

CrossFit[®]
COMPETITOR'S
COURSE

PARTICIPANT GUIDE

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COURSE SCHEDULE

DAY 1

- 9:00 - 9:10 Introduction
- 9:10 - 10:00 Identification of Strengths and Weaknesses
- 10:00 - 10:05 Break
- 10:05 - 11:05 Gymnastics Skills Breakout
- 11:05 - 11:10 Break
- 11:10 - 12:30 WOD #1
- 12:20 - 1:30 Lunch
- 1:30 - 2:20 Mental Preparation, Goal Setting, Options of Coaching
- 2:20 - 3:20 Weightlifting Skills Breakout
- 3:20 - 3:30 Break
- 3:30 - 4:50 WOD #2
- 4:50 - 5:00 Q&A / Close

DAY 2

- 9:00 - 9:10 Introduction
- 9:10 - 10:10 Nutrition for Competition
- 10:10 - 10:15 Break
- 10:15 - 11:30 WOD #3
- 11:30 - 12:15 Programming Based on Weaknesses (Conditioning, Strength, and Skills)
- 12:15 - 1:15 Lunch
- 1:15 - 2:15 Monostructural Skills Breakout
- 2:15 - 2:20 Break
- 2:20 - 3:30 WOD #4
- 3:30 - 3:35 Break
- 3:35 - 4:30 Group Breakout for Development of a Program
- 4:30 - 4:45 Student Brief Backs
- 4:45 - 5:00 Q&A / Close

INTRODUCTION

The CrossFit Competitor's Course is designed to help both athletes and coaches improve their own or their team's athletic performance at any level of CrossFit competition. The course builds on the foundational CrossFit methodology presented at the Level 1 Certificate Course and explains how to apply that knowledge for competitor workouts, programming, and game-day. Topics like nutrition, goal setting, and inspiration are also covered. The goal is for any level of athlete or coach to leave more prepared for CrossFit competitions.

This course is designed for:

- CrossFit Level 1 Trainers of any experience level;
- Beginner, Intermediate, Advanced, or Elite athletes;
- Anyone interested in coaching an individual or team for CrossFit competitions.

You should leave this course with:

- The ability to program for CrossFit competitions (based on identifying strengths and weaknesses);
- Improved understanding of how to prepare physically and mentally for competitions and workouts;
- Inspiration that anyone can compete in CrossFit at some level.

Learning Objectives:

- Identify strengths and weaknesses of individuals or teams and use this information to program for improvement and preparation for competitions.
- Understand how to apply CrossFit's nutrition recommendations to competitors.
- Analyze each one of CrossFit's modalities for improved performance in competitions.
- Understand the options for efficiency of movement within each modality.
- Use a template for preparation of workouts and competitions involving strategy, warm-up, execution, and recovery.

IDENTIFICATION OF STRENGTHS AND WEAKNESSES

Objectives:

- Assess athletes and teams to determine their current fitness levels and goals.
- Identify strengths and weaknesses on both a broad and specific scope.

3 Steps to Successful Evaluation:

1. Written Questionnaire to capture basic information including age, family, habits, and WOD data (see page 22)
2. Evaluations of strengths / weaknesses in CrossFit movements and workouts
3. Observation and critique of athletes and teams during workouts

Evaluations of strengths / weaknesses:

General Areas:

