

epicRIDES™ TRAINING GUIDE

HEALTH WARNING

Not all exercise programs are suitable for everyone, so please consult your physician before beginning this or any exercise program. You should always warm up for a few minutes before beginning any exercise program. You should never exercise beyond the level at which you feel comfortable. If at any time you feel that the recommended intensity is too difficult, reduce the resistance or shift to a lower gear. Take additional time to rest between sections if needed. If at any time you feel discomfort or you are exercising beyond your limit, you should slow down or discontinue the exercise immediately.

THE USER ASSUMES ALL RISKS OF INJURY IN USE OF THIS PROGRAM.

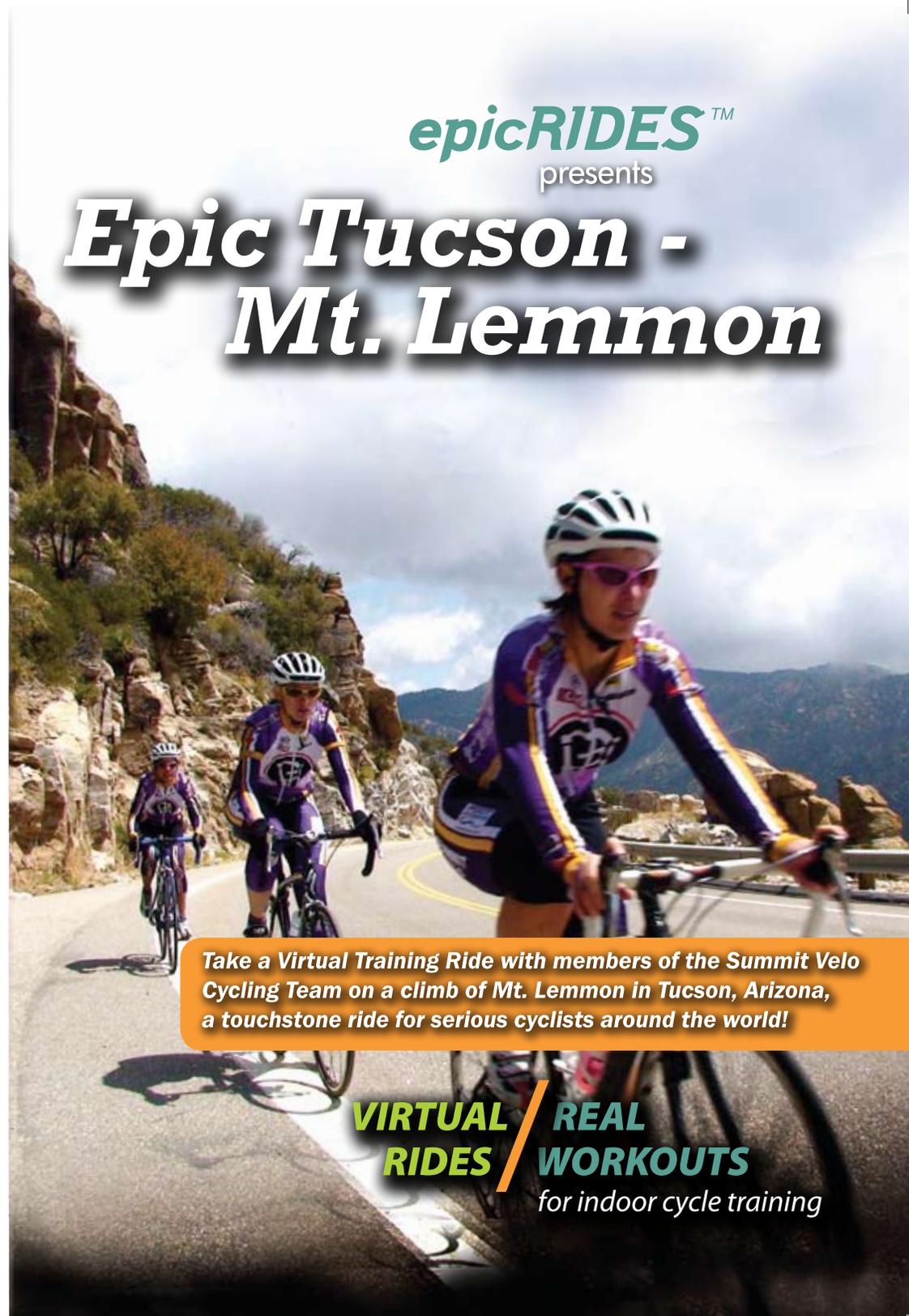


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www.epicplanet.tv

epicRIDES™
presents

Epic Tucson - Mt. Lemmon



Take a Virtual Training Ride with members of the Summit Velo Cycling Team on a climb of Mt. Lemmon in Tucson, Arizona, a touchstone ride for serious cyclists around the world!

