



OFFICE OF PROFESSIONAL AND
CONTINUING EDUCATION

Office of Professional & Continuing Education
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Student Full Name: _____

Start Date: _____ End Date: _____

Sports Health & Personal Fitness Specialist

720 Hours/12 Months/Mentor Supported
Program Cost: \$4,000.00

Course Code:	AU-SNPFS
Program Duration:	12 Months
Course Contact Hours:	720
Student Tuition:	\$4,000

The exciting field of sports nutrition combines the sciences of nutrition and exercise physiology. Fitness trainers and instructors lead, instruct, and motivate individuals or groups in exercise activities, including cardiovascular exercise (exercises for the heart and blood system), strength training, and stretching. They work with people of all ages and skill levels. Our two level fitness program coupled with Kinesiology will prepare students for a career in fitness training.

Personal Fitness Trainer – Level 1 contains essential information for students interested in a career as a personal trainer. This program 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 program 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. Learn to be a Personal Trainer and change people's lives!

Personal Fitness Trainer - Level 2 prepares you to take the ACSM's certification exam. This program 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 program comprises both theoretical and practical physiological concepts, with related examples of exercise testing, training, and programming.

Our Sports Nutrition course takes a personalized approach that guides you through the elements of carbohydrates, fats, proteins, minerals, vitamins, and fluids using case studies and practical applications for working with athletes. You'll be introduced to the functions of these nutrients, proper dietary intakes, and how they affect your body. Proper nutrition is vital to the overall athletic performance and experience. To get a job in the sports nutrition field, you need to understand current guidelines, emerging research, and be able to apply knowledge to athletes of all ages. This course will meet those needs by using the most up to date information and tools.

After completing this program, you should be able to:

- Identify current trends in the field of personal training
- Recall biomechanics and nutritional needs for fitness
- Define coaching and behavior modification theory
- Identify the steps for an initial client screening and exercise program development
- Recognize the principles for starting your own business and how to address legal issues
- Recognize the principles of physiology, nutrition and body composition
- Recall the importance of basic nutrients, the effects on our bodies, and energy systems
- Identify the functions of carbohydrates, fats, proteins, vitamins, and fluids to overall body composition
- Recognize the fundamentals of nutritional ergogenics, weight management, and endurance
- Differentiate between strength/power athletes, team sports athletes, and types of consultations
- Recall how to work with special populations and potential jobs in sports nutrition

This program includes:

1. Personal Fitness Trainer – Level 1
2. Personal Fitness Trainer – Level 2
3. Sports Nutrition

Personal Fitness Trainer – Level 1

Personal Fitness Trainer Module 1

Introduction to the Field and Profession of Personal Training

- The Current State of the Fitness Industry
- 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

Personal Fitness Trainer Module 2

Anatomy, Kinesiology and Biomechanical Principles

- Body Position
- Joint Movement
- Musculoskeletal Anatomy
- Joint Anatomy
- Mechanical Laws of Motion
- Vector Quantities
- Power for Rotational Movements
- Muscular Anatomy and Force
- Biometrics of Selected Physical Activities

Personal Fitness Trainer Module 3

Exercise Physiology and Nutrition

- Systems of the Body
- Acute Responses

- Energy Systems
- Oxygen Requirement
- Nutritional Concepts
- Vitamins and Minerals
- Hydration
- Special Food Conditions
- Understanding a Food Label

Personal Fitness Trainer Module 4 Behavior Change and Client Focus

- Challenges of Behavior Changes
- Transtheoretical Model (TTM)
- Health Belief Model
- Theory of Planned Behavior
- Social Cognitive Theory
- Goal Setting Theory
- Helping Clients Stay Active
- Self-Efficacy
- Motivation
- Increase Adherence

Personal Fitness Trainer Module 5 Coaching and Initial Client Consultation

- Active Listening
- Developing Rapport
- The 5 As Model of Behavior Change Counseling
- Methods of Communication
- Successful Client Relations
- Relationship Marketing
- Power of Nonverbal Communication
- Generating Clients
- Components of the Consultation
- Client Communication

Personal Fitness Trainer Module 6 Screening and Fitness Assessments

- The Screening Process
- Risk Categories
- Exercise Testing
- Medical Clearance and Referral
- Sequence of Assessments
- Heart Rate
- Blood Pressure
- Body Composition
- CRF Assessment
- Muscular Strength Assessment

Personal Fitness Trainer Module 7 Program Design and Resistance Training Programs

- Physiological Benefits of an Exercise Program
- Muscular Fitness
- Intensity, Time, and Duration

- Flexibility
- Anatomy of an Exercise Session
- General Resistance Training Principles
- Program Design Process
- Resistance Training Modalities
- Needs Analysis
- Resistance Exercises

