



Education & Training Plan

Personal Fitness Trainer Online

MyCAA Information

Tuition: \$4000 (ACSM exam & CPR Certification included)

MyCAA Course Code: LIT-PFT3

Course Contact Hours: 670 Hours

Program Duration: 6 Months

(Please note these courses are approved as one course block)

This training program combines:

- Personal Fitness Trainer: Level 1
- Personal Fitness Trainer: Level 2
- Kinesiology

Program Description

Become a Personal Fitness Trainer and jumpstart your health career! This comprehensive program is broken down in to three segments: Personal Fitness Trainer – Level 1, Personal Fitness Trainer – Level 2 and Kinesiology.

Personal Fitness Trainer – Level 1 contains essential information for students interested in a career as a personal trainer. This course provides an introduction to the profession along with coverage of exercise physiology, biomechanics, anatomy, motor learning, and nutrition. In this Personal Fitness Trainer – Level 1 course you will learn how to establish goals for clients and assess strength, flexibility, and risk as well as develop resistance, cardiorespiratory and flexibility training programs.

Personal Fitness Trainer – Level 2 prepares you to take the ACSM's certification exam. This course elaborates on all major aspects of preventative rehabilitation and fitness programs. We provide students with the information necessary to address the knowledge, skills, and abilities (KSA) set forth by ACSM. The contributions of experts in the field are featured, showcasing their expertise in physiology, kinesiology, fitness, cardiology, pulmonary medicine, and epidemiology. The content of this course comprises both theoretical and practical physiological concepts, with related examples of exercise testing, training, and programming.

Kinesiology - Discover how muscles function as movers, antagonists, and stabilizers in the human body and fully understand concentric, eccentric, and isometric muscle contractions. This course in kinesiology explores the bones, landmarks, and joints of the body, and presents a thorough explanation of muscle function. It provides clinical applications related to key kinesiology concepts and clearly explains terminology needed for working in any rehabilitative practice field.

After completing this course, you should be able to:

- Identify current trends in the field of personal training
- Comprehend biomechanics and nutritional needs for fitness
- Define coaching and behavior modification theory
- Identify the steps for an initial client screening and exercise program development
- Identify the principles for starting your own personal training business
- Comprehend exercise physiology, nutrition, and related common diseases
- Identify the steps to perform a health appraisal
- Identify the steps to perform various exercise assessments
- Identify factors to consider when forming an exercise prescription
- Comprehend the benefits and risks of regular exercise
- Comprehend the fundamentals of structure and motion
- Identify the various joints in the body and their movement
- Identify the function and roles of the muscles in the body
- Comprehend the motion of muscles in the body
- Comprehend the importance of good posture and exercise

Outline

Introduction to the Field of Personal Training

- The Current State of the Fitness Industry
- Exercise is Medicine
- Professional Career Environments
- Core Body of Knowledge
- Options for Personal Trainers
- Future Trends in the Fitness Industry
- Code of Ethics for ACSM Professionals
- Career Track for Professional Personal Trainers
- Becoming a Personal Trainer
- Areas of Specialization
- Establishing a Client Base

The Science of Personal Training

- Anatomy & Kinesiology
- Musculoskeletal System
- Biomechanical Principles
- Key Terminology
- Applied Biomechanics
- 1st, 2nd, & 3rd Class Lever
- Effects of Gravity
- Angular Work & Angular Power
- External Torque, the Movement of Inertia, & Angular Acceleration
- Exercise Physiology
- Physiological Mechanism
- Cardiovascular & Respiratory Systems
- Muscular & Neurological Systems
- Nutrition & Human Performance
- Essential Nutrition Concepts
- Nutrients that Provide Energy

- Nutritional Considerations

Behavior Modification

- Bringing Coaching to Personal Training
- What is Coaching?
- Integrating Coaching Skills
- Understanding Behavior Changes
- Behavior Modification Theory
- Different Stages of Change
- Cognitive & Behavioral Change Processes
- Client Relationships
- Establish Credibility
- Maintaining Confidentiality
- Develop Trust & Being Present
- Give & Receive Feedback
- Model a Healthy Lifestyle
- Motivational Tools
- Appreciative Inquiry
- Setting SMART Goals
- Training the Whole Client
- The Behavior Change Pyramid

Initial Client Screening

- The Initial Client Consultation
- Successful Client Relations
- Principles of Relationship Marketing
- Screening & Risk Stratification
- The Screening Process
- Health-History Evaluation
- Documentation
- Medical Clearance & Referral
- Client Fitness Assessment
- Heart Rate & Blood Pressure
- Body Composition
- CRF Assessment
- Muscular Strength Assessment
- Muscular Endurance Assessment
- Flexibility Assessment

Developing the Exercise Program

- Program Design
- Types of Training
- Functional Training
- Resistance Training Programs
- The Science Behind Resistance Training
- Resistance Training Modalities
- Machines versus Free-Weight Exercises
- Acute Program Variables
- Periodization of Exercise

