

Quiz Policies

Eligibility

The NCSF online quizzes are open to any currently certified fitness professional, 18 years or older.

Deadlines

Course completion deadlines correspond with the NCSF Certified Professionals certification expiration date. Students can obtain their expiration dates by reviewing either their certification diploma or certification ID card.

Cancellation/Refund

All NCSF continued education course studies are non-refundable.

General Quiz Rules

- You may not have your quiz back after sending it in.
- Individuals can only take a specific quiz once for continued education units.
- Impersonation of another candidate will result in disqualification from the program without refund.

Disqualification

If disqualified for any of the above-mentioned reasons you may appeal the decision in writing within two weeks of the disqualification date.

Reporting Policy

You will receive your scores within 4 weeks following the quiz. If you do not receive the results after 4 weeks please contact the NCSF Certifying Agency.

Re-testing Procedure

Students who do not successfully pass an online quiz have the option of re-taking. The fees associated with this procedure total \$15 (U.S) per request. There are no limits as to the number of times a student may re-test.

Special Needs

If special needs are required to take the quiz please contact the NCSF so that appropriate measures can be taken for your consideration.

Quiz Rules

What Do I Mail Back to the NCSF?

Students are required to submit the quiz answer form.

What do I Need to Score on the Quiz?

In order to gain the .5 NCSF continued education units students need to score 80% (8 out of 10) or greater on the CEU quiz.

Where Do I Mail My Quiz Answer Form?

You will mail your completed answer form to:

NCSF

Attn: Dept. of Continuing Education

5915 Ponce de Leon Blvd., Suite 60

Coral Gables, FL 33146

How Many CEUs Will I Gain?

Professionals who successfully complete the any continuing education quiz will gain .5 NCSF CEUs per quiz.

How Much does each quiz cost?

Each quiz costs the student \$15.00.

What Will I Receive When The Course Is Completed?

Students who successfully pass any of the NCSF online quizzes will receive their exam scores, and a confirmation letter.

How Many Times Can I Take The Quizzes For CEUs?

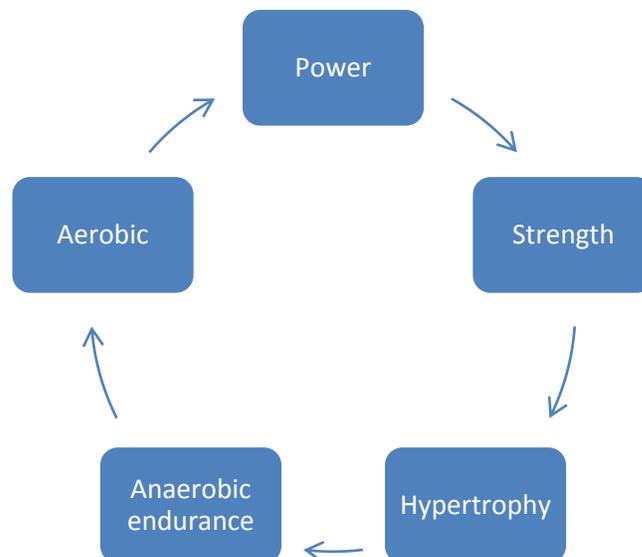
Individuals can take each NCSF quiz once for continuing education credits.

Effective Use of Training Time

Effective use of training time is a key priority for all personal trainers. The 120-180 minutes of usable training time per week often makes it difficult for trainers to help their clients reach all their perceivably attainable goals. This is particularly true when the needs include all aspects of health related fitness. The traditional, but antiquated, model of personal training that uses body part emphasis and three sets of ten repetitions provide limited benefit for the average person with multi-factor need. Attempting to fix range of motion issues, musculo-skeletal imbalances, as well as body fat reduction and the often associated metabolic and cardiovascular conditions with three sets of ten using bodybuilding exercises is an inefficient use of time. Rather, the exercise program should be broken down into segments with specific emphasis. Separating the needs into discernable categories allows for a more efficient use of the training time and places

specific stress related to the desired adaptation.

