

UNIVERSITY OF MUMBAI

Certified Course in Exercise Programming

135 hours

INTRODUCTION

Current Fitness Certification course are limited to covering foundation knowledge in Anatomy, Physiology, Basic Biomechanics, Health Specific Fitness assessments. These knowledge base makes an individual competent to work with an Healthy individuals having goals limited to Fat Loss and Muscle Gain. A Fitness Professional is required to work with a wide range of individuals having wide range of Fitness Goals like improve sport specific performance, Improve existing Health Risk factors, improve specific Health or Skill Fitness variables. Certified Exercise Programming is created to upgrade competency of Fitness Professionals ,B.Pd ,M.Pd students/pass outs who are working or wish to work in Sports and Fitness Industry. This is done by filling the knowledge gap of Exercise Science spread in 6 months long duration course structure .

OBJECTIVES

- To learn to design workout plans beyond traditional split routines using Exercise Physiology, Exercise Biomechanics and Exercise Biochemistry .
- To understand Principles of Exercise Programming like Subject need analysis, Sports need analysis ,Specificity, Overloading, Progression
- To learn to integrate the above Principles of Exercise Programming.
- To learn to design appropriate Fitness Assessments to design a safe and effective Exercise Programming.
- To understand Body Composition Analysis, Sport Analysis to establish a S.M.A.R.T goal.
- To understand Cardiovascular System,(CVS), Musculoskeleton system ,Endocrine system Exercise Physiology .

OUTCOMES

- To be competent to design an Individualized, Progressive, Periodic Exercise Programs for improvement Health Specific & Skill Specific Fitness variables.
- To understand importance of planning of exercise programme.
- To understand the Anatomy of Human body.

COURSE I

INTRODUCTION TO EXERCISE PROGRAMMING

UNIT I : Introduction to Exercise Programming

4 Hours

- 1) Understand what Exercise Programming, whom is for is Exercise Programming, why to do Exercise Programming.
- 2) Know components of Exercise Programming.

UNIT II: Components of Exercise Program Design

2 Hours

- 1) Introduction to five components of Exercise Program Design.
- 2) Development of components of Exercise
- 3) Component wise Exercise Program

UNIT III: Soft skills required for Exercise Program Design

6 Hours

- 1) Learn how to communicate effectively using verbal and non-verbal cues to develop reports required for Fitness Consultation.
- 2) Learn computer skills required to design Templates for Fitness Consultation, Fitness Assessments and workout plans

COURSE II
FOUNDATIONAL EXERCISE SCIENCE.

UNIT I Introduction to Anatomy

9 Hours

- 1) Introduction to Bones, types of joints, types of moments at the joints.
- 2) Classification and Anatomy of diarthrosis joints

UNIT II Introduction to Human Physiology

12 Hours

- 1) Introduction to Physiological systems.
- 2) Understanding Cardiovascular systems.
- 3) Understanding Respiratory System.
- 4) Understanding Endocrine System.
- 5) Understanding Digestive system.
- 6) Underrating Muskculoskeleton System.

UNIT III Introduction to Biomechistry

12 Hours

- 1) Introduction to metabolism and enzymes.
- 2) Understanding metabolism of Carbohydrate.
- 3) Understanding metabolism of Protein.
- 4) Understanding metabolism of Fats.

UNIT IV Introduction to Biomechanics

12 Hours

- 1) Introduction to Kinematics and Kinetics.
- 2) Underrating Kinematics variables.
- 3) Understanding Kinetics variables.

COURSE III

APPLIED EXERCISE SCIENCE.

UNIT I Exercise Physiology

6 Hours

- 1) To understand Cardiovascular Exercise Physiology.
- 2) To understand Musculoskeleton Exercise Physiology.
- 3) To understand Endocrine system Exercise Physiology.

UNIT II Exercise Biochemistry

6 Hours

- 1) To understand effect of Exercise duration & intensity on metabolism of macronutrients.
- 2) To understand how metabolism of micronutrients changes after prolong training.

UNIT III Exercise Biomechanics

6 Hours

- 1) To apply Biomechanics to Health Specific Exercises using current researches.
- 2) To apply Biomechanics to Skill Specific Exercises using current researches.

COURSE IV

COMPONENTS OF EXERCISE PROGRAMMING

UNIT I Need Analysis.

22 Hours

- 1) Learn to take Fitness Consultation.
- 2) Learn to do Risk Stratification.
- 3) Establish Training status.
- 4) Learn Posture Analysis.
- 5) Learn to do Body Composition.
- 6) Learn to establish S.M.A.R.T goal.

UNIT II Fitness Assessments

22 Hours

- 1) Learn to perform Health Fitness Variables Assessments.
- 2) Learn to perform Skill Fitness Variables Assessments.

UNIT III Load Progression

6 Hours

- 1) To know loading variables, loading types.
- 2) To understand progression.
- 3) To learn to design progression for Health & Skill Specific Fitness Variables

UNIT IV Load Progression

16 Hours

- 1) To know components of workout plan.
- 2) To know sub-components of workout session.
- 3) To understand Exercise Selection specific to Health & Skill Fitness goals.
- 4) To understand Exercise sequencing for a safe, effective and optimal Workout design.

O ___ Title of the Course: Certificate Course in Exercise Programing (CCEXP)

O ___ ELIGIBILITY:

A student for the admission of **Certificate Course in Exercise Programing (CCEXP)** must have at least completed his/her Higher Secondary Education (HSC i.e.10+2) of Maharashtra State Board or any other equivalent board.

O ___ DURATION OF PROGRAMME:

The duration of **Certificate Course in Exercise Programing** shall be of 144 hours. The programme shall be conducted on regular/part time basis. The maximum duration for the completion is 6 months.

O ___ INTAKE CAPACITY: Maximum 50 (for one batch)

O ___ FEES STRUCTURE:

Rs. 10,000/- Course Fees.

Rs. 1,000/- Examination fee.

R_____ SCHEME OF EXAMINATION

Standard of Passing the Examination

- The learner shall have to obtain a minimum of 50 % Marks including theory and practical.
- The learner shall obtain minimum 50% Marks in aggregate.
- To pass the course minimum grade 'C' shall be obtained in each course.
- The following letter grades shall be assigned on the basis of marks obtained.

% of marks obtained by the Student	Grade points	Letter grade
70-100	7	O
60-69.99	6	A
55-59.99	5	B
50-54.99	4	C
Less than 49.99	3	F (Fail)

- The students failed in the examination shall have to reappear for the next examination (within 2 years) including theory and practical by paying examination fees.

R_____ Nature of Theory Examination

- For each Course : 30 Marks
- Duration : 1 Hours
- Questions paper pattern:-
 1. There shall be 03 questions, each of 10 marks on each unit (per unit 1 question).
 2. All questions shall be compulsory with internal choice.