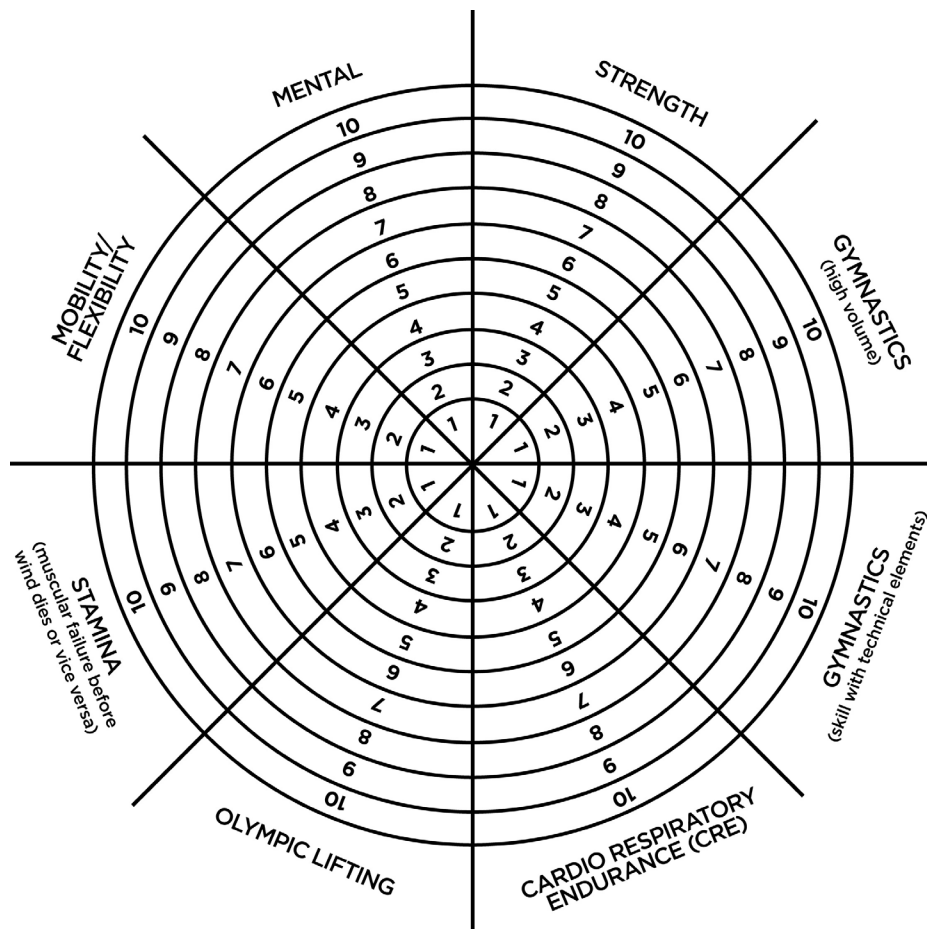
- Strength: Include different varieties (max effort, stamina, high rep, low rep, technical, etc.)
- Gymnastics: Mix of skills including their potential variations and difficulty levels
- Monostructural: Balance of time domains (short to long), as well as movements

*This provides a good starting point and general assessment to allow for group analysis

Implementation of a "spider web":

Specific Areas:

- Strength
- Gymnastics (high volume)
- Gymnastics (skill with technical elements)
- Cardio Respiratory Endurance
- Olympic Lifting
- Stamina (muscular failure before wind dies or vice versa)
- Mobility/Flexibility
- Metabolic Conditioning (think of various modalities)



Observation: the “often neglected evaluation tool”:

- Simply watching the athlete in workouts can be the most effective of all evaluations and this should not be forgotten.
- Here are some questions to consider for constructive and effective criticism and evaluation of workouts:
 - Where do they typically fail?
 - What movements are more difficult than others and why?
 - When does technique break down to a point that it negatively affects the overall efficiency of movement?
 - Where can the athlete be more efficient?
 - Is their potential for improved mental preparation or strategy of the workouts?

