can as though they are one. It also is the most dangerous. The speeds are constantly around 50 kilometers an hour, the riders' wheels are inches apart, they are on their aero bars, and they are suffering. It's a recipe for disaster, but the teams at the Tour make it look it easy.

This year (2010) there was no Team Time Trial in the Tour de France (but it is slated to return in 2011). I absolutely love to simulate these stages in my indoor cycling classes, so I am presenting this particular one as a stage of the Vuelta a Espana, to Spanish music. However, you can do this to French music and simulate the TTT of the 2009 Tour de France, or use any music and do any TTT at any time. It is hard, so plan on some balance in your week's classes.

Indoor Class Application of a TTT and Intensity

In a TTT all 9 riders go at once and rotate in a circle, each taking a pull at the front that can last anywhere from about 10 seconds to 30 seconds. The stronger riders will take longer pulls, the weaker riders shorter ones. The riders not in the lead are riding at a slightly lower intensity, so in effect you are doing an interval ride, though the recovery is still at a fairly high effort, just lower than when leading.

In a class, however, it would be a long wait if you divided the class into 9 groups and had them alternate. So I use a little "artistic" license and usually just divide the class into 3 groups. I will vary the pulls at the front from anywhere from 20-40 seconds. That may be a little longer than you might see in an actual stage race, but again, a little license so that you, the instructor can keep better track of your students and where you are in the sequence, and so your students don't get distracted either.

I usually don't designate them as a specific team, or divide the class into teams, but you can do this if you want. What I do is to divide the class into 3, and give them a number, 1, 2 or 3. And then during the actual race I'll alternate who is in the lead, the "1's", the "2's" or the "3's".

Intensity in a time trial is fairly high, hovering anywhere from just below, at or just above threshold. The shorter races (less than 40km) will have a higher average intensity, and the longer races 40 or more km will be held right around anaerobic threshold. As explained above, the rider "pulling" is at the highest intensity. But don't think that the riders in the back have it easy! It is still HARD. So I use the descriptive terms of "hard", "harder" and "hardest" to describe how they should feel in each of the three positions.

It goes without saying that this type of race requires a good warm-up, one which raises the intensity to race pace for brief periods to prepare the body.

Terrain: many TTTs are held on flat roads. Some, like the opening stage of the Vuelta 2010 is right inside a city center and contains some dangerous turns. When you go around a turn with a long line of riders only a few inches from each other at high speeds, this is a recipe for disaster unless there is total concentration and teamwork. The 2009 Tour de France route around Montpellier was a dangerous course over narrow sinewy roads with yet another element to deal with – a stiff wind that was often blowing crosswise – enough to knock a rider over if he wasn't careful.

Music: As much as possible, I used Spanish music for my Vuelta stage (although I couldn't verify the origin of all songs. Some are from other European countries). I tried to find music specifically from Spain, and not just music sung in Spanish, as in many of the songs we might hear from Latin American groups. Puerto Rico, Colombia and Cuba are not Spain! But if you

don't mind the origin of the song, any good latin beat can work. Spain has the wonderful element of Flamenco to add to its music which is fantastic for indoor cycling if you've never used it. Also, the Balearic Islands off the coast of Spain, including Mallorca, Menorca and especially Ibiza, are hotbeds for fantastic chill-dance-party music. You'll see I found some fabulous electronic songs with Flamenco twist. I put the call out on Twitter and Facebook to my European friends for some Spanish music ideas and ended up with some great Spanish pop as well. Enjoy!

Audio Master Class Transcript

Warm-up

[Note: While they are warming up I'll describe what a Team Time Trial is, how it's done outside and how we're going to simulate it indoors. Many of your students are not cyclists and may know absolutely nothing about this kind of race. It may take you two songs to describe it – just every now and then check in with them, having them progressively add a little more resistance as their legs warm up]

Welcome to the Vuelta a Espana Team Time Trial in Sevilla Spain. The Vuelta is a multi-day stage race, much like the Tour de France or Giro d'Italia. Like those two races, it includes a little bit of everything from flat plains to huge mountains to both individual and team time trials. This year is the 75th anniversary of the Vuelta a Espana.

You know what is interesting about this stage at this year's Vuelta a Espana? They are holding it at night in the center of this ancient city! This is a first for a stage race of this kind – a night-time event!

Another interesting thing about this year's Vuelta is that the leader's jersey is changing to red. It's been red in the past, and it seems they change it every few years. But red is the color that a lot of Spanish athletes wear in international sporting events.

Today's race is pancake flat, but it will wind through the city center, with a couple of dangerous turns. If you could be over there in Spain, this would be a very exciting stage to watch. Each team rides with all 9 riders, going off in 5-minute increments. On longer races, some of the stronger teams may pass another team, but this stage is only 13km. Our race here in this class, will be 23 minutes long. We are going to do some serious warming up however, to get us nice and ready for that sustained effort.