Although the exercise program structure may differ on a case-by-case basis, a basic model can be used that addresses the individual need in a periodized, cycled program. Looking at the basics of exercise physiology a plan of attack that separates the energy systems and the tension requirements of the muscle can be used to categorize the gross purpose of the activity and its relative order in the exercise bout. When employing anaerobic and aerobic modalities in the same day the requisite tensions employed for adaptational response can be used to sort out the emphasis. This organization is directed by the energy systems that support each action. The standard order should reflect the continuum from phosphagen to oxidative metabolism and therefore should be ordered in the following manner:



Within these categories the energy systems can be further broken down to reflect the specific intent along with individual considerations such as fitness level, training tenure, movement aptitude, etc. Getting back to the underlying exercise science, the activities may be broken down into the phosphagen system and the glycolytic pathway or if unsure about the overlap, 1-5 and 6-12 repetitions. Less than five repetitions to volitional failure reflect phosphagen energy utilization and an intensity greater than 85% of a 1RM, whereas greater than six repetitions of the same effort reflects use of the glycolytic pathway and less than 85% of a 1RM. When more than 12 repetitions are completed the intensity is most likely too low. This will result in the activity dropping out of a strength emphasis and migrating into the early stages of an anaerobic endurance activity. Take a look at this order example

recognizing that not each section is necessary and that client specifics will dictate decisions.

The aforementioned is an example of order considerations based solely on the intensity/energy system relationship. Now it makes sense to apply the additional considerations that are relevant to addressing multiple client needs. The inclusion of, and need for a warm-up, a functional skeleton (ROM and strength balance), multi-planar movement efficiency, and adequate caloric expenditure, warrant significant attention. When each of these components are added into the exercise bout, and with the limited time considered, the use of multiple training systems should enter the equation. The use of circuits for dynamic flexibility and glycolytic strength/endurance as well as supersets, contrast sets, and movement combinations

Compound Power <6 reps (Cleans, Pulls and Jerks)

Compound Strength <6 reps (Squats and Deadlifts and Combinations; i.e. squats to press)

Compound Power >6 reps (Weighted Ballistics and Box Jumps)

Compound Strength >6 reps (Bent row, Pull-ups, Barbell lunges and combinations; i.e. bulgarian squat with front raise)

Hypertrophy 8-12 reps (Chest presses, Cable rows, DB flies)

Anerobic Endurance "Metabolics" >8 reps (MB chops, Clap push-ups, Reverse lunge with row)

Aerobic (Interval rowing)

can be used to effectively accomplish tasks of different nature. Segmenting the program in a logical order can be accomplished by simply matching the need to the desired outcome. Consider the following:

This schematic accounts for numerous aspects of a needs analysis and can be manipulated based on those client specific needs. During the muscle preparedness section the tissue should be ready for increasing tensions and range of motion. Foam rolling may be considered as warranted. The dynamic warm-up should use all major movements and progress through a complete range of motion. The activities can be progressive but must give consideration to the common skeletal distortions like upper and lower cross syndromes. These conditions are common and require actions that promote thoracic

extension and lumbar-pelvic hip activity. The neural prep is necessary following the use of static stretches aimed at preventing an injury to “awaken” relaxed tissue or for the purposes of significant velocity or tensions used in the core exercise segment. The core area is where the most diversity will be found. It is important to note core components in programming means “primary” and not the trunk musculature. Here the emphasis is defined by assessments and client goals. Some clients have the capacity to employ strength and power exercises as a primary focus whereas others will be looking at movement efficiency, improvements in motor patterning, and a defined volume of movement for initial conditioning, exercise experience, and caloric expenditure. For those able to employ compound lifts at higher intensities, the anaerobic endurance section allows for a



large variety of movements and higher training volumes. Lesser conditioned clients would already employ this intensity/energy system relationship as their core components.

The metabolic segment is often completed by utilizing supersets or tri-sets. This enables a higher volume; challenging the body in a way that is desirable for the outcome yet under the controls of lower intensity. During this section, movement combinations and glycolytic-driven velocities can be used. The actual number of activities that fall under this area are greatest as is the diversity of the adaptional goals. For instance, cable diagonal chops for closed chain hip/trunk rotation, 30 seconds of jump rope for increased heart rate, lateral walking front-loaded lunges for frontal plane core/hip activity, bench push-ups for upper body endurance, speed step-ups for velocity based stability/efficiency, suspension rows for core/shoulder joint endurance/strength; the list could go on and on. Employing metabolic exercise sequences is based on the individual's capabilities and experience and again is directed by the needs analysis. Some key considerations are

performance under fatigue, the force velocity curve, and buffering capacity. The use of two tri-sets, two times through, can increase training volume by 1/3rd, which translates into greater adaptation response and increased caloric expenditure. Metabolics also allow for training practice when stability, coordination or another major influence must be mastered before real loads are used.

When circuits and multi-set systems are employed it should be noted that more is not always better. Excess variety does not allow for adequate time to develop efficient motor patterns. Therefore some level of homogenous programming is justified. Although variety creates more diversity in stress, too much new physical data is tough to manage and the nervous system efficiency is slowed. Rather, select a fewer movements instead of more and master them before adding new exercises or getting aggressive with the progressive overload factors.