PROGRAMMING BASED ON WEAKNESSES (CONDITIONING, STRENGTH, AND SKILLS)

Objectives:

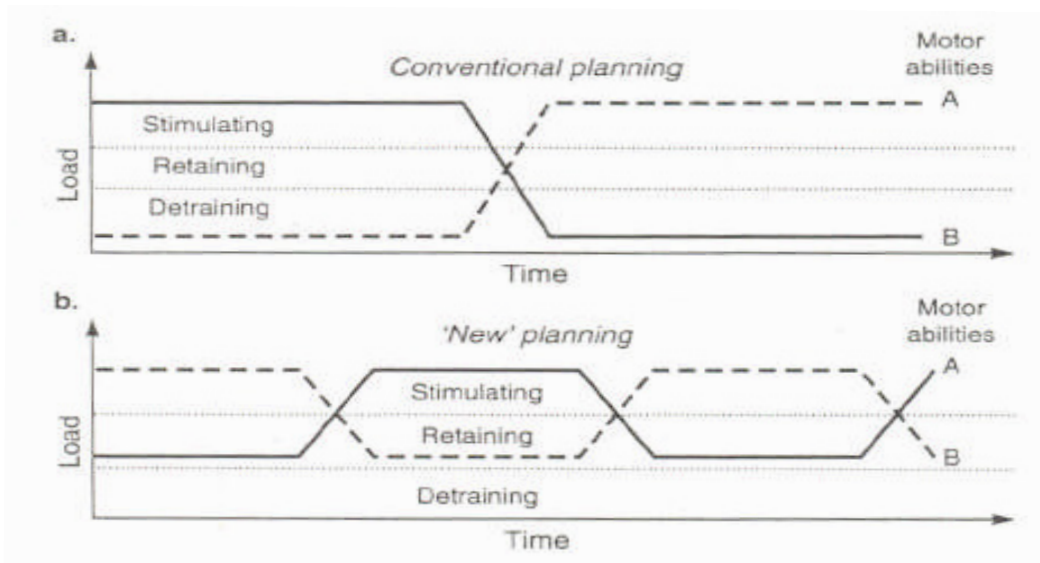
- Learn how to effectively program based on the athletes or teams weaknesses
- Understand how to apply the S.A.I.D Principle (Specific Adaptations from Imposed Demands)
- Be able to utilize programming cycles while maintaining the athletes strengths
- Training specific time domains

Programming Based on Weaknesses:

- Requires awareness of current fitness levels. This provides the coach or athlete with the knowledge to create a well designed and thought-out program based on specific needs.
- Use the evaluation tools (questionnaire, spider webs, observation) to identify weaknesses.
- "Simplify": there is no key or magic program. The "key" is to increase our work capacity across broad time and modal domains. Keep it simple with core concepts. Too often that people identify too many weaknesses to work on. 3 to 4 areas should be worked on at the most to allow for adaptation as well as continued progress or maintenance of strengths.
- Athletes needs vary by degree and the time spent on an individuals weaknesses will vary depending on their current fitness levels, how well they adapt to programs, and if the issue is technique or strength/conditioning driven.

S.A.I.D (Specific Adaptations from Imposed Demands) Principle:

- Less variance is more when we are focusing on weaknesses. It allows for adaptation to take place.
- Recognize when to change your programming when progress has stalled
- Acceptance of this principle does NOT have to lead to a decrease of capacity in other areas. The exception for this would be an athlete that has excessive capacity in one area over others.



(Graph from Zatsiorsky, V (1995). *Science and Practice of Strength Training*. Published by Human Kinetics.)

Utilization of Cycles:

- CrossFit's definition: constantly varied, functional movements, executed at high intensity. Variance is the key and 99% of the participants/clients in affiliates as well as beginner athletes should follow this prescription and they will see continued improvement for years.
- Approaching CrossFit as a sport and competitor is a distinction that is going to demand a closer look at targeting weaknesses in specific ways for a given date or time period. This is where using programming cycles has more relevance.

The Application of Cycles in CrossFit:

- Mesocycle: The end of one season to the start of the primary competition. Define this is for the athletes.
- Mesocycle: Typically 3-4 month segments dedicated on working specific weaknesses. The use of the spider web is helpful for a plan here.
- Microcycle: The time spent daily, or weekly on addressing specific weaknesses. This will vary depending on the athlete's adaptation, the domains addressed, and their goals.