Let me read you an excerpt from Frankie Andreu's diary about the 2002 Tour e France Team Time Trial. Frankie is a former pro-racer turned media reporter:

The Team Time Trial is one of the most exciting events in the sporting world. Nine riders all in formation, all riding the same bikes, wearing the same clothing, going as fast as they can as though they are one. It also is the most dangerous. The speeds are constantly around 50 kilometers an hour, the riders' wheels are inches apart, they are on their aero bars, and they are suffering. It's a recipe for disaster, but the teams at the Tour make it look it easy.

Normally there are 9 riders, but I'm going to divide you in three groups.

[Instructors, you can divide them as you see fit, either counting them out, or simply pointing to 1/3 of the class and telling them that they are your "1's" and so on].

So listen up, let me tell you how this is going to work. Imagine you're in a line of cyclists, only 4-6 inches away from the rear wheel in front of you. The riders are going to take

turns pulling at the front, holding that spot for 20-40 seconds, and then pulling off to the side and sliding backwards until they reach the back of the line. Then they're going to tuck back in line, waiting for their turn to pull again at the front. When you're behind another bicycle, you're going to like it a little more, because you get a little chance for break. But when you're in front, the entire team is depending on YOU! The reason why they rotate like this (also called circling) is because it gives each rider a chance to rest while keeping the average high. The single most important thing is to keep the pace smooth and consistent. If a rider at the front doesn't do his job and pull hard, the whole team suffers. A rider that isn't as strong as some of the others will take a shorter pull – but no one gets out of this requirement to work for the sake of the team!

We need a good warmup for this race. Our team isn't going to go until late in the race, so right now, we are all on our bikes on trainers, lined up outside the team bus. We need to do some surges and short climbs to wake up the legs and make sure they are at full attention once that race starts. So picture in your mind's eye a line up of 9 riders, all in their own worlds, listening to the music on their ipods that motivates them, as they run through some cadence surges on their bikes going nowhere.

Song #3: Ke Pasa

We're going to stand up with moderate resistance and surge the legs to about 85-90 rpm. Hold it for 30 seconds. Then sit back down for 30 seconds. (do this 3X)

Song #4: Mucho Mas 3:53

This time let's do some seated surges for 30 seconds. Then recover 30 seconds. (do this 4X). Let the intensity rise to where you are breathing pretty hard, and the recovery doesn't seem like enough. Not to worry, it won't last long! But you've got to open up those capillaries!

Song #5: Libertango 3:32

Here I want you to gradually build resistance to what feels like a moderate hill (Do this over 2-1/2 minutes every 30 seconds). Now, stand up and climb out of the saddle – you're going to hold it until the song ends. This will get the legs ready for more resistance.

While you're standing, I want to tell you what you're going to feel when you're racing. When you're in the back of the line, it will feel HARD. Hard, but manageable, not breathless. When you move up to 2nd in line, it will feel slightly HARDER. Just a slight increase in effort. But when you are in front, it will feel HARDEST! Mind-you, it is NOT a sprint – we need consistent smooth output. But it will be at, or just above your threshold – just before breathless. That HARDEST effort should regulate where you are for the other two efforts. Hard, H

Song #6: Salinas 4:00

Once again, seated surges, middle size gear. Hold 1 min on/1 minute off. 2X. The clock is ticking. We're getting closer to our time in the starting gate. Are you getting nervous? From our vantage point next to the team bus, we can see the starting stage, and hear the announcers. Sevilla is bursting at the seams for this exciting event.

Has that Hard, Harder, Hardest sunk in yet?

(Look around the room, catch their eyes – a good way to let them know you mean business!)

Think a threshold effort for 23 minutes is not very challenging? Think again! But also know, that if you push TOO hard, you'll blow up, and you will NOT be able to grab that wheel of the last rider when you drop back. Once you lose the wheel, I'm sorry, it's all over. We may not be able to wait for you. However, if there's a crash, we might decide to wait, because we need the help of every teammate. In 2001, at the TDF, Lance Armstrong's team, US Postal had a rider go down in the pouring rain – his wheel slid out on a painted stripe in the road. He took down another top rider. They waited – because they needed those riders! By waiting they lost a minute...but by waiting they also made that minute up and then some. So we don't want to lose a rider if we can avoid it. However, if you can't keep up your end of the bargain, we might have to drop you so you don't slow the rest of the team down.

Song #7: La Frontera 3:32

This last song before the race is to keep the legs at a moderate intensity, fully aerobic, feeling fully functional and ready. Butterflies convene in our stomachs. But a little bit of nervousness is good, it heightens your awareness and readiness. Too much is not good. If you are anxious, do some deep breathing. Remember, this is a team event...our entire team is depending on YOU, and YOU, and YOU and YOU and YOU! (Point to everyone, emphasizing the team nature of this event). We are all in this together!

