

Welcome to the ACA Advanced Coaching course!

With a focus on providing you with a solid foundation in exercise science, this course will equip you with the knowledge and skills necessary to understand the intricate workings of the human body, its response to exercise, and how to design effective training programs tailored to individual needs.

We will guide you through the essential concepts, theories, and practical applications in this field. You will explore the role of ATP in muscular function, learn about joint anatomy and biomechanics, understand the principles of training theory, and gain insights into designing safe and effective exercise programs.

Moreover, we will address the unique considerations when working with special populations, such as obesity, diabetes, children, individuals with low back pain, and pre and postnatal individuals. You will learn how to adapt exercise strategies to meet their specific needs and goals.

By the end of this course, you will have a comprehensive understanding of exercise science, be able to critically analyse research and literature, and apply your knowledge to real-world scenarios.

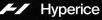
Welcome aboard!

Phil Learney

ACA Global Director

ACA PARTNERS









Content Delivery

The ACA delivers all of its modular content via a state-of-the-art online learning platform. Content is provided in logical, linguistic, visual and audible mediums to ensure an individuals own learning style is catered for. The platform and support groups enable solitary or social learners to either work alone using self-study or gives the opportunity to learn in groups or with other people using our online community

Evidence Based Content

All of the content within the ACA is, whenever possible derived from the best available evidence and systematic research. The ACA team have compiled, analysed and used objective evidence to design and bring together all of the modular and ongoing content alongside their own experience within their given fields.

Expert Instruction

Watch and learn from world class practitioners with over a quarter of a centuries experience in their given fields. Learn from sports scientists, doctors, sports dieticians, human bioscientists and many others. The ACA brings some of the greatest mind in their appropriate fields to deliver new and innovative content.

Applied Evolving Knowledge

All material is optimised for both practical and immediate application to ensure you're getting the best from the people you presently deal with.

Accessibility

All of the academy content is available globally and is optimised across platforms. To fit with a busy coaches lifestyle content can be accessed via desktops, laptops, tablets and mobile devices so learning on the go is never a problem.

Study at your own pace.

There are no time restrictions on studying with the ACA. Delegates can study ongoing for as long as they wish.

Online Assessments

All of the ACA exams are done online. This allows us to deliver better education globally and removes the restrictions imposed by geographical restrictions.

Exclusive Member Discounts

All ACA members receive exclusive discounts from our partners.

CONTENT OVERVIEW

MODULE 1 - MUSCULAR PHYSIOLOGY AND ENERGETICS

This section focuses on understanding the role of adenosine triphosphate (ATP) in muscular function, how ATP is produced, and the physiological processes involved in fat burning during exercise. Students will explore the intricate workings of muscles and energy systems. The section concludes with an exam to assess their knowledge and comprehension.

MODULAR CONTENT

The Role of ATP in Muscular Function
The Production of ATP
Fat Burning Physiology
Muscular Physiology and Energetics Exam

MODULE 2 - HUMAN ANATOMY

The study of human anatomy forms the foundation of exercise science. In this section, students are introduced to the basics of human anatomy and its relevance. They delve into joint anatomy, biomechanics, joint actions, movement classification, postural deviations, muscular anatomy, the nervous system, and the cardiorespiratory system. An exam evaluates their understanding of human anatomy.

MODULAR CONTENT

Introduction to Human Anatomy
Joint Anatomy and Basic Biomechanics
Joint Actions and Movement Classification
Mechanical Specificity and Postural Deviations
Postural Muscles and Deviations
Correcting Posture Part I
Correcting Posture Part II
Muscular Anatomy
Nervous System and Neuromuscular Activity
The Cardiorespiratory System
Human Anatomy Exam



MODULE 3 - TRAINING THEORY

This section covers the essential principles of training theory. Students learn about the stages of adaptation, the concept of stress and resistance, principles of training, factors influencing hypertrophy and strength training, motor unit recruitment, and muscle fibre types. They explore mechanisms of hypertrophy, exercise selection, training variables, and various aspects of cardiovascular training theory. The section also delves into stretching, flexibility, and analysis of training systems, as well as musculoskeletal injuries. An exam tests their comprehension of training theory.