Example Programming Cycles (for Games veteran, Chris Spealler):

Macrocycle:

- July (end of the Games) – May (the start of Regionals).
- Virtually every Games competitor still has to qualify for them; that is the first long-term goal of the season.

Mesocycles:

- 3-4 month segments focusing on specific weaknesses
- In this example, 3 mesocycles are used over 10 months

Mesocycle #1 (August thru October):

Focus: primarily on size and weight gain, by both lifting and putting on size. Some ways to develop this are as follows.

Absolute Strength Development Overview:

- Point 1: CNS Stimulation: Rep Ranges 1-5, with 1's being largely neurological.
- Point 2: Increasing contractile potential through hypertrophy methods targeting musculature used most in lifts or based on weaknesses:
- Point 3: Technique practice to help with Productive Application of Force particularly with Olympic lifts

Types of Strength Programs:

- Linear Progressive Overload
- Westside Conjugate Method
- 3 Week Progressive Overload Conjugate
- 5/3/1- Week 1 5's and 1 max rep set, Week 2- 3's and 1 max set, Week 3- 1's and 1 max rep set, Week 4- is back to 5's but using heavier loads than Week 1, etc.
- Using Higher Rep sets with compound movements (back squat 3-4 sets of 8-15 etc) to help with stamina for moderate to heavier load metcons. Doing just heavy weight or just higher rep sets is not an option but are very valuable when both are done
- On the Minute Work
- Periods where there is emphasis on the slow lifts transitioning to periods with emphasis on the fast lifts.
- Your strength program should have a structure to it and you need to be committed to the program with whatever structure you choose.

Short-Duration/Short Term (primarily ATP-CP/ Non-Oxidative):

- Time Duration: 6-20 seconds
- Work to rest ratios 1:12-1:20
- Other options in different modalities
- Training this system can be crucial for the athlete that has good wind, good technique but just does not move fast!
- Potential for overtraining

Mesocycle #2 (November thru February):

Focus: HEAVY bias toward heavier loads in metcons, strength days were backed off to 1 or no more than 2 workouts a week. These workouts are longer in continuous duration, relying primarily on the glycolytic and oxidative pathways.

Medium Duration (primarily Glycolytic/Lactate/Fast Glycolysis/Non-Oxidative):

- Time Duration
- Work to rest ratios: 1:3-1:5
- This system is incredibly taxing, but volume is typically restricted such that recovery should not suffer.

Long Duration (primarily Oxidative/Aerobic):

- Lower intensity and potential for recovery
- Potential for overtraining
- If "long duration" workouts turn into a something reassembling repeat intervals, this can hinder the athlete's development of aerobic capacity. In this case, more energy will be derived from the anaerobic pathways instead of the aerobic pathway. While intensity is necessary to see aerobic improvement, it needs to be only as intense as will allow a continuous pace across the duration for which the athlete seeks improvement such that that system is predominantly stressed.

During both mesocycles #1 and #2 have to allow for the "maintenance phase" of modalities that are considered strengths. In this example, it was the gymnastics and monostructural domains. Some options for training this if they are more of your focus are the following.

Gymnastics Options for Training:

- Pre/Post WOD work. Skills to Practice: Ring Complexes, HS Work, freestanding HS work, muscle up variations, Levers, Planches, L-sits, Jumps and bounds, rolls, cartwheels, ice cream makers, etc. These movements done in a strict fashion can also be used as accessory work for your strength days. Ex: After a heavy press day you can do ice cream makers, or a ring complex consisting of many movements: ex: a strict muscle up to 3 ring dips to an inverted hang back to a strict muscle up to 3 more ring dips, etc.
- Low Intensity Metcons- Having a skill oriented metcon can also be a great way to enhance gymnastic ability but should be used sparingly or on days when the athlete is fatigued for an active rest or on a double day as an accessory.
- Building stamina for high rep gymnastic based movements can happen as part of metcons or can be separated altogether usually accomplished by single modality gymnastic elements. Remember stamina is failing primarily due to muscle fatigue and not failing primarily due to breathing although you may still be breathing hard.
- Practice every possible version of the common gymnastic elements involved in CF games events.

