

HFW415 - Advanced Strength and Conditioning (3 credit hours) Course Syllabus

Course Description

This course is designed for senior status students majoring in Health, Fitness, and Wellness and Exercise Science who are interested in pursuing a career as an advanced personal trainer or strength and conditioning coach. This course is based on, and will provide an overview of, the principles of strength and conditioning. Emphasis will be placed on the application of concepts in anatomy, physiology, kinesiology, biomechanics, and nutrition in order to effectively design strength and conditioning programs, ensure proper exercise technique, and select appropriate exercise testing and evaluation protocols. Students will also be introduced to facility design, policies, organization, and legal issues. At the conclusion of this course, students will have been presented with the information necessary to sit for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam.

Course Learning Outcomes

By the end of this course you will be able to do the following:

- 1. Apply scientific knowledge to train athletes and clients for the primary goals of improving athletic performance and fitness.
- 2. Select and interpret sport-specific exercise tests.
- 3. Demonstrate and teach proper exercise techniques.
- 4. Design and implement safe and effective strength training and conditioning and personal training programs.
- 5. Provide guidance regarding nutrition and performance-enhancing substances.
- 6. Apply exercise prescription principles for improving health- and skill-related physical fitness, injury prevention, and reconditioning while incorporating the concept of periodization.

Prerequisites/Corequisites

Prerequisite: NAT150 and NAT150L or BIO 312 and BIO312L, EXS322

Co-requisites: HFW415L and NAT112

Required Textbook(s) and Resources

Haff, G. G., & Triplett, N. T. (Eds.). (2016). Essentials of strength training and conditioning (4th ed). Human Kinetics. ISBN: 9781718202375

NCSA. (2017). Certified Strength and Conditioning Specialist (CSCS) online training course access code.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the Tiffin University Library.

Time Commitment

Effective time management is possibly the single most critical element to your academic success. To do well in this class you should plan your time wisely. With our accelerated, seven-week term, you should reserve roughly **twenty (20) hours per week** to complete readings and assignments. To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

- 1. All times assume Eastern Time (GMT-4).
- 2. Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.
- 3. Unless otherwise noted, initial forum discussion posts are due by 11:55 p.m. ET on Wednesdays and response posts are due by 11:55 p.m. ET on Saturdays.
- 4. Major assignments and reflections are due by 11:55 p.m. ET on Sundays.

Learning Activities

Each week you will answer a series of application questions, complete Springboard units at the Human Kinetics website, and take a short quiz in Moodle. You will also submit a weekly report on your unit work, complete a Test Selection Project in Week 4, a Program Design project in Week 7, and record three presentations in Weeks 4, 5, and 7.

Key Assessment (Taskstream Submission)

Designated courses at TU feature a "Key" (Outcomes) Assessment to provide you the opportunity to demonstrate your program's core competencies. These activities also show how the course fits within the broader curriculum. For this course, **Activity 7.4 - Project Design** serves as a key assessment.

Grading

The chart below identifies the individual contributions from each type of activity, per week.

Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Application Questions	20	20	20	20	20	20	20	140
Completion of HK Springboard Units	30	20	30	20	20	40	30	190
Assessment of Springboard Units	20	20	20	20	20	20	20	140
Test Selection Project				90				90
Structuring an Effective Warm-up					50			50
Program Design Project							150	150
Quizzes	40	40	30	20	30	50	30	240
Total	110	100	100	170	140	130	250	1000

Grading Scale

A: 90-100% | B: 80-89% | C: 70-79% | D: 60-69% | F: <60%

Course Schedule and Weekly Checklist

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Week 1: Exercise Sciences	 □ WED: Activity 1.1 - Introductory Forum □ WED: Activity 1.2 - Application Questions □ SAT: Activity 1.3 - Springboard Units 1-3 □ SUN: Activity 1.4 - Quiz on chapters 1-4
Week 2: Exercise Program Adaptations and Considerations	 □ WED: Activity 2.1 - Application Questions □ SAT: Activity 2.2 - Springboard Units 4-5 □ SUN: Activity 2.3 - Quiz on chapters 5-8
Week 3: Nutrition and Performance	 □ WED: Activity 3.1 - Application Questions □ SAT: Activity 3.2 - Springboard Units 6-8 □ SUN: Activity 3.3 - Quiz on chapters 9-11

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Week 4: Testing and Evaluation	 □ WED: Activity 4.1 - Application Questions □ SAT: Activity 4.2 - Springboard Units 16-17 □ SUN: Activity 4.3 - Test Selection Project (Presentation) □ SUN: Activity 4.4 - Quiz on chapters 12-13
Week 5: Exercise Technique	 □ WED: Activity 5.1 - Application Questions □ SAT: Activity 5.2 - Springboard Units 9 & 14 □ SUN: Activity 5.3 - Structuring an Effective Warm-up Session □ SUN: Activity 5.4 - Quiz on chapters 14-16
Week 6: Program Design	 □ WED: Activity 6.1 - Application Questions □ SAT: Activity 6.2 - Springboard Units 10-13 □ SUN: Activity 6.3 - Quiz on chapters 17-21
Week 7: Organization and Administration	 □ WED: Activity 7.1 - Application Questions □ SAT: Activity 7.2 - Springboard Units 15, 18, & 19 □ SUN: Activity 7.3 - Project Design (Presentation) Key Assessment □ SUN: Activity 7.4 - Quiz on chapters 22-24

Tips for Success

Online learning requires self-discipline and self-direction. As seekers of the truth, we should be willing to challenge one another's academic work in a spirit of respectful comradery. Your course is a place for you to grow as you benefit from the expertise, experience, and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge and understanding.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

For More Information:

Be sure to review the **Support**, **Policies**, and **Procedures** addendum.