MODULAR CONTENT

Stages of Adaptation and the Hierarchy of Science
Stress and the Stages of Resistance
Adaptive Reserve and Principles of Training
Factors Involved in Hypertrophy and Strength Training
Motor Unit Recruitment and Muscle Fibre Types
Hypertrophy
Mechanisms of Hypertrophy and Training Variables Part I
Mechanisms of Hypertrophy and Training Variables Part II
Exercise Selection and Classification
Training Tempo and Intent
Muscular Strength and Endurance
Cardiovascular Training Theory
Stretching and Flexibility
Analysing Training Systems
Musculoskeletal Injuries



MODULE 4 - PROGRAM DESIGN

The art of program design is the focus of this section. Students gain an understanding of needs analysis, muscle nomenclature, training compliance, effective communication, and coaching techniques. They explore the components of physical and motor fitness, training priorities, and effective program delivery. The section covers pre-programming considerations, program design frameworks, periodization, goal setting, and different training methodologies. The students' ability to design programs is assessed through an exam.

MODULAR CONTENT

The Art of Program Design Needs Analysis and Assessment Muscle Nomenclature and Architecture **Training Compliance** Communication and Coaching Techniques Components of Physical and Motor Fitness Training Priorities and Effective Program Delivery Programme Adherence **Pre-Programming** Programme Design Framework Periodisation Part I Periodisation Part II Periodisation Part III Goal Setting HIIT Training Circuit and Group Training Programme Design Exam



MODULE 5 - SPECIAL POPULATIONS

Special populations require specific considerations when it comes to exercise. This section addresses working with populations such as obesity, diabetes, children, individuals with low back pain, and pre and postnatal individuals. Students gain insight into the unique needs and adaptations required for each population and develop appropriate exercise strategies. The section concludes with an exam to assess their understanding of working with special populations.

MODULAR CONTENT

Obesity
Diabetes
Working with Children
Low Back Pain
Pre and Post Natal Exercise
Special Populations Exam



COURSE LEARNING OUTCOMES

On completion of the course, delegates will be able to:

On completion of the course, delegates will be able to:

- Demonstrate a comprehensive understanding of muscular physiology, including the role of ATP in muscular function, ATP production, and fat burning physiology.
- Apply knowledge of human anatomy, including joint anatomy, biomechanics, joint actions, movement classification, postural deviations, muscular anatomy, and the role of the nervous and cardiorespiratory systems in exercise.
- Comprehend the principles of training theory, including the stages of adaptation, stress and resistance, principles of training, factors influencing hypertrophy and strength training, motor unit recruitment, and cardiovascular training theory.
- Design effective training programs based on needs analysis, muscle nomenclature, training compliance, communication techniques, physical and motor fitness components, and goal setting.
- Work with special populations, such as obesity, diabetes, children, individuals with low back pain, and pre and postnatal individuals, by understanding their unique considerations and developing appropriate exercise strategies.
- Evaluate research studies, literature, and evidence related to muscular physiology, human anatomy, training theory, program design, and working with special populations.
- Apply critical thinking and problem-solving skills to analyse and interpret data, findings, and results related to the course topics.
- Demonstrate effective communication and coaching techniques when working with clients or individuals in a fitness or training setting.
- Adhere to ethical guidelines, academic integrity, and professional standards in the field of exercise science.
- Successfully complete assessments and exams to validate their knowledge and comprehension of the course content.



COURSE LEARNING OUTCOMES

Average Learning Hours/week 2-4

Full Access to E-learning area and Exclusive members content

52+ Lessons

Fully delivered online content available worldwide.

Exclusive ACA Discounts including seminars and our preferred partners.





W W W . A D V A N C E D C O A C H I N G A C A D E M Y . C O M