The following case study is a good example of how this segmented daily program may look as well as how the metabolic can expand a program's volume.

Sample Program

General Warm-up

Rowing ergometer 5 minutes

Dynamic Warm-up Circuit 2 x 30 seconds each movement

Quadruped – opposite raise with hold

Forward step with alternating cone reaches

The example above is designed to present the schematic as it may look for a client. The program progresses from more intense exercises to those that serve more functional tasks. The use of supersets and tri-sets allows for more resistance than a traditional circuit but still expands the exercise program to nearly double its volume from the core components. An important aspect of the program is to closely monitor the time between the exercises. The “as tolerated” concept suggests the duration of time between sets be as short as possible for successful and clean performance of the movements. The rest interval and intensity

will determine the hormonally driven response. Compromise to technique in exchange for reps is unacceptable and excessive rest intervals are also problematic to volume. If appropriate resistance is a difficult factor, select resistance based on form and desired time under tension, always siding with lighter as reps can always be added. The multi-rep calculator is a useful NCSF trainer tool for this issue. The key is to monitor the performance and make adjustments as necessary. Having a note pad or writing on the program sheet will help with adjustments after the fact when memory fades after a long work day.

Effective Use of Training Time CEU Quiz

1. On average, personal trainers have approximately _____ usable minutes each week to work with their clients.
 - A. 15-60
 - B. 30-90
 - C. 120-180
 - D. 240-360
2. A traditional routine of 3 sets of 10 repetitions for each body part is most likely ineffective at maximizing adaptational responses aimed at _____.
 - A. range of motion issues
 - B. musculo-skeletal imbalances
 - C. body fat reduction
 - D. all of the above
3. The correct organization of aerobic and anaerobic modalities within an exercise program should be determined by _____.
 - A. trainer's available equipment
 - B. clients interest in specific exercises
 - C. flexibility issues of the client
 - D. the energy systems that support each action
4. Which of the following represents the correct order of training techniques within an exercise program if following the continuum from phosphagen use to oxidative metabolism?
 - A. Power, Strength, Hypertrophy, Anaerobic Endurance, Aerobic
 - B. Hypertrophy, Aerobic, Strength, Power, Anaerobic Endurance
 - C. Aerobic, Power, Anaerobic Endurance, Strength, Hypertrophy
 - D. Strength, Power, Aerobic, Anaerobic Endurance, Hypertrophy

5. Within each category (i.e. hypertrophy, strength, etc) individual considerations such as _____ should also be employed to address specific intent.
- A. fitness level
 - B. training tenure
 - C. movement aptitude
 - D. all of the above should be considered
6. Phosphagen utilization is defined by ____ repetitions and _____ of 1RM.
- A. 6-12; 75%
 - B. 8-12; <90%
 - C. 1-5; 45%
 - D. 1-5; >85%
7. The glycolytic pathway is in use when ____ repetitions are completed using _____ of 1RM.
- A. 6-12; <85%
 - B. 1-5; 75%
 - C. 1-5; 90%
 - D. 6-12; 50%
8. Based on the segmented program outlined in the article, which of the following components of the program would be utilized for emphasizing full ROM in multiple planes?
- A. Dynamic Warm-up
 - B. Static Stretch
 - C. Aerobic Endurance
 - D. Anaerobic Endurance
9. The hormonally driven response to exercise will be determined by _____ and _____.
- A. duration; reps
 - B. rest interval; intensity
 - C. flexibility; VO₂max
 - D. muscle mass used; aerobic activity used

10. The sample exercise program cites the “as tolerated” concept which means _____.

- A. clients should lift as much weight as they can
- B. clients should exercise every day, if possible
- C. clients should minimize rest intervals between sets without sacrificing form
- D. trainers should yell and scream at their clients for motivation as much as possible

Quiz Answer Form

FIRST NAME _____ LAST NAME _____ M.I. _____

TITLE _____

ADDRESS _____ APT. _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

COUNTRY _____ POSTAL CODE _____

CERTIFICATION NO. _____ CERTIFICATION EXP. ____/____/____

MEMBERSHIP NO. _____ MEMBERSHIP EXP. ____/____/____

Quiz Name	Member Price	Total
	\$15	



Discover



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Check/Money Order

Account No. _____

Exp. Date _____

Security Code _____

Signature _____

Date _____

Quiz Answers

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Fill in each blank with the correct choice on the answer sheet. To receive 0.5 CEUs, you must answer 8 of the 10 questions correctly.

Please mail this Quiz answer form along with the proper enclosed payment to:

NCSF
5915 Ponce de Leon Blvd., Suite 60
Coral Gables, FL 33146

Questions? 800-772-NCSF