

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.



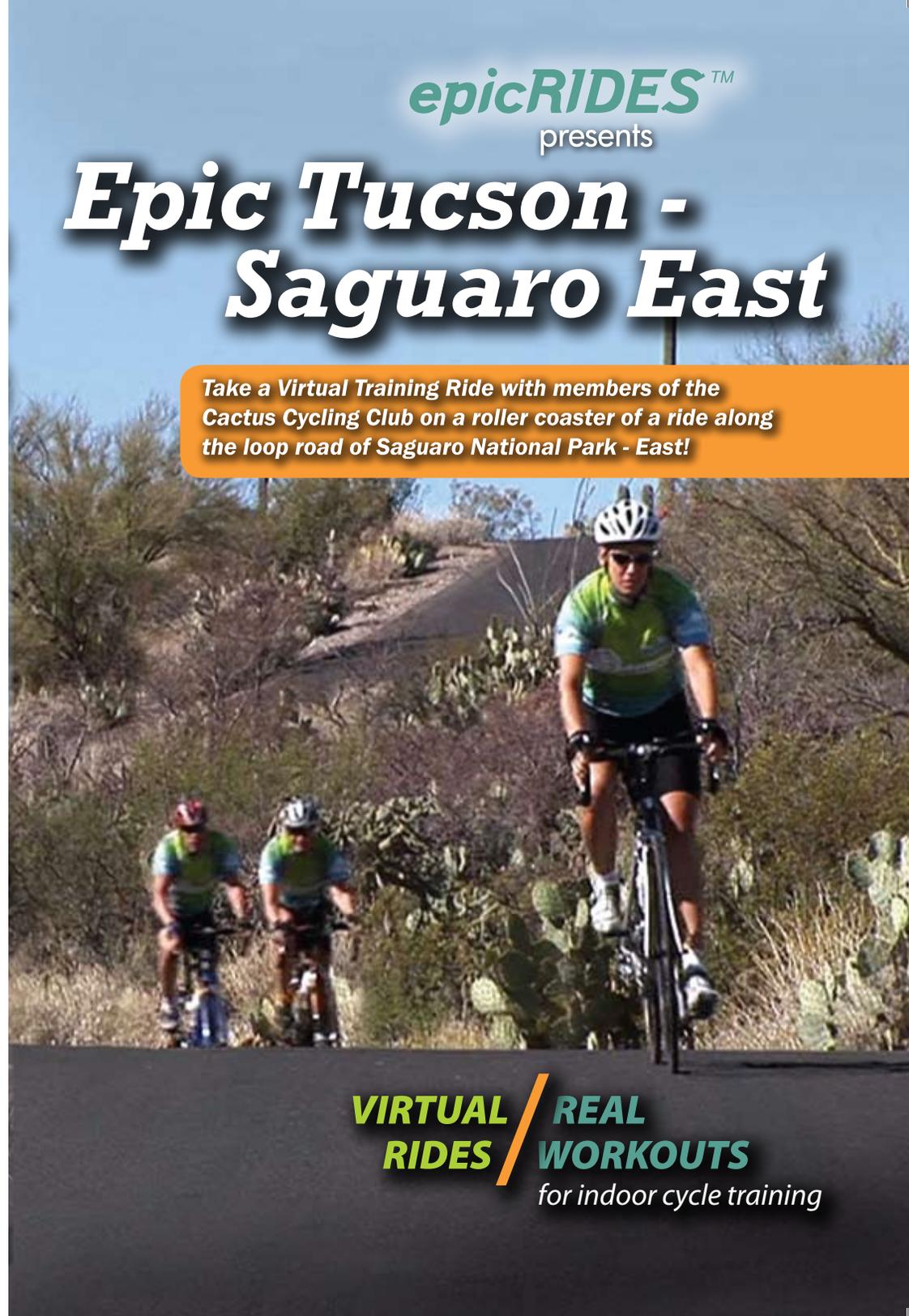
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epicRIDES™
presents

Epic Tucson - Saguaro East

Take a Virtual Training Ride with members of the Cactus Cycling Club on a roller coaster of a ride along the loop road of Saguaro National Park - East!



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 dashboard features a central video feed of cyclists on a road. Overlaid on the video are several data elements:

- Training Activity:** A black box in the top left shows a globe icon and the text "ROLLING HILLS".
- Interval Timer:** An orange box in the top right shows "CLIMB 00:21".
- Training Zone:** A black box in the bottom left shows "2-4 +/-4%" and "TZ AV GR".
- Average Grade (for segment):** A line graph in the bottom center shows a fluctuating orange line representing the grade.
- Current Ride Position:** A vertical line in the bottom center indicates the current position on the terrain profile.
- Terrain Profile:** A line graph in the bottom center shows a red line representing the terrain profile.
- Ride Timer:** A black box in the bottom right shows "00:06:22".

Labels with vertical lines pointing to these elements are: "Training Activity", "Interval Timer", "Training Zone", "Average Grade (for segment)", "Current Ride Position", "Terrain Profile", and "Ride Timer".