(One minute before the song ends, tell them)

We are now on the departure stage, all in a horizontal line, someone holding our bikes. The time is now. Get your engines ready! 23 minutes from now, it will be over!

Song #8: Flamenco Mediterraneo 7:51

And we are off – it takes us a little bit to get into formation and to get up to race pace. (Give them a minute). OK, my #1's – are you ready? When you start off at the front, I'm going to allow you to stand up for 5-8 seconds to get up to pace, but no longer than that. #1's, you will increase your effort in 10 seconds, as our leaders. 3-2-1 And you're ON! These first pulls are going to be 30 seconds long. #2's, start thinking about it. 3-2-1 and you are now in the front! #1's, you can drop back. Imagine that you feel a slight sense of relief – but not too much – you've got to grab that wheel at the back. #3's, you're on deck.... And here you go. I'm riding with the 3's, let's stand up for 5 seconds, then sit down and drive...

(Instructors, you're going to have to really focus. Rotate the three groups, 30-seconds each. You'll have to keep track of where you are! This can get challenging! Have a clock with a second hand within easy view – it's easier than a digital clock to count specific blocks of time passing. For this first song – just rotate them, letting them settle into the system. This song is 8 minutes – you'll have time to get into the rhythm of your rotations and get the hang of remembering where you are in those rotations).

Song #9 A Gozar 5:19

How's it feeling? Shall we take a little longer pulls? You'll work harder for longer, but you'll also get a little more relief. Let's do 40-seconds at the front. We still don't want to stand more than 5-10 seconds though – that will slow down the pace.

The slightly longer pulls will give you a moment to tell them the following “Rules” of a TTT. You may have to stop to make sure you rotate them correctly.

You know what some of the rules of a Team Time Trialing are? I'm not talking about the “official” rules of the race organizers, but the unspoken rules between riders on a team (these come from a racer's diary):

(Look at them and hold up your fingers for emphasis. Say these slowly and a little louder)

#1: No matter how bad you're suffering, you must never take a slow pull. Make your pull shorter, sit out a few pulls on the back if you have to, but never, ever take a slow pull and slow down the group.

#2: Don't ever let yourself fall off the back, unless you're throwing in the towel and don't want the team to wait. If you're quitting, let them know.

#3: If you screw up and let a gap open up, swallow your pride and speak up instantly. If the group has to wait for a second, that's bad. But if it has to wait several seconds, that's devastating.

#4: See rule #1!

Song #10 & 11 The Ketchup Song 3:34 and El Abandonao 3:35

Remember I told you that there would be some turns within the city walls? They are coming up – the road goes over a bridge and turns twice. We're going to let up speed as we go into the turn, then as we come out of it, everyone will stand up for 20 seconds to get up to speed. Then we'll settle back into our 30-second pulls. Ready, here's the first sharp corner, slow down (10-seconds), hold it (10 seconds), and let's stand up and bring it back to race pace!

(Instructors, this will take a little coordination on your part, watching the clock. Go through 2 more cycles of rotations, cueing intensity then comes the next turn)

Next turn, let up speed (a little recovery – hold 10 seconds), hold it through the turn (10 seconds) then stand up and get back to race pace (20 seconds).

(Then continue the rotations through the song, but explain the new strategy for the final song).

How are you all feeling – if you're getting tired, you're doing this right! But hold on to some energy, we need you for one more song!

Near the end of a Team Time Trial, the team takes a strategy called a “death pull”! It's going to be shorter and even harder, with the goal to raise our average speed just a little. So are you ready – these will be 20 second pulls, to “hardest PLUS”! IF because of this DEATH pull, we lose a rider or two, it's not quite as bad, because we're almost there. We

only have to cross the line with 5 riders together – the team gets the time of the 5th rider (unless you get dropped).

Song #12 Vino Tinto 3:19

This is it everyone, this is where we put all our effort into this! Estan lista? (Are you Ready?)

(Instructors – coach them through 20second pulls. They should be breathless for their 20seconds at the front – but it’s still not a sprint. It’s just a VERY HARD effort in the saddle. Not super high cadence, but with a good size gear at a cadence of 90-100rpm. You’ll only be able to do a couple rotations. Then for the last 30-40 seconds of the song, let them stand up for 15 seconds, then sit and drive to the finish line.)

There’s the finish line – tens of thousands of people are sheering you on. We’ll all go in together – no need to circle anymore, this is for the fastest time we can get.

SI! Que Bien! What a great effort, a great race!

(Your riders should be wiped out!)

Song #13 & #14 De Momento 3:33, La Playa 4:05

If you need to, you can stand up and jog at an easy pace for a saddle break once your heart rate drops down – you should be proud of yourself for staying in that saddle for so long, for working so hard for your team.

