Cycling Periodization For Triathletes

Annual Training Plan (ATP): Structure from which you will develop and create a periodization plan

Periodization: A method of manipulating training variables in order to increase the potential for achieving specific performance goals. Dividing the ATP into smaller more manageable segments with the goal of reaching peak performance.

Prep Phase: Prepare body for rigors of training; focus is on skill development, technique/drills, functional strength training, and aerobic development
2-4 weeks
Examples – Cadence Workout

Base Phase: Development of aerobic capacity and ability to utilize fat as fuel, skills, strengthen connective tissues, technique/drills, some intensity sprinkled in to stimulate anaerobic energy systems
16-20 weeks
Examples - Endurance Ride and Long Rides

Build Phase: Focused interval work, get ready to race, VO$_2$max/Aerobic threshold efforts
8-12 weeks
Examples - Threshold Ride, Long Hill Repeats, Short Hill Repeats, Time trials

Peak/Race Phase:
Get a feel for race pace, short intense efforts to sharpen, taper, mental preparation
1-2 weeks
Examples - Time Trials, Bricks

Transition Phase: Recover, Time off, new sports, yoga, cross training – 1 week or after season up to 4-6 weeks
<table>
<thead>
<tr>
<th>Zone</th>
<th>Description/Physiological benefit</th>
<th>Prep Phase</th>
<th>Base Phase</th>
<th>Build Phase</th>
<th>Peak/Race Phase</th>
<th>Transition Phase</th>
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<td>Z1 (Easy Aerobic)</td>
<td>Very relaxed, great for base development, warm up/cool down.</td>
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<td>Z2 (Aerobic)</td>
<td>Develop aerobic capacity, recovery intensity, can easily maintain for long durations without difficulty (talking pace), teach body to utilize fat as primary fuel source</td>
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<td>Z3 (Strong Aerobic/Tempo)</td>
<td>Develop aerobic capacity, steady pace that can be maintain for long durations, pace is &quot;comfortably quick&quot;, breathing is not labored but some focus is needed</td>
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<td>Z4 (Anaerobic Threshold)</td>
<td>The point at which oxygen can no longer be utilized efficiently, lactic acid is produced from anaerobic metabolism, breathing is labored, 15-60 minutes of exercise in general</td>
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<td>Z5 (VO₂ max/Aerobic)</td>
<td>Maximal Oxygen Consumption, VO₂ max, short duration intervals, very labored breathing</td>
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**The Macrocycle** The macrocycle is the longest of the three cycles and includes all four stages of a periodized training program (e.g., endurance, intensity, competition and recovery). Because macrocycles incorporate all 52 weeks of your annual plan, they provide you with a bird's-eye view of your training regimen and allow you to facilitate long-range planning.

**The Mesocycle** The mesocycle represents a specific block of training that is designed to accomplish a particular goal. Mesocycles are typically three or four weeks in length.

**The Microcycle** A microcycle is the shortest training cycle, typically lasting a week with the goal of facilitating a focused block of training.
Minnesota Triathletes and Coaches
Build/Peak Phase Workouts:

Julie Hull

90 min Bike...20 min warm with 4x1 min build to strong aerobic watts 2x 20 min interval (ideally using watts) The 20 min is broken as:

- 3 min at 95% LT - 1 min ez
- 3 min at 100% LT - 1 min ez
- 3 min at 105% LT - 1 min ez
- 3 min at 100%LT - 1 min ez
- 3 min at 95%LT - 1 min ez

5 min break Between sets 15 min CD

Kortney Haag

30 min Easy Spin W/U @ 95rpm @ 65-75% effort
Mixed Terrain.

Main Set:

- 5 x 5min @ 50-60RPM @ 75-80% effort (zone 3)
  with 3-5min recovery spin between sets (depending on recovery rate and how the legs feel at 90rpm+).

- W/D with left over time @ 90RPM+ mixed Terrain.

The goal of the workout is to build strength through the full range of motion
Dan Hedgecock

Intervals of 5mins on, 2 mins recovery. Usually 10 repeats.

Kris Swarthout

30-30’s have always been one of my favorites. No one can cheat these. Also it promotes progression in the athletes training when you add more sets. Warm-up well and then do 15 x 30 seconds at 90% effort (9 on 1-10 RPE scale) with 30-second spin recoveries. Stop if speed drops by 1 mph (1.5 kph, 50 watts). Rolling starts, standing, big gear. Get to top end quickly. Cool down easily and stretch.
David Thompson's 30-30's. 30 seconds on, 30 seconds off, for 30 repeats. After a 10 minute warmup and followed by a 10 minute warm down. Less than one hour of cycling and I can hardly walk. I do this four times before race season and then about 2 times a month in season. I do this indoors to get the precise workout and I do it on my road bike.

2. Time trial on the road. I do this on weeks when I am not doing 30/30's. Using a power meter I can quantify. This workout some times comes by accident. A morning ride that I feel good on I will ramp up the power the entire ride until I am begging for the ride to end. I have a few prescribed routes which have minimal stops or turns and allow me to keep the flow. I always do this outdoors. My best results are the years when I am doing TNTs as my time trial workout.

3ish. I wouldn't call it a designed workout but it is what I do in the off season. I ride the trainer to help with toughening the butt, lose some weight, and get a solid workout. I don't stress about the specifics of each workout but instead concentrate on some consistency. I will start with just 45 minutes but I never do more than 90 minutes. I am not trying to mentally torture myself or prove anything. Riding the trainer give the solid workout with out any breaks like you have on the road. I will throw in a couple short TT efforts of 10 minutes or so and I will also do a less intense 30/30 workout where I do 20 repeats and don't go quite as intense. This is my building phase but by keeping it informal I don't get burned out before the season actually begins.
David Thompson

Base: priority 1 riding 2 quality rides (quality is relative to fitness level: it could be just a 2 hour ride)
Build: priority 1 60min TT, priority 2 8x5min intervals
Peak: priority 1 5x 5min intervals

Suzie Fox

90 min IM main set for build phase:
Long WU
6×12/3 continuous
12 min= IM race pace
3 min= above IM race pace (about HIM effort)
Rest of the ride is relaxed until you meet the total time goal of your ride. Include short ez CD
1) 4 hour long ride steady (usually on the darn trainer these cold > rainy/snowy days!)
2) 90 minutes, with 2-3 x 20 minutes threshold with 2 minutes rest, or 4 x 10 minutes threshold with 2 minutes rest
3) 100 minutes steady with 5-8x 3 minutes hard effort within the endurance ride.
I’m not sure I have one favorite bike workout that I do…I just LOVE riding my bike. Surprisingly, I do a lot of training on my trainer – even in the summer. It’s great to get outside, but I like the trainer to really work on my mental focus on the bike. I feel it really keeps me honest for the IM bike portion. I have tried a few different approaches each year with building volume and then building speed or vice versa. This last winter coming into the 2012 tri season I did a lot of speed work all winter on my trainer…not much volume and then over the summer added volume. It rides and you pick your distances. I did the 200K, 200K, and 300K rides. The terrain is very similar to IM Wisconsin…but harder and hillier. So after doing those rides the IMoo bike course seemed quite easy. I would usually drive to Madison and ride the course the day before and/or after the bike rides so I would get three-four days of massive bike miles. I liked those “core blocks” of high bike mileage. I would usually end my core block with a long run.