TRAINING GOAL: Climbing - Beginner

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-10:00	Warmup	+3%	1-2	85-95	Spin in a moderate gear. Through in a few accelerations to wake-up the legs.
2	10:00-21:00	Muscular Endurance and Power	+/- 4%	3-4	80-85 95+ on bursts	For the next segment of short climbs increase the resistance and pedal at 80-85 rpm. Develop a nice steady rhythm at moderate intensity (RPE 4-5). When the climbing interval appears put in a hard effort by spinning up to 95+ rpms. Get out of the saddle for the last 10 seconds of each short climb and push it to the top. After the climbing interval is over, recover to 80-85 rpm but don't change the resistance. After the last short climb, spin in an easy gear until the 10 minute climb begins.
3	21:00-31:00	Climbing Force	+/- 4%	3-4	70-80	During the 10-minute climb, adjust the gearing or resistance so staying within 70-80 rpm is moderately hard (RPE 6-7). Find a nice rhythm over the first 1-2 minutes. At 3 minutes into the climb, push the pace for 1 minute (RPE 8) and then return to your original pace for 2 minutes. Push the pace again for another minute, and then return to your original pace for 2 minutes. Go hard for the last minute and then spin in an easy gear to recover.
4	31:00-40:00	Strength	+/- 4%	3-4	Climb 70-75 Recover 80+	You have 4 short climbs left. For the first 3, stay seated and push the hardest gear you can at 70-75 rpm. Really feel the tension in the muscles, but be careful not to overstress your knees. On the last climb, you guessed it...give it everything you got. You made it!
5	40:00-45:00	Cool Down	-3%	1-2	90+	Flush the lactate out of your legs by spinning in an easy gear on your way back home.

Disclaimer: Prior to embarking on any fitness program please consult with your physician. Remember, the following are recommended as guidelines. Always think safety first. Each of the following is designed to create a distinct training adaptation.

TRAINING GOAL: Climbing - Intermediate

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-10:00	Warmup	+3%	1-2	85-95	Spin in a moderate gear. Through in a few accelerations to wake-up the legs.
2	10:00-21:00	Muscular Endurance and Power	+/- 4%	3-4	75-80 95+ on bursts	For the next segment of short climbs increase the resistance and push a big gear at 75-80 rpm. Develop a nice steady rhythm at moderate intensity (RPE 4-5). When the climbing interval appears put in a hard effort by spinning up to 95+ rpms. Get out of the saddle for the last 10 seconds of each short climb and push it to the top. After the climbing interval is over, recover to 75-80 rpm but don't change the resistance. After the last short climb, spin in an easy gear until the 10 minute climb begins
3	21:00-31:00	Climbing Force	+/- 4%	3-4	70-80	During the 10-minute climb, adjust the gearing or resistance so staying within 70-80 rpm is moderately hard (RPE 7). Find a nice steady rhythm. Stand up and accelerate hard for 8 seconds every 2 minutes.
4	31:00-40:00	Strength	+/- 4%	3-4	Climb 65-70 Recover 80+	You have 4 short climbs left. For the first 3, stay seated and push the hardest gear you can at 65-70 rpm. Really feel the tension in the muscles, but be careful not to overstress your knees. On the last climb, you guessed it...give it everything you got. You made it!
5	40:00-45:00	Cool Down	-3%	1-2	90+	Flush the lactate out of your legs by spinning in an easy gear on your way back home.

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TRAINING GOAL: Climbing - Advanced

Segment	Time	Training Activity	Avg. Grade	TZ	RPM	Action
1	00:00-10:00	Warmup	+3%	1-2	85-95	Spin in a moderate gear. Through in a few accelerations to wake-up the legs.
2	10:00-21:00	Muscular Endurance and Power	+/- 4%	3-4	70-75 95+ on bursts	For the next segment of short climbs increase the resistance and push a big gear at 70-75 rpm. Develop a nice steady rhythm at moderate intensity (RPE 4-5). When the climbing interval appears put in a hard effort by spinning up to 95+ rpms. Get out of the saddle for the last 10 seconds of each short climb and push it to the top. After the climbing interval is over, recover to 70-75 rpm but don't change the resistance. After the last short climb, spin in an easy gear until the 10 minute climb begins.
3	21:00-31:00	Climbing Force	+/- 4%	3-4	70-80	During the 10-minute climb, adjust the gearing or resistance so staying within 70-80 rpm is moderately hard to hard (RPE 7-8). Find a nice rhythm over the first 1-2 minutes. At 3 minutes into the climb, push the pace for 1 minute and then return to your original pace for 2 minutes. Push the pace again for another minute, and then return to your original pace for 2 minutes. Go all out for the last minute and then spin in an easy gear to recover.
4	31:00-40:00	Strength	+/- 4%	3-4	Climb 60-65 Recover 80+	You have 4 short climbs left. For the first 3, stay seated and push the hardest gear you can at 60-65 rpm. Really feel the tension in the muscles, but be careful not to overstress your knees. On the last climb, you guessed it...give it everything you got. You made it!
5	40:00-45:00	Cool Down	-3%	1-2	90+	Flush the lactate out of your legs by spinning in an easy gear on your way back home.

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Epic Tucson - Saguaro East 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	00:00-10:00	Warmup	+3%	1-2		
2	10:00-21:00	Muscular Endurance and Power	+/- 4%	3-4		
3	21:00-31:00	Climbing Force	+/- 4%	3-4		
4	31:00-40:00	Strength	+/- 4%	3-4		
5	40:00-45:00	Cool Down	-3%	1-2		

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