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Level Up!

Chad Vaughn explains what lifters and coaches will learn at the CrossFit Weightlifting Advanced Trainer Course.

By Chad Vaughn

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Weightlifting is described as ballet with a barbell, poetry in motion, and a beautiful work of art. As the best weightlifters in the world train to put the greatest weight overhead, they also develop athletic attributes such as strength, flexibility, power, speed, coordination, agility, balance and accuracy. These attributes are finely honed through training, giving Olympic lifters relative degrees of the strength of powerlifters, the flexibility of gymnasts and so on.

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The CrossFit Weightlifting Advanced Trainer Course contains practical work but is very much designed for coaches.

Because the lifts have such dramatic effects on so many aspects of fitness and athleticism, top athletes in other sports employ the snatch and clean and jerk to help them succeed in their sports of choice. This is also why the snatch and clean and jerk are a huge part of the CrossFit program. It's no coincidence that the eight attributes listed above are all found on CrossFit's list of 10 fitness domains. And when you add in the task of completing a larger number of reps with these movements at lower weights, you have a very uncomfortable yet very effective method of developing cardiovascular/respiratory endurance and stamina, completing the CrossFit list.

In CrossFit, we want the ability to lift as much as we can for a single rep, and we also want the ability to execute many reps with lighter loads as quickly as possible. Both tasks require a great amount of efficiency: The better the movement and the stronger the key positions, the more I can lift for one rep and the better chance I have of maintaining excellent positioning through high-rep efforts. To maintain efficiency while performing high-rep workouts, you must first learn good technique and

movement with practice for heavier loads, and you must pursue consistency at all times. Efficiency will increase the number of reps you can get in a given interval, which will maximize intensity and dramatically improve your fitness.

Can you improve the flexibility, movement and positional strength demanded by weightlifting while still doing the CrossFit workouts we all love, including Murph, Cindy and Helen? I believe the answer is yes, and the proof I offer is the movement and loads lifted by most if not all CrossFit Games athletes. But how do athletes find the ballet, the poetry and the art within their snatches and clean and jerks? How do we find proper execution that further develops and demonstrates the dynamism, explosiveness and grace of the Olympic lifts?

To answer those questions, let's break down the goal of the CrossFit Weightlifting Advanced Trainer Course and explain who should attend.

Learning to Lift, Learning to Coach

The stated goal of the Advanced Trainer Course is “to teach the coach how to assess and optimize movement, to advance the athlete in the snatch, clean and jerk.”

Some think the new course is for the advanced weightlifter or athlete, but it is 100 percent a course for coaches, and its intent is to improve their technical eyes and give them the tools to advance their athletes in the lifts. That said, we strongly believe a coach can become better by feeling the positions and movements while lifting and being coached, just as we believe an athlete can improve his or her own skills by seeing and correcting others.

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Course attendees should be ready to participate in a number of breakout sessions that aim to aid coaches and athletes in assessment and optimization, and they should expect to lift heavy in other sessions. Throughout, they'll get an abundance of detailed coaching on their lifting, and they'll get a chance to coach while staff members guide them. As the course progresses, seminar staff will coach the coaches more and more, assisting them in seeing and correcting errors.

With regard to assessing and optimizing movement, we are not just referring to the snatch and clean and jerk but rather any movement. Many athletes are held back in weightlifting by patterns developed while performing other movements (such as within Murph, Cindy or Helen, to name a few).



Coaches who attend the course will become better by feeling the positions and movements while lifting and being coached.

For example, if you always flare your elbows and internally rotate the shoulders on push-ups, you will likely have a hard time with Mike Burgener’s “show me your armpits” cue when the bar is overhead. Burgener is asking athletes to externally rotate the shoulders to create a safer and stronger overhead position, and internal-rotation patterns can short-circuit their attempts to do so.

Another example is provided by athletes who regularly muscle weight overhead during low-weight, high-rep snatches, which takes the bar out of contact with the body as they exert power through extension. If you regularly use a round-back deadlift to get the weight to the hips and allow the bar to drift away from you during the pull, you will likely exhibit the same faults with heavier loads, where the margin for error is far smaller. Repeated efforts with these patterns will deeply ingrain them and make it very difficult to improve your movement later on. We'll give tips on how to move to ensure the best carryover to the Olympic lifts, and we'll suggest methods to help athletes achieve the positions we recommend.



Two-time Olympian Chad Vaughn leads the CrossFit Weightlifting Advanced Trainer Course.

While we do focus on movement in general, we will, of course, take the time to completely tear the snatch, clean and jerk apart in lectures, and we put them back together and create a very simple way to look at the lifts. The reconstruction is continued in breakout sessions in which athletes coach and receive coaching.

An example of one of the technical aspects that we cover in detail is the start position of the snatch and clean. We lower or raise the hips and shift the body forward or back to create different angles at the shins, back and thighs, and we set the athlete exactly where we want him or her to lock in and initiate the lift. This start position will create the exact bar path we want to achieve in this course. While other systems and coaches recommend the bar be “swept back” to the launch position as it comes off the floor, we recommend a start position that will allow you to move the bar straight, or as straight as possible. In this start position, we are looking for the body weight to be more centered on the foot or evenly distributed throughout, with a slightly smaller shin angle and the bar touching the shins.

While this start position can help those who want to lift more in the Olympic lifts, it also has carryover for the CrossFitter, who can use the position to increase efficiency in heavy-weight, low-rep efforts and light-weight, high-rep efforts. This set-up and resulting bar path will cut down on the movement of the body and bar and conserve energy. Think about the effort required to displace the bar rep after rep with light weight, and consider if you would really want to sweep the bar when returning to the floor while performing touch-and-go reps.