Personal Fitness Trainer Module 8 Cardiorespiratory and Flexibility Programs

- General Training Principles
- Cardiovascular Endurance
- Benefits and Risk of Flexibility Training
- Evaluating Flexibility
- Three Types of Stretching
- Static and Dynamic
- Rationale for Flexibility Training
- Flexibility Development Program

Personal Fitness Trainer Module 9 Session Components and Special Populations

- Optimal Client Care
- Appropriate Sequencing
- Client Education
- Client Motivation
- Training Status
- Programming for Children
- Programming for Older Adults
- Clients with Health Concerns

Personal Fitness Trainer Module 10 Business Planning Basics and Legal Issues

- Fitness Management
- Budget and Administration
- Sales and Pricing
- Professional Standards
- Legal Responsibilities
- Liability
- Risk Management Program
- Business Plan
- Informed Consent

Personal Fitness Trainer – Level 2

Personal Fitness Trainer Module 1 Anatomy and Exercise Physiology

- Functions of Body Systems
- Structure and Function of Joints
- Biomechanics
- Forces in Human Movement
- Exercise Metabolism
- Metabolic Response to Exercise
- Nutrition Basics

- Major Nutrients
- Recommended Intake
- Vitamins and Minerals

Personal Fitness Trainer Module 2 Lifespan and Pathophysiology

- The Impact of Aging
- Aging and Body Systems
- Deconditioning
- Effects of Cardiovascular Disease
- Treatment of Pulmonary Disease
- Prevention of Metabolic Disease
- Risk Factors for Diseases
- Role of Exercise and Activity for Disease Treatment

Personal Fitness Trainer Module 3 Psychopathology, Screening and Activity Status

- Mental Illness
- Recognizing Symptoms
- Legal Considerations for Exercise Programming
- Legal Terminology and Concepts
- Preparticipation Health Screening
- Risk Assessment
- Medical Complications
- Chronic Diseases
- Health Outcomes

Personal Fitness Trainer Module 4 Nutritional Status and Chronic Diseases

- Assessment of Physical Activity
- Diseases and Diets
- Obesity and Weight Loss
- Dietary Assessment
- Dietary Intake
- Psychosocial Status
- Illnesses
- Behavior Intervention
- Exercise Therapy

Personal Fitness Trainer Module 5 Body Composition, Program Safety and Exercise Testing

- Stress and Anxiety
- Health Psychology
- Clinical Applications
- Body Composition Models
- Exercise Program Safety
- Emergency Procedures
- Pre-Exercise Evaluations
- Client Preparation
- Testing Equipment

Personal Fitness Trainer Module 6 Fitness and Diagnostic Procedures

- Assessments for Cardiorespiratory

- Reasons for Health-Related Fitness Assessments
- Resting Measurements
- Principles of Muscular Fitness
- Range of Motion
- Clinical Exercise Testing Procedures
- Procedures for Cardiovascular Disease
- Physical Examination
- Imaging Methods

**Personal Fitness Trainer Module 7
Pulmonary Diseases, Metabolic Disease and Special Populations**

- Obstructive Airway Diseases
- Respiratory Exercise Limitations
- Metabolic Syndrome
- Routine Exercise Testing
- Occupational Assessment
- Clinical Assessment
- Rehabilitation
- Environmental Conditions
- Pregnancy and Children
- Elderly

**Personal Fitness Trainer Module 8
Cardiorespiratory and Musculoskeletal Prescription**

- Electrocardiography
- The Conduction System
- Designing an Exercise Prescription
- Developing Cardiorespiratory Fitness
- History of Resistance Training
- Needs Analysis
- Chronic Programming
- Cardiorespiratory Fitness
- Physiologic Adaptations to Cardiorespiratory Training
- Exercise Training

**Personal Fitness Trainer Module 9
Group Exercise and Weight Management**

- Adaptions to Resistance Training
- Health and Fitness Adaptations
- Trends in Group Exercise
- Instructor Responsibilities
- Establishing a Healthy Weight Goal
- Weight Loss Methods
- Proper Weight Loss
- Exercise Prescription for Special Populations

**Personal Fitness Trainer Module 10
Exercise Prescription Part 1**

- Medical Considerations
- Injury Risk Factors
- Environmental Considerations
- Disease-Specific Effects
- Cardiac Rehabilitation
- Exercise Prescription for Pulmonary Disease

- Exercise Prescription for Patients with Diabetes
- Epidemiology of Diabetes Mellitus
- Management of Diabetes