- Cardiorespiratory Training Programs
- Exercise Intensity & Exercise Session Duration
- Designing Flexibility Programs
- Three Types of Stretching
- Flexibility Program Development
- Sequencing the Personal Training Program
- Exercise for Special Populations
- Programming for Older Adults
- Programming for Pregnancy & Postpartum
- Programming for Obese Clients

The Personal Training Business

- Business Basics & Planning
- Legal Issues & Responsibilities
- What Do Personal Trainers Do?
- Who Is Your Market?
- Designing Your Business
- Business Plan Elements
- Structuring Your Business
- Locating and Setting Up Your Business
- Operating in Cyberspace
- Setting Yourself Apart
- Start-Up Expenses & Financing
- Maximizing Your Human Resources
- Building Client Relationships
- Advertising & Marketing
- Fiscal Fitness
- Maintain a Client Base
- Be Your Own Advertisement

Advanced Preliminary Background Materials

- Functional Anatomy
- Biomechanics
- Exercise Physiology
- Nutrition
- Lifespan Effects of Aging & Deconditioning
- Pathophysiology of Cardiovascular Disease
- Treatment of Cardiovascular Disease
- Pathophysiology of Pulmonary Disease
- Treatment of Pulmonary Disease
- Pathophysiology of Metabolic Disease
- Treatment of Metabolic Disease
- Psychopathology

Health Appraisal, Risk Assessment & Safety of Exercise

- Pre-participation Health Screening
- General Overview of Risk Assessment
- Physical Activity Status
- Understanding Chronic Diseases

- Assessment of Physical Activity
- Nutritional Status & Chronic Diseases
- Assessment of Nutritional Status
- Psychosocial Status & Chronic Diseases
- Assessment of Psychosocial Status
- Body Composition Status
- Body Composition Assessment

Understanding Exercise Testing

- Pre-Exercise Testing Evaluation
- Cardiorespiratory Physical Fitness Assessments
- Other Health-Related Physical Fitness Assessments
- Muscular Fitness & Assessment
- Clinical Exercise Testing Procedures
- Diagnostic Procedures for Cardiovascular Disease
- Diagnostic Procedures in Patients with Pulmonary Diseases
- Diagnostic Procedures in Patients with Metabolic Diseases
- Occupational Assessments
- Functional Assessments
- Exercise Assessment in Special Populations
- Electrocardiography

Exercise Prescription - Part 1

- Cardiorespiratory Exercise Prescription
- Musculoskeletal Exercise Prescription
- Adaptations to Cardiorespiratory Exercise Training
- Adaptations to Resistance Training
- Group Exercise Programming
- Weight Management
- Exercise Prescription & Medical Considerations
- Exercise Prescription in Patients with Cardiovascular Disease

Exercise Prescription - Part 2

- Exercise Prescription in Patients with Pulmonary Disease
- Exercise Prescription in Patients with Diabetes
- Exercise Prescription for Patients with Comorbidities
- Exercise Prescription for People with Osteoporosis
- Exercise Prescription for People with Arthritis
- Exercise Prescription in Special Populations
- Exercise Prescription for Women & Pregnancy
- Exercise Prescription for Children & the Elderly
- Behavioral Strategies to Enhance Physical Activity Participation

Programmatic & Professional Information

- Principles of Health Behavior Change
- Health Behavior Counseling Skills
- Channels for Delivering Behavioral Programs
- Exercise Program Professionals

- Community Physical Activity Interventions
- Health & Fitness Program Development
- Health & Fitness Program Operation
- Clinical Exercise Program Development
- Clinical Exercise Program Operation
- Exercise Program Safety & Emergency Procedures
- Legal considerations for Exercise Programming

Health Appraisal, Risk Assessment & Exercise Testing

- Benefits of Regular Physical Activity
- Risks Associated with Exercise
- Pre-participation Health Screening
- Risk Stratification
- Pre-Exercise Evaluation
- Contraindications to Exercise Testing
- Purpose of Health Related Fitness Testing
- Basic Principles & Guidelines
- Clinical Exercise Testing
- Diagnostic Exercise Testing
- Exercise Protocols
- Interpretation of Clinical Exercise Test Data
- Diagnostic Value of Exercise Testing
- Prognostic Applications of the Exercise Test

The Exercise Prescription

- General Principles of Exercise Prescription
- Exercise Mode (Type)
- Components of the Exercise Training Session
- The FITT Principle
- Muscular Fitness
- Flexibility Exercise
- Neuromuscular Exercise
- Exercise Program Supervision
- Exercise Prescription for Pregnancy
- Exercise Prescription for Children & Adolescents
- Exercise Prescription for Older Adults
- Inpatient Rehabilitation Programs
- Outpatient Exercise Programs
- Exercise Prescription for Special Illnesses

