



Syllabus

Track and Field Academy Course 310

Strength and Conditioning Coach Certification Course

Overview. TFA Course 310 is a certification granting course that covers all aspects of strength training, and the development of other key athletic qualities for the sports of Track and Field. The course is designed to assist Track and Field coaches wishing to become more effective in designing and administering Strength and Conditioning programs for their sports, or for Strength and Conditioning coaches who wish to develop a better understanding of specific Strength and Conditioning program design for Track and Field.

Course Components. The course consists of 18 hours of in-class instruction. This time includes a mix of lecture, group learning activities, video analysis, and training design exercises.

Course Objectives. Upon completion of the course, the student will:

1. Value science based coaching and appropriate roles of coach and athlete in the training process.
2. Be able to identify various components of athletic fitness and plan training units appropriate to the development of each.
3. Be able to properly individualize training in order to accommodate varying levels of ability, training age, and body composition.
4. Be able to design appropriate and specific warmups and culminating activities for training sessions
5. Be able to design complete training programs to enhance athletic performance in multiple sports and events throughout the training calendar.
6. Be able to effectively teach sound techniques for all common training exercises to athletes of all levels and diagnose and correct common technical problems in each.
7. Be able to identify signs and causes of overtraining and make appropriate training adjustments
8. Be able to combine compatible training units into effective and time efficient training sessions, and sequence training sessions in a complimentary manner.
9. Be able to effectively and safely administer weight training through use of planning, grouping, and spotting techniques.
10. Demonstrate a basic understanding of nutrition and hydration, be capable of offering basic nutritional counseling, and be able to refer athletes to additional professional expertise.
11. Demonstrate knowledge of the signs of poor nutritional practices, substance abuse, and performance enhancing drug use and serve as an informational resource to athletes and a referral to professional help in these cases.
12. Value sport as an agent of a healthy lifestyle and fair play and serve as an advocate for healthful living and drug free sport.

Course Topics. TFA Course 310 contains the following multiple course units, each covering the topic indicated in the unit title.

1. Introduction
2. Foundations of Training Design
3. Energy System Physiology
4. Neuromuscular Physiology
5. Warmups and Cooldowns
6. Training the Energy Systems
7. Training Speed, Power and Coordination
8. Foundations of Strength Training
9. General Strength Training
10. Medicine Ball Training
11. Multi-jump Training
12. Multithrow Training
13. Weight Training Exercises and Exercise Choices
14. Technique and Teaching of Weight Training Exercises
15. Weight Training Administration and Safety
16. Peripheral Issues in Training Design
17. Foundations of Sports Medicine
18. Gross Training Design
19. Weight Training Design

Student Evaluation. The student evaluation process consists of three parts.

1. Attendance of all class sessions and participation in all class activities
2. Online that is submitted after completion of the classroom portion of the course and prior to a predetermined deadline.
3. Completion of a training design project, which involves designing training for a hypothetical athlete according to the guidelines set forth in the Training Design Project Instructions provided in the course. This is submitted after completion of the classroom portion of the course and prior to a predetermined deadline.

Grading. The student's performance in the course will be evaluated and grades assigned on a pass-fail basis. In order to gain a passing grade, the student must accomplish the following:

1. Attend all class sessions and participate in all class activities. Failure to attend all class sessions disqualifies a candidate from certification consideration.
2. Complete the online course examination by the assigned deadline, and achieve a grade of 80% or better. Instructions and Deadlines will be stated in your Examination Information bulletin.
3. Submit a Training Design Project by the assigned deadline and receive a passing grade on the project. ***Exams and Training Design projects must be completed without collaboration with fellow students. Projects deemed to be too similar will be disqualified and all parties involved will fail the course.*** The project is graded on a pass-fail basis, according to the criteria below. Instructions and Deadlines will be stated in your Training Design Project Information bulletin.

Course Materials. All course materials will be provided electronically prior to the start of the program (typically 10 – 14 days prior). Access to the materials is helpful but not imperative during the class. Students wishing to have access to course materials during class are encouraged to download the materials prior to arrival and bring a laptop, tablet or smartphone to access that material.

Certification. Certification as a Strength and Conditioning Specialist by the USTFCCCA is awarded for successful completion of the course and its student evaluations, in accordance with certification policies detailed on the USTFCCCA website. Certification is good for three (3) years and continuing education units are not required. The course must be completed in its entirety to renew the certification.

Training Design Project Grading Standards. The training design project is graded on a pass-fail basis. ***Exams and Training Design projects must be completed without collaboration with fellow students. Projects deemed to be too similar will be disqualified and all parties involved will fail the course.*** Passing work shows no serious errors and no more than five minor errors throughout the entire project.

- Serious Errors are:
 - Gross failure to observe course issued volumetric guidelines in training units.
 - Gross failure to group and sequence training in a compatible and complimentary manner as advised in the course.
 - Gross failure to include adequate rest and restoration as evidenced by the ratio and distribution of rest days and restoration sessions to total training days
 - Improper sequencing of long term training in a way that uses high intensity training without adequate preparation.

- Minor Errors include, but are not limited to:
 - Failure to use course terminology in classifications of training units and sessions
 - Isolated incidences of failure to group and sequence training in a compatible and complimentary manner as advised in the course.
 - Isolated incidences of failure to include adequate rest and restoration as evidenced by the ratio and distribution of rest days and restoration sessions to total training days
 - Improper sequencing within training sessions
 - Improper sequencing of long term training
 - Incompatibility of strength and on-track work within the session
 - Isolated incidences of failure to observe course issued volumetric guidelines in training units.