# **Slowtwitch Cycling Power Certification**

The Slowtwitch Cycling Power Certification Clinic focuses completely on cycling power as it relates to the sport of triathlon. It is a 13 hour course delivered over 2 days with half of the instruction in a classroom setting and the other half on the Interbike Exhibit Showroom floor with interactive demonstrations and discussions with vendors and leaders in the industry. Attendees are taken through the progression of assessing and implementing different types of power equipment in addition to learning how to test athletes, analyze data and incorporate the information gained into a training plan.

## **Topics Covered**

There are 4 interactive classroom presentations and 3 hands-on demonstrations on the Interbike Exhibit Showroom floor with approximately 10 industry-leading vendors. The sessions vary in length from 1 to 2 hours depending on the topic. Each session is listed below with a brief summary. Please note that the content of each presentation and demonstration is subject to change and can vary based on the needs of the attendees.

#### History of Mobile Power Meters and Existing Power Meters on the Market (90 minute presentation)

An important part of understanding power meters is knowing where they started, how they have progressed, the trends in the industry and what is currently available on the market to athletes. During this presentation, attendees are guided through the development and progression of measuring power and the advantages and disadvantages of the major types and brands available. Attendees learn about what features to look for in a power meter and why they are beneficial.

#### Interbike Exhibit Hall (90 minutes to 2 hour practicum; occurs three times)

Attendees are taken to the Interbike Exhibit Hall three times during the clinic where they are given exclusive access to everything the show has to offer. Attendees receive a private demonstration on power meters from the leaders in cycling power, such as PowerTap, Quarq, SRM, Garmin Vector, Pioneer and Stages. Afterwards, attendees have the opportunity to walk the exhibit floor on their own and visit additional booths of their choice.

#### **Basics of Power Based Coaching (90 minute presentation)**

It is important to have a solid understanding of the fundamentals of using power in cycling coaching. In this session, attendees learn about the components of power meters and the variations available for different levels of athletes. The major power meter brands available are discussed in terms of their individual pros and cons. This presentation also covers one vs. two sided options, different head units and software decisions. Attendees are also taken through the meaning and purpose behind concepts such as functional threshold power, average power vs. normalized power, variability index, intensity factor and training stress score.

#### **Benchmark Testing (90 minute presentation)**

Athletes can only show improvement if there is a starting point from which to measure their progress. Benchmark tests provide coaches with quantitative feedback on how the athlete is responding to training. Attendees are taken through the process of assessing an athlete, determining an appropriate benchmark test for varying skill levels, and using that test to measure progress throughout training. Sample benchmark tests are provided as well as guidelines for developing ones specific to an individual athlete's needs.

### Power File Analysis for Racing (90 minute presentation)

Equipment and its provided data are only as helpful as the interpreter. The focus of this session is how to take the data from the power meter and incorporate it into an athlete's training plan. Attendees learn how to track changes over time, interpret shape intervals, and link ranges in addition to using a training stress score to predict peak fitness. Metrics include functional threshold, normalized power, variability index,

#### **Understanding Pmax & Functional Reserve Capacity (90 minute presentation)**

In this presentation, the advantages of Pmax power over max power are discussed. Attendees learn about functional reserve capacity and how it compares to anaerobic reserve capacity. Individual power files and analyzed and discussed as they relate to training needs and training plan development. Guidelines and recommendations on how to utilize power files to help create a peak performance through a training stress score are discussed as well.

#### Open Discussion/Q&A (60 minute discussion)

The final session of the clinic is completely guided by the attendees. During this time, attendees have the opportunity to ask questions about anything related to power meters, cycling coaching and triathlon. It is an opportunity to expand on topics covered throughout the course as well as answer any outstanding questions. Attendees are encouraged to ask questions and engage in discussion to learn from one another as well as the instructor.

# Cycling Power Certification Clinic Sample Schedule

Day 1	
07:45 - 08:00 AM	Clinic Check-In
08:00 - 08:25 AM	Introduction
08:30 - 10:00 AM	History of Mobile Power Meters and Existing Power Meters on the Market (lecture)
10:15 - 12:15 PM	Interbike Exhibit Hall (practical)
12:15 - 01:15 PM	Lunch
01:15 - 02:45 PM	Benchmark Testing for Power (lecture)
03:00 - 04:30 PM	Interbike Exhibit Hall (practical)
Day 2	
08:00 - 09:30 AM	Power File Analysis for Racing (lecture)
09:45 - 11:45 AM	Interbike Exhibit Hall (practical)
11:45 - 12:45 PM	Lunch
12:45 - 02:15 PM	Understanding Pmax & Functional Reserve Capacity (lecture)
02:30 - 03:30 PM	Open Discussion/Q&A
03:30 - 04:00 PM	Certification Process