Fundamentals of Structure & Motion

- Major Divisions of the Human Body
- Major Body Parts
- Joints Between Body Parts
- Movement of Body Parts
- Regions of the Body
- Anatomic Position
- Location Terminology
- Planes & Their Corresponding Axes

- Classification of Bones by Shape
- Fracture Healing
- Cartilage Tissue
- Fascial Response to Physical Stress
- Properties of Skeletal Tissues
- Axial Skeleton
- Appendicular Skeleton
- Lower & Upper Extremities

Skeletal Arthrology: Study of the Joints - Part 1

- Joint Action Terminology
- Overview of Joint Function
- Axial & Nonaxial Motion
- Roll, Spin, & Glide Movements
- Naming Joint Actions
- Classification of Joints
- Anatomy & Physiology of a Joint
- Joint Mobility versus Joint Stability
- Joints & Shock Absorption
- Menisci & Articular Discs
- Joints of the Axial Body
- Suture Joints of the Skull
- Temporomandibular Joint (TMJ)
- Spine & Spinal Joints
- Rib Joints
- Thoracolumbar Fascia

Skeletal Arthrology: Study of the Joints - Part 2

- Joints of the Lower Extremity
- Pelvis & Pelvic Movement
- Intrapelvic Motion
- Lumbosacral Joint
- Hip Joints
- Effect of Pelvic Posture on Spinal Posture
- Angulations of the Femur
- Knee Joint Complex
- Patellofemoral Joint
- Tarsometatarsal (TMT) Joints
- Joints of the Upper Extremity
- Shoulder Joint Complex
- Sternoclavicular Joint
- Elbow Joint Complex
- Wrist & Hand Joint Complex
- Metacarpophalangeal Joints
- Interphalangeal Joints of the Hand

Myology: Study of the Muscular System

- Anatomy & Physiology of Muscle Tissue
- Tissue Components of a Skeletal Muscle

- Sliding Filament Mechanism
- Nervous System Control of Muscle Contraction
- Myofascial Meridians & Tensegrity
- How Muscles Function
- 5 Step Approach to Learning Muscles
- Functional Group Approach
- Muscle Actions that Change
- Types of Muscle Contractions
- Concentric, Eccentric, & Isometric Contraction
- Relating Muscle Contraction
- Movement versus Stabilization
- Roles of Muscles
- Mover & Antagonist Muscles
- Concept of Fixation & Core Stabilization
- Support Muscles
- Coordinating Muscle Roles

Muscles in Motion – Part 1

- Force of a Muscle Contraction
- Muscle Fiber Architecture
- Active Tension versus Passive Tension
- Classes of Levers
- Leverage of Resistance Forces
- The Skeletal Muscles
- Muscles of the Shoulder Girdle
- Muscles of the Elbow, Wrist & Finger Joints
- Muscles of Facial Expression
- Muscles of the Hip, Knee, Ankle & Toe Joints
- Types of Joint Motion
- Musculoskeletal Assessment
- Active versus Passive Range of Motion
- Resisted Motion
- Muscle Palpation

Muscles in Motion - Part 2

- The Neuromuscular System
- Voluntary Movement versus Reflex Movement
- Reciprocal Inhibition
- Muscle Spindles
- Pain-Spasm-Pain Cycle
- Gate Theory
- Posture & the Gait Cycle
- Importance of Good Posture
- Ideal Standing Plumb Line Posture
- General Principles of Compensation
- Common Postural Distortion Patterns
- Muscular Activity during the Gait Cycle
- Basic & Advanced Stretching Techniques
- Principles of Strengthening Exercise
- Reasons for Exercise

- Exercise Program Design

System Requirements:

Internet Access

- Broadband or high-speed internet access is required. Broadband includes DSL, cable, and wireless connections.
- Dial-Up internet connections will result in a diminished online experience. Moodle pages may load slowly and viewing large audio and video files may not be possible.

Hardware

- Windows hardware configurations and processors are acceptable
- Mac computers **MUST** have Microsoft Window Operating Systems over Bootcamp (Bootcamp is a free download from Apple's website)
- 1 GB RAM minimum recommended
- Operating Systems
 - Windows XP, Vista or 7 and Mac OS X 10 or higher with Windows
- Web Browsers
 - Google Chrome is highly recommended
 - Internet Explorer is not recommended as it may not display certain menus and links
- Cookies **MUST** be enabled
- Pop-ups **MUST** be allowed (Pop-up Blocker disabled)
- Kindle Reader App is needed for many of our courses (No special equipment needed. This can be downloaded onto your computer.)
- Adobe PDF Reader
- Media Plug-ins (These may be required depending on your course media.)
- Adobe Flash Player (Required for many of our career courses and ALL of our IT courses.)
- Adobe Acrobat Reader, Apple Quicktime, Windows Media Player, &/or Real Player
- PowerPoint Viewer (Use this if you don't have PowerPoint)

****Subject to change, as courses and materials are updated.****