**Personal Fitness Trainer Module 11
Exercise Prescription Part 2**

- Prescription for Comorbidities
- Prescription for Chronic Diseases
- Medical Management
- Prescription for Osteoporosis
- Bone Structure
- Clinical Management
- Prescription for Arthritis
- Types of Arthritis
- Physical Activity Behavior Change

**Personal Fitness Trainer Module 12
Behavior Change**

- Practical Skills for Behavior Change
- Setting Goals
- Shaping Behaviors
- Counseling Physical Activity
- Methods for Delivering Activity Programs
- Health Communications
- Social Movements
- Physical Activity in Community
- Facilitating Community Change
- Evaluating Community Interventions

**Personal Fitness Trainer Module 13
Benefits, Risks and Assessments**

- Physical Activity and Fitness Terminology
- Benefits of Regular Exercise
- Exercise Risks
- Preparticipation Health Screening
- Initiating Physical Activity
- Preexercise Evaluation
- Medical History
- Physical Fitness Testing and Interpretation
- Body Composition
- Muscular Strength and Endurance

**Personal Fitness Trainer Module 14
Clinical Exercise Testing and Principles of Exercise Prescription**

- Measurements During Exercise Testing
- Imaging Modalities
- Exercise Testing as a Screening Tool
- Diagnostic Value of Exercise Testing
- Considerations for Exercise Prescription
- Components of the Exercise Training Session
- Muscular Fitness
- Flexibility Exercise
- Special Populations
- Environmental Considerations

Personal Fitness Trainer Module 15

Exercise Prescription for Patients, Populations and Behavioral Theories

- Cardiovascular and Cerebrovascular Disease
- Chronic Diseases
- Health Conditions
- Special Considerations
- Strategies to Promote Exercise
- Theoretical Foundations
- Behavior/Increase Adherence
- Special Populations

Sports Nutrition Module 1

Basic Nutrients

- Why Study Sports Nutrition?
- How Does the Body Produce Energy?
- Dietary Reference Intakes
- Enriched and Fortified Foods
- Basic Nutrition Guidelines
- How are Carbs Digested?
- How are Fats Digested?
- How are Proteins Digested?
- What is Energy?
- Cells and ATP
- Three Energy Systems

Sports Nutrition Module 2

Carbohydrates and Fats

- How are Carbohydrates Classified?
- Functions of Carbohydrates
- Sources of Dietary Carbohydrates
- Glycemic Index and Glycemic Load
- How are Lipids (Fats) Classified?
- Which Foods Contain Fat?
- Cholesterol
- Fats Affect Daily Training and Competitive Performance
- How Much Fat Should be Consumed?

Sports Nutrition Module 3

Proteins and Vitamins

- Main Functions of Proteins
- Nitrogen Balance
- Daily Protein Consumption
- Foods with Protein
- Benefits of Protein Supplements
- Why is Protein Essential for Daily Training?
- Water-Soluble Vitamins
- Fat-Soluble Vitamins
- Antioxidant Properties
- What are Phytochemicals?

Sports Nutrition Module 4

Minerals and Water

- What are Major Minerals?
- What are Trace Minerals?
- Consequences of Poor Water Balance
- How Much Fluid do Individuals Need?
- Pre-exercise Hydration
- Hydration During Exercise
- Post-exercise Hydration

Sports Nutrition Module 5 Nutritional Ergogenics and Consultation

- What is Ergogenic Aid?
- What are Dietary Supplements?
- What is Doping?
- Commonly Encountered Doping Substances
- Diet History
- How are Food Records Analyzed?
- Steps for Initial Consultation with Athletes
- Walk-In and Short-Sessions

Sports Nutrition Module 6 Weight Management and Endurance

- Prevalence and Significance of Overweight and Obesity
- Methods for Weight Status
- Body Composition
- Energy Intake
- Methods for Losing Weight
- Ultra-Endurance Athletes
- Differing Protein Needs
- Are Fluids Critical to Endurance Performance?

Sports Nutrition Module 7 Strength/Power Athletes and Team Sport Athletes

- Calorie Needs for Strength/Power Athletes
- Are Carbs and Protein Needs Different for Strength/Power Athletes?
- Are Minerals, Vitamins, Fluid Needs Different for Strength/Power Athletes?
- Energy Systems Utilized During Team Sports
- Are Carbs and Protein Needs Different for Team Sport Athletes?
- Are Minerals, Vitamins, Fluid Needs Different for Team Sport Athletes?
- Meal Planning/Event Logistics

ALL Materials Included

Certification:

Upon successful completion of our Personal Fitness Trainer Level 1 and Level 2 courses, students will be prepared to sit for the ACSM national certification exam to become a Certified Personal Trainer (CPT).

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 Windows 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)

****Outlines are subject to change, as courses and materials are updated.****