Not only did you win this Team Time Trial at the 2010 Vuelta a Espana, but you also had a great high intensity workout right around your anaerobic threshold, yielding great things for your fitness and burning a lot of calories! Be proud of yourself tonight!

Team Time Trial Quick PROfile & Playlist

Created by: Jennifer Sage
Training Type: Race simulation
Working HR Zones: Zone 4/5a (possible finish at 5b)
Cycling Specificity: 5/5
Total Class Length: 60 minutes

Warm-up and race prep: 30- minutes

Long warmup and race prep that should include seated and standing surges of 30-60 seconds to a sensation of “hard”, with the same amount of recovery. Include one short hill in the race prep

Divide the class into 3 groups. Explain how a Team Time Trial works, both in a real race situation and how you’re going to simulate it indoors by alternating who is in the lead taking the “pull”. Explain the concept of “hard”, “harder”, “hardest” for the intensity they will feel during the three positions of the “rotation”. “hard” is just below threshold, “harder” is at threshold, “hardest” is just above threshold and just before breathless. There is no real recovery during the actual race.

The Race:

23 minutes (or however long you think your class can handle. Shorten for riders who are not accustomed to sustained periods at LT).

Begin with 30 seconds pulls. Allow them to stand for the first 5-8 seconds of their “pull”; otherwise it’s all seated.

After 6-8 minutes, change to 40-second pulls.

Simulate two sharp turns (about 60-90 seconds apart) by first slowing down the pace over 10 seconds, then hold that for 10 seconds, then everyone stands up for 20 seconds to return to race pace. Return to the rotations.

Final song, “death pulls” of only 20 seconds each but at an even higher intensity.

Final 30-40 seconds, everyone stands up and pushes to the finish line (not a sprint, but a very hard effort).

Cool down/stretch

Vuelta a Espana Suggested Songs

Warm-up and Race-prep

(Song title, artist, album, time, where to find it)

A Balearic Dinner, Sunlounger Feat. Seis Cuerdas, Another Day On The Terrace 2007, 6:48 (eMusic)

Scirocco, Tierra Negra Para Ti - Flamenco Nuevo, 3:10 (eMusic)

Ke Pasa!?, Estopa, Destrangis, 3:20 (eMusic)

Mucho Más, Mucho Mejor, Jarabe de Palo, Orquesta Reciclando 3:53 (eMusic)

Libertango, Bond Girls, Barrio Latino – Paris, 3:32 (Amazon)

Salinas (Original Edit), Balearic Session, Ibiza Progressive Essentials 2, 4:00 (eMusic)

La Frontera, Pau Riba, Disc Dur, 3:32 (eMusic)

Race

Flamenco Mediterraneo (Original Mix), Balearic Session, Flamenco Mediterraneo, 7:51 (eMusic)

A Gozar, Spiritual Vibes, Paris Bailando, 5:19 (hard to find, but possible – Google it)

The Ketchup Song (Asereje) (Spanish Version), Las Kala, The Ketchup Song (Hey Hah), 3:34 (eMusic)

El Abandao, Elefante, Elefante Exitos 3:35 (eMusic)

Vino Tinto, Estopa, Destrangis, 3:19 (eMusic)

Cool-down

De momento, (India, Ludovico Vagnone, Raúl Ruiz), ¿Por Qué Se Frotan Las Patitas?, 3:33 (eMusic)

La Playa, La Oreja de Van Gogh, El Viaje De Copperpot, 4:05 (eMusic)

Other Spanish songs (mostly from Spain, a couple other countries as well):

Spanish Pop/Rock: Anything by Estopa, Elefante, Zucchero or Jarabe de Palo

La Oreja de Van Gogh, Pop (a fun “pop” song). Lot’s of others by this group

Generique, by Kouz-1 (feat Ardag), on the L’Auberge Espanole soundtrack

Levantis & Friends, Gypsy Air

Wawa, Flamenco (Main Mix)

Enrique Iglesias, Bailamos

The Cascades, Malaguena

Anything by Ottmar Liebert (flamenco guitar)

The Gypsy Kings

B-Tribe (great for cool downs)

Ketama, Te Miro y Tiemblo, Me Gusta Como Eres, Aqua, Menos Que un Amor,

Kiko Veneno

Manolo Garcia, Pajaros de Barro, Abre la Puerta, Nunca el Tiempo es Perdido.

Alejandro Sanz, Desde Cuando, Corazon partio.

Niña Pastori, Corazon Partio

Diego El Cigala

Rosario Flores

Pata Negra

Navajita Platea

Alba Molina y Raimundo Amador, Noches de bohemia.

Jose Ortega

Manzanita, un Ramito de Violetas

Juan Manuel Serrat, Mediterraneo.

Nino Bravo, la Cancion de la Alegria