

Study Guide for Mr. Hendry's Weight Training Class

(You will see many of the target goals listed below on the final exam – we will cover them in class)

Understand what “weight training” is.

Know how weight training is different from powerlifting, strength training and resistance training.

Know how many muscles are in the body.

Know the Bigger-Faster-Stronger “Six Absolutes”

Be able to list ways you can keep your back safer when exercising.

Be able to list ways you can keep your knees safer when exercising.

Be able to list ways you can keep your hamstrings safer when exercising.

Be able to list ways you can keep your shoulders safer when exercising.

Know what the mile is testing you for.

Know what the push-up test is testing you for.

Know what muscles are involved in the push-ups test.

Know what the crunches test is testing you for.

Know what muscles are involved in the crunches test.

Know what the pull-ups test is testing you for.

Know what muscles are involved in the pull-ups test.

Know what the sit & reach test is testing you for.

Know what muscles are involved in the sit & reach test.

Understand how strength training works.

Understand how strength training works on the cellular level.

Know the target muscles in the front squat and back squat.

Know the proper technique of the front squat and back squat.

Know the proper spotting technique for the front squat and back squat.

Know the target muscles in the bench press and incline bench.

Know the proper technique of the bench press and incline bench.

Know the proper spotting technique for the bench press and incline bench.

Know the target muscles in the power clean and power snatch.

Know the proper technique of the power clean and power snatch.

Know the proper spotting technique for the power clean and power snatch.

Understand how and why people are different when it comes to weight training.

Know how many different types of muscle you have and what they are.

Know how your central nervous system responds to training.

Know what the two main types of skeletal muscle fibers are.

Know the characteristics of type 1 muscle fibers.

Know the characteristics of type 2 muscle fibers.

Know what a "repetition" and "set" are.

Know what "training intensity" and "training volume" are.

Know what a 1RM is.

Know what a Multiple Rep Max and how it works.

Know the different energy systems of the body.

Know how the aerobic system works.

Be able to list some aerobic activities.

Know how the anaerobic system works.

Be able to list some anaerobic activities.

Know how the ATP-PC system works.

Be able to list some ATP-PC activities.

Know the four key principles of strength training.

Understand the principle of specificity.

Understand the principle of overload.

Understand the principle of progression.

Understand the principle of recovery.

Know how weight loss and weight gain work.

Understand the series of stages in learning new patterns of movement.

Know what visualization is.

Know how to write a S.M.A.R.T.E.R. goal.

Know the three primary types of strength.

Know the categories of weight training as it pertains to sports performance.

Know what Olympic lifts are.

Know what static lifts are.

Know what ballistic lifts are.

Know what bodybuilding lifts are.

Know some attributes that athletes will need to develop through strength training.

Know what power is.

Know what muscular endurance is.

Know what maximal strength or absolute strength is.

Know what hypertrophy is.

Know what hyperplasia is.

Know why athletes should train movements, not muscles.

Know some of the sporting movement patterns.

Know what rotation is.

Know what triple extension is.

Know what push is.

Know what pull is.

Know what weight shifting is.

Know what acceleration and deceleration is.

Know some basics of warming up and cooling down.

Know some characteristics of the general warm-up.

Know some characteristics of the specific warm-up.

Know some characteristics of the cool-down.

Know some of the misconceptions regarding strength training and flexibility.

Know some of the different types & varieties of stretching.

Know what static stretching is.

Know what ballistic or dynamic stretching is.

Know what passive/active stretching is.

Know the three different types of muscle action that can occur during strength training.

Know what isometric is.

Know what concentric is.

Know what eccentric is.

Know what overtraining is.

Know some warning signs of overtraining.

Know some prevention strategies for overtraining.

Know how many distinct systems there are in the human body.

Understand what the muscular system does.

Know what the muscular system consist of.

Understand what the skeletal system does.

Know what the skeletal system consist of.

Explain how some of the systems of the human body work together.

Know what anterior is.

Know what posterior is.

Know what lateral is.

Know what medial is.

Know what prone is.

Know what supine is.

Know what abduction is.

Know what adduction is.

Know what flexion is.

Know what extension is.

Know what plantarflexion is.

Know what dorsiflexion is.

Know the different types of joints in the body.

What are some Synovial Joints in the human body

Know what the S.A.I.D. principle is.

Understand what stabilizers and mobilizers are.

Know what mobilizers are.

Know what stabilizers.

Know what the principle of variation is.

Know some examples of cross training.

Know what the F.I.T.T. Concept is.

Explain the difference between Core lifts and Auxiliary lifts.

Understand how you can improve speed.

Know what the most important component of speed development is.

Know what Agility is.

Know what the primary effect of agility training is.

Be able to give some examples of "being quick".

Understand the different types of reaction that can be improved.

Know what plyometrics are.

Know what cardiovascular endurance is.

Know what circuit training is.

Know what Biomechanics are.

Understand how the center of gravity (COG) works.

Understand more about action and reaction.

Know what Sport-Specific Training is.

Know why it is important to use multiple joint movements.

Know what multiple plane movements are.

Know what ground-based movements are.

Know what periodization is and how it works.

Understand how nutrition and sleep can help with your training.

Know how character can help with you become the best you can be.

Know all the auxiliary exercises we do in the weightroom.

Know what muscles are being trained by each exercise we do in the weightroom.

Know the major muscles in the body and where they are located.

Be able to list some health benefits of exercise and physical activity.

Be able to list some benefits of aerobic exercise.

Be able to list some benefits of strength training.

Understand the use of proper lifting technique as it applies to safety in their daily lives