Monostructural Options for Training:

- Modalities to target
- Identify whether the weakness is technique vs. capacity
- Intervals: Running a variety of lengths and time domains is key while drilling in technique if necessary.
- Generally 200's, 400's, and 800's are going to be the main focus for application to CrossFit workouts. Using 1600 meter and 5k distances will still be necessary depending on the athlete's stamina, ability to pace, and ability to maintain technique over longer periods of time.

Mesocycle #3 (February thru May):

- Focus: CV, FM, HI.
- Working on what we "think" may show up at the competition, and efficiencies in existing strengths. Once the workouts are announced, focus on those specifically.

Conclusion:

- Pay attention during workouts to determine why or where an athlete may be failing.
- If the athlete cannot breathe then maybe he or she needs to do more longer duration work. If the weight feels heavy then maybe the athlete needs more strength training days. If the athlete fails first because he or she cannot do more reps then maybe more focused work on stamina with gymnastics movements or barbells is needed.
- This will help identify where improvements are needed for greater success.

NUTRITION FOR PERFORMANCE & COMPETITION

Objectives:

- Understand how to eat for performance
- Understand how nutrition changes in relation to training volume
- Learn the considerations necessary for planning for game day
- Consider potential supplements

Review of Level 1 Material:

- Hormones and their response to food choices
- Eating for wellness
- Utilization of weighing and measuring, which is essential to determine how nutrition affects performance.

Eating for Performance:

- Establish a baseline, assessment, and goals for the athlete
- Map an athlete's daily nutrition patterns and how to deviate from the baseline to achieve specific goals
- Pre/Post WOD Nutrition

Training Volume and Nutrition:

- Use the baseline to make adjustments for caloric intake as the training volume increases throughout the season.

Game Day Nutrition:

- Practice the game day nutritional plan ahead of time during periods of increased volume to learn it's effect.
- Breakdown of specific athletes tweaks to the baseline

Supplementation:

- Products to consider and why?
- Applying supplementation to an athlete's goals (recovery, weight gain/loss, performance, etc.)

MONOSTRUCTURAL SKILLS

Objective:

- Learn how to improve efficiency in monostructural movements based on distance and duration.

Rowing

- Measurements of rowing
- Techniques for distance, calories, and watts
- Drills
- Common faults

Running

- Application in varying distances
- Short distance
- Medium distance
- Long distance

Swimming

- Open water vs. pool
- Distances and techniques
- Techniques while coupled with other movements

Cycling

- Set up
- Technique

Box Jumps

- Use of stretch reflex
- How to improve
- Box heights and techniques
- Various planes of movement

WEIGHTLIFTING SKILLS

Objective:

- Learn how to improve efficiency in weightlifting movements.

Olympic Lifting Movements

- Clean and Snatch Variations
 - Muscle
 - Power
 - Squat
- When to utilize these, at what loads each athlete can utilize each, and when to adopt other versions due to muscular fatigue.
- Hang position and rebounding at the bottom vs. pause

Overhead Olympic Movements

- Push Press, Push Jerk, Split Jerk
- Foot positioning and when to best utilize each movement
- Front or back rack, when and why
- There application to clean to overhead position as well as squat clean to overhead positions

Powerlifts

- High bar vs. low bar positions. When and why?
- Front Squats utilizing the squat clean for the start of each first rep. Considerations on wearing a tshirt and chalk.
- OHS utilizing squat snatch for the start of each first rep
- Deadlifting with rebound, various options and techniques, possibility of using a belt

Strongman

Odd objects are becoming a natural part of the competitions and need to be addressed on some level.