Neither this start position nor the start position that will require sweeping is wrong. Each will work for some athletes better than others, but the carryover of a set-up creating a consistently straighter bar path is worth consideration by the CrossFit athlete.

All aspects of the Olympic lifts will be broken down and considered in this manner, helping athletes optimize technique and increase performance on the platform and in CrossFit workouts.

The information presented in the Advanced Trainer Course builds on the CrossFit Level 1 Certificate Course and the CrossFit Weightlifting Trainer Course.

Building on a Solid Foundation

The information presented in the Advanced Trainer Course builds on the CrossFit Level 1 Certificate Course and the CrossFit Weightlifting Trainer Course. We present alternative techniques and methods and new material to a more experienced audience, but the information is not intended to conflict with that presented at other courses. Introducing athletes to CrossFit and weightlifting (meaning teaching someone who has never done the movements before) usually requires a different approach than that required for helping a more experienced athlete optimize performance. Continued use of introductory information and cues can sometimes hinder the development of intermediate or advanced athletes, much like too much detail presented too

early can overwhelm an inexperienced lifter and potentially limit long-term development.

Introductory courses must present the easiest, most effective way to introduce weightlifting movements and set athletes up for success. An example would be the three-position teaching method for the pull of the snatch, as taught in the CrossFit Level 1 Certificate Course. The PVC or bar is put in each position as the athlete moves from one to the other and learns to recreate each position on his or her own: high hang, mid-thigh and mid-shin. This three-position approach is a simple and very effective way to teach someone who hasn't done a lot of snatching before or has done no snatching at all. The pattern helps coaches address errors commonly seen in new lifters, but as the lifter becomes more experienced, positions, cues and drills usually need to be modified to address other errors or to prevent the creation of errors when the exaggerated beginner positions are maintained for too long. At this point, alternative techniques can be introduced to help lifters find what works best for them.

An example of an alternative technique would be a jerk that employs high elbows and a chin lift (like a Pez dispenser), as described in the video "Head Movement for the Jerk With Chad Vaughn." This technique is, of course, different than the chin-tuck method taught in the CrossFit Level 1 Certificate Course, and it's different from the jerk taught at the first level of the Weightlifting Trainer Course, at which attendees are instructed to keep the elbows down and out in the pressing position.

None of these techniques are wrong. They are just alternatives to try with yourself or some of your athletes to see if they optimize performance. For instance, less flexible or smaller athletes may benefit from keeping the elbows high in the jerk set-up, while others will find success with the elbows lower. A good coach knows many techniques, as well as the order in which they should be introduced to athletes.

For example, I would recommend first teaching the jerk with the chin tucked and the elbows down and out because it's easier and keeps things more consistent in the beginning. Also, understand that the "Pez technique" is specifically for maximal efforts; we are not recommending it for low-weight, high-rep efforts. In Grace, for example, it would be a waste of time and energy to aggressively tilt your head back in this way rep after rep, and we spend time in the Advanced Course confirming this.

The goal of the course is to help an athlete reach his or her potential in the Olympic lifts, whether he or she wants to perform better and get fitter or compete at the local, national or international level. To optimize performance, coaches and athletes have to be able to identify what they are doing wrong, and they need to have the tools to fix these errors. The Level 1 Certificate Course, Weightlifting Trainer Course and Weightlifting Advanced Trainer Course give athletes these tools and build on each other with the goal of long-term development and improved performance.

Personally, I've had to re-learn how to better introduce newer CrossFit athletes and weightlifters to the snatch and clean and jerk. At one point, I was teaching everyone more in line with the techniques taught in the Advanced Course, and the job got done, but not as efficiently and effectively as it could have for the beginners.

Trust in this three-step CrossFit progression that is laid out before you. The techniques introduced in each are presented in a specific order with an eye on efficiency and effectiveness.



The Advanced Course introduces techniques that will allow experienced lifters to optimize their form for best results on the platform.

That said, I'll leave you with a few Advanced Course topics that can be appreciated by athletes of all levels:

1. Barbell mobility work: any stretch in which a lifter holds an exaggerated weightlifting position with a barbell or other load.
2. A four-step process to assess and fix faults, including practice with video review.
3. Focus work: how to engage your mind to find clarity amid the complexity.
4. Programming tricks for setting up a sport-specific weightlifting program and combining it with CrossFit.

To take the Advanced Course, attendees must have held a CrossFit Level 1 Certificate for at least one year and completed the CrossFit Weightlifting Trainer Course. These prerequisites ensure everyone is on the same page and has a sound foundation we can use to explore other aspects of Olympic weightlifting. Though the Advanced Course content runs deep in detail, the

course flows very smoothly because of this shared foundation.

Hope to see you in an Advanced Course soon!



About the Author:

Chad Vaughn is a two-time Olympian, a nine-time national champion and an American record holder in the sport of Olympic weightlifting. He was introduced to CrossFit in 2008 and began working within the community in early 2010. Chad is part owner of CrossFit CenTex in Belton, Texas, where he holds weekly weightlifting classes while now leading the CrossFit Weightlifting Advanced Trainer Course. Chad has a natural, matured understanding of how the body best moves and is highly motivated to help anyone find his or her perfect snatch and heftiest clean and jerk.

Chad is assisted in the Advanced Course by Matt Bruce and Jodi Vaughn. You can read more about them at CrossFitweightlifting.com.



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