VIRTUAL / REAL
RIDES / WORKOUTS
for indoor cycle training

Welcome to **epicRIDES™** - Real rides, shot in real places with real riders that are virtually amazing!

This Training Guide offers you a number of physiologically based training programs created in partnership with Joey Adams, M.S. CycleOps Master Training Specialist and owner of Intelligent Fitness a human performance company.

Here is what you will find in this Training Guide:

- An explanation about our Training Zone methodology
- An explanation of the **epicRIDES™** digital dashboard
- Three different Training Ride programs to choose
- A blank Training Ride program for you or your trainer to write in your own training program for this ride

Additionally, on our web site (www.epicplanet.tv) you can also find:

- A MapMyRide.com Route Map of this epic ride with downloadable GPS data
- A way for you to nominate your own Epic Ride for consideration for filming by the epicPLANET.tv team at www.epicplanet.tv/myride
- A feedback form for you to share your ideas about **epicRIDES™** with us at www.epicplanet.tv/review

Your next step is to get your indoor cycling gear on, and get ready for an epic indoor experience! So pop your DVD in, get on your indoor bike, and let's get those wheels spinning!

Don't Like Our Music? Then Use Your Own!

In our **epicRIDES™** testing we have found that the choice of music for Indoor Cycle Training is very subjective and that it's virtually impossible to please everyone!

So we suggest that if our music is not for you, simply turn the volume down on the video and use your iTunes, Music Player or other digital music player software to create a your own playlist for this ride.

It's really pretty easy! Since our **epicRIDES™** is laid out in segments of five minute or multiples of five minutes, you can use your playlist creation software (such as iTunes) to organize your choice of songs for this ride; keeping in mind that you want your music for each segment to either fit or exceed the length of that segment. Then, when you ride, simply move the music ahead to the next segment's songs if your choices for the previous segment runs too long.

And with iTunes, you can even share your custom **epicRIDES™** playlist with us and other riders by creating an iMix (use your iTunes help for instructions)!

A Note to Indoor Cycling Instructors

For years, indoor cycling instructors have mixed their own music selections and then blended these with a class program of their choosing to deliver exciting and motivating classes to their participants.

Now, with **epicRIDES™**, indoor cycling instructors can bring a new dimension to their classes - the video dimension! **epicRIDES™** are designed to complement you, the Instructor. So now you can take your class far outside your studio to real and exciting places, riding along with real riders on a challenging route.

As an indoor cycling instructor, we suggest you use this Training Guide as a starting place in making this **epicRIDES™** "your own." Here are the steps:

1. Ride to this **epicRIDES™** yourself before using it in a class.
2. Choose to use our music or create your own mix.
3. Review our various workouts in this Training Guide and either use them as they are, adapt one as you see fit or invent your own!
4. Finally develop your own individual strategy to use to present and lead this ride.

If you believe, like we do, that using real road riding situations in Indoor Cycling Classes is a great new way to motivate, energize and excite your class, then you can be sure to deliver a compelling **epicRIDES™** class time after time.



About epicRIDES™ Training Zones

Indoors versus outdoors. Outdoors versus indoors, each type of training has advantages over the other. Yet, they both have the same training zones in common. What is a training zone, and why is it important?

First, let's start with the big advantage that indoors has over outdoors – one can easily argue it is the smooth “road” of the inside. When you are riding outside there are many variables, you work with and against wind, terrain, and a host of environmental, physiological and psychological factors. Inside you can control the environment and the terrain – thus, you can more readily work in specific training zones via the elimination of extraneous factors. Indoor training ensures your body is getting the prescribed stimulus of a specific training session. In contrast to the varying stimuli often created when the ride is outside.

Often we will ask athletes that we coach to ride inside for certain workouts to maximize the “dosage” of their workout. Each of the training zones is like a dose of medicine – the dosage creates a specific response in the body and thus a specific adaptation. So, the first thing that is essential is having the right dose dialed in – this dosage can be identified through the CycleOps Power Test (<http://www.saris.com/t-CPTC.aspx?skinid=2>). After you have completed your test you now have your zones (dosages) ready for your training plan. Your training plan (daily, weekly, monthly and annually that you or your coach created as a roadmap towards your goals) will identify for you when and how you need to exercise to create

the optimal adaptation of your physiology with the most efficient use of your time. Without a plan you are just working out – with a plan you build your strengths and improve on your weaknesses. Each training zone creates specific adaptations and each training zone fits into a larger whole. **The table on the next page highlights some of the key elements of each zone.** But keep in mind the body is in a constant state of flux and is always “blending” systems and hence, fiber type recruitment depending on fitness, neuromuscular pathways, bike fit and a host of other factors – thus, the following is offered as a generalization of the complexity of the body's intricacies.