- Prowlers
- Sleds
- Logs
- Stones
- Axles
- Farmers Walk
- Sandbags
- Rope pulls
- Yokes
- Options if you don't have these specific tools

Dumbbells/Kettlebells

- Most movements performed with barbells can also be performed with dumbbells or kettlebells but will require a slightly different technique. Spend the majority of one's time on a barbell but make sure to train techniques with dumbbells or kettlebells to improve efficiency and adaptation to them.

GYMNASTICS SKILLS

Objective:

- Learn how to improve efficiency, and potentially stamina, in gymnastics movements.

Gymnastics Movements:

- Pull-ups
 - Strict
 - Gymnastics vs. Butterfly Kip
 - Chest to Bar
 - Weighted
- Push-ups
 - Regular
 - Hand Release
 - Ring
- Handstand Push-ups
 - Standard
 - Plates
 - Parallettes
 - Rings
 - Implementation of the kip
 - Free standing
- Muscle-up
 - Strict
 - Kipping w/ false grip
 - Kipping w/out false grip
 - Bar muscle-ups
 - Transition into HSPU
- Trunk Movements
 - L-sit (paralletes vs. rings)
 - K2E
 - T2B
 - GHD Sit ups
- Dips
 - Strict vs. kip and strap positioning
- Rope Climbs
 - Wrap variations
 - Legless

RESOURCES

Athlete Questionnaire

Name: _____

Height: _____

Weight: _____

Age: _____

Estimated BF %: _____

How long have you been CrossFitting?: _____

Describe your previous athletic background: _____

Describe your nutrition habits: _____

Describe your sleep habits: _____

Are you married? _____

Do you have kids? _____

What does your current training program/structure look like?

What are your perceived strengths/weaknesses (i.e. technique, skills, strength, bodyweight movements, running, rowing, time domains, mobility, etc.):

What are your goals?

Weightlifting Benchmarks:

Press:
Push press:
Push jerk:
Split jerk:
Bench Press:
Deadlift:
Snatch (power and full):
Clean (power and full):
Clean and jerk:
Front squat:
High-bar back squat:
Low-bar back squat:
Overhead squat:

Gymnastic Benchmarks:

Max consecutive muscle ups or 30 muscle ups for time score (false grip or no false grip):
Max rep strict pull-up:
Max rep kipping pull-up (butterfly or traditional):
Max rep chest to bar pull-up:
Max rep handstand push-up (strict):
Max rep Kipping HSPU
Max rep ring dip:
Can you do pistols?
L-sit max seconds:
HS Walk Distance
Max rep toes to bar:

Monostructural Benchmarks:

400 meter run:
100 meter sprint
1600 Meter run:
5 K run:
10K run:
Max consecutive double-unders:
500 meter row:
2K row:
5K row:
Can you swim?

CrossFit Benchmarks:

Fran:
Amanda:
Diane:
Helen:
Angie:
Cindy:
Elizabeth (with squat cleans):
Grace:
Randy:
Isabel:
Nancy:
Mary:
Murph:
Nate:
Filthy 50:
Fight Gone Bad:

WOD Training Template

Strategy

- What is going to be the most difficult part of the workout?
- What rep schemes do you use for each of the elements?
- Establish positive self-talk prior to entering WOD
- ALWAYS be willing to throw the "plan" out and re-adjust on the fly

Warm-up

- Dynamic mobility work
- Static stretching/joint preparation for improved positioning or speed

WOD

- Attack
- Evaluate

Cool-Down

- Post WOD nutrition
- Static stretching
- Recovery options (high volume vs. heavy day)

Spider Web

This is simply a guide to identify weaknesses and to provide a starting place for programming. Using the numbers, rate an athlete or team on a 1-10 within each of the following elements. Imagine the 1 as a beginner and 10 as a seasoned games athlete. This is only **one of many** ways to help analyze the weaknesses of an athlete or team.