Think of each zone as a building block for the next zone. As you build your physiology from the bottom up (Zone 1 to Zone 5), you are creating a stronger you. Each zone is dependent on the strength of the zones below it. Thus, the anaerobic system is dependent upon the strength of the aerobic system. The longer you can rely on the strength of Zone 1, the less you will have to rely on the limited capacity of the anaerobic system in Z5. The more wattage you can get out of Z1 the more energy you get at less cost to the body. It is just like driving your car in these days of high cost petroleum. By having an efficient and strong aerobic system you get more power at less cost – kind of like a “green” ride. As your threshold increases you will notice that your wattage output in each training zone increases! We all want more power at less cost... using training zones within a periodized training plan is the way to get more power out of less effort!

About Mike Burris

Mike Burris is a USA Cycling Certified Coach and Owner/Director of the Burris Logistics - Fit Werx Masters Cycling Team. Mike competes regularly throughout New England specializing in time trials and criterium racing. In addition to an extensive bicycle-racing resume, Mike has completed multiple marathons, ultramarathons, snowshoe races, and triathlons.



Mike holds a B.S. in Biology and a M. Ed. in Curriculum and Instruction from the University of Vermont. Mike is a high school physics teacher and owner of Impulse CYCLEsport. Impulse CYCLEsport offers personalized coaching and guided training rides throughout Vermont and Northern New York.

Mike resides in Shelburne, Vermont with his wife, Alicia and his two daughters, Ana and Lily.

Training Zone	% of Threshold Power	Approx. % of Maximal HR*	Rating of Perceived Exertion 1-10 Scale	Primary Energy System	Primary Muscle Fibers	Primary Fuel	Benefits
5	Max effort	Maximum	10 Very Hard	Anaerobic	Fast Twitch IIa and IIb	Carbohydrate/ Creatine Phosphate	<ul style="list-style-type: none"> increases high energy phosphate stores (ATP/PCr) Increases neurological recruitment
4	100 - 120% TP	>85%	8 - 9 Hard	Anaerobic	Fast Twitch IIa	Carbohydrate	<ul style="list-style-type: none"> improves lactate clearance develops speed develops power elevates anaerobic capacity hypertrophy of fast twitch fibers increases anaerobic capacity increases VO2
3	85 - 100% TP	80 - 85%	5 - 7 Moderate to Hard	Aerobic and Anaerobic	Fast Twitch IIa	Carbohydrate	<ul style="list-style-type: none"> increases oxidative/glycolytic enzymes elevates lactate threshold develops strength increases blood buffering of lactate
2	60 - 85% TP	65 - 80%	3 - 4 Moderate	Aerobic	Slow Twitch	Fat	<ul style="list-style-type: none"> body fat/weight loss skill/technique development improves economy of movement increases capillary density increases oxidative enzymes slow twitch development connective tissue development increases stroke volume/maximal cardiac output increases muscle fuel storage builds muscular endurance and stamina increases blood volume
1	Up to 60% TP	Up to 65%	1 to 2 – Easy	Aerobic	Slow Twitch	Fat	<ul style="list-style-type: none"> removal of metabolic waste regeneration between intervals recovery after hard training rest during injury or illness warm up or cool down no muscular fatigue

*Fitness level, stroke volume, and a plethora of other factors effect heart rate and heart rate zones – see The Heartbeat of Power at <http://www.saris.com> for a more detailed explanation.



The video dashboard displays a cycling scene with several data overlays and labels:

- Training Activity:** A black box with a globe icon and the text "ROLLING HILLS".
- Interval Timer:** An orange box with the text "CLIMB 00:21".
- Training Zone:** A black box with the text "2-4 +/-4% TZ AV GR".
- Average Grade (for segment):** A label pointing to the "AV GR" text in the Training Zone box.
- Current Ride Position:** A label pointing to a vertical line on the terrain profile graph.
- Terrain Profile:** A line graph showing elevation changes along the ride.
- Ride Timer:** A black box with the text "00:06:22".

TRAINING GOAL: Climbing - Beginner

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-05:00	Warmup	+6%	1-2	Varied	Spin easy and get the blood flowing. Do a few accelerations by standing and bringing up your cadence for 8-12 seconds before returning to the saddle.
2	00:05-35:00	Long Interval Climbing Repeats	+6%	3	Work 80-85 Rest 90-95	During the first 30-minute climbing segment do 2 x 10 minutes in zone 3. After each 10-minute interval reduce the resistance while maintaining the same cadence for 5 minutes. Work on establishing a steady and powerful rhythm. Pay attention to your breathing and make sure it is controlled. These efforts should be moderate (RPE 5). You still have a lot of climbing to do.
3	35:00-50:00	Climbing Rhythm	+6%	3	70-80	For the next 15-minute climbing segment, do 2 x 6 minute intervals. Alternate standing for 1 minute and sitting for 1 minute. Rest for 2 minutes after each interval. These efforts should be moderate (RPE 6).
4	50:00-1:10:00	Power Development	+6%	3-4	Work 90+ Rest 80-85	During the final 20-minute alternate climbing hard for 1 minute (RPE 9) and return to a moderate intensity for 3 minutes (RPE 5). Repeat this 3 more times. For the last 4 minutes go hard for 1 minute, easy for 2 minutes, and then hammer as hard as you can go for the last minute. You made it!

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TRAINING GOAL: Climbing - Intermediate

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-05:00	Warmup	+6%	1-2	Varied	Spin easy and get the blood flowing. Do a few accelerations by standing and bringing up your cadence for 8-12 seconds before returning to the saddle.
2	00:05-35:00	Long Duration Climbing Repeats	+6%	3	70-80	<p>During the first 30-minute climbing segment do 2 x 10 minutes in lower zone 3. After each 10-minute interval reduce the resistance while maintaining the same cadence for 5 minutes.</p> <p>Work on establishing a steady and powerful rhythm. Pay attention to your breathing and make sure it is controlled. These efforts should be moderate (RPE 6).</p>
3	35:00-50:00	Low Gear/ High Gear	+6%	3	Low 60-65 High 90-95	<p>For the next 15-minute climbing segment, complete 3 intervals that are 5 minutes long. During each interval spend 2 minutes at a low cadence and 3 minutes at a high cadence.</p> <p>Really feel the tension in the muscles as you push a big gear. Keep the intensity in low zone 3. Stand for last 30 seconds of each low cadence interval</p>
4	50:00-1:10:00	Medium Duration	+6%	3	70-80 90+ during accelerations	<p>For the final climb do 2 x 8 minute intervals with 4 minutes rest between them. Establish a nice climbing rhythm during each interval. Go a little harder on these than you do on the first climbing segment.</p> <p>Every 2 minutes during the interval, without changing resistance, spin-up to 90+ rpm for 8 seconds.</p> <p>Remain seated for the spin-ups during the first 8 minutes and stand for the spin-ups during the second 8-minute interval.</p>

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TRAINING GOAL: Climbing - Advanced

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-05:00	Warmup	+6%	1-2	Varied	Spin easy and get the blood flowing. Do a few accelerations by standing and bringing up your cadence for 8-12 seconds before returning to the saddle.
2	00:05-35:00	Long Interval Climbing Repeats	+6%	3	Work 70-80 Rest 80-85	<p>During the first 30-minute climbing segment do 2 x 10 minutes in zone 3. After each 10-minute interval reduce the resistance while maintaining the same cadence for 5 minutes.</p> <p>Work on establishing a steady and powerful rhythm. Pay attention to your breathing and make sure it is controlled. These efforts should be moderate (RPE 6).</p>
3	35:00-50:00	Low Gear/ High Gear	+6%	3	Low 60-65 High 90-95	<p>For the next 15-minute climbing segment, complete 3 intervals that are 5 minutes long. During each interval spend 3.5 minutes at a low cadence and 1.5 minute at a high cadence.</p> <p>Really feel the tension in the muscles as you push a big gear. Keep the intensity in low zone 3. Stand for the last 30 seconds of each low cadence effort.</p>
4	50:00-1:10:00	Power Development	+6%	4	Work 90+ Rest 80-85	<p>During the final 20-minute climb complete 3 intervals of 2.5 minutes in length with 2.5 minutes rest between each interval. Really push the pace during each interval. This is the final climb, so empty the tank.</p> <p>When beginning the interval, jump out of the saddle and accelerate for 10 seconds before settling in to a seated but powerful rhythm. Picture yourself leaving the group behind. These efforts should be hard (RPE 9-10).</p> <p>For the last 5 minutes of the climb, give it everything you got. You made it!</p>

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Epic Tucson - Mt. Lemmon Training Ride

This blank page is for you or your trainer to write in your own **epicRIDES™** training plan.

TRAINING GOAL:

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-05:00	Warmup	+6%	1-2		
2	00:05-35:00	Long Interval Climbing Repeats	+6%	3		
3	35:00-50:00	Low Gear/ High Gear	+6%	3		
4	50:00-1:10:00	Power Development	+6%	4		

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