# SHIVAJI UNIVERSITY, KOLHAPUR CENTER FOR COMMUNITY DEVELOPMENT

## CERTIFICATE COURSE IN SPECIAL POPULATION EXERCISE

## **OBJECTIVES:**

- Understand the unique physiological and psychological needs of special populations.
- Apply exercise science principles to design safe and effective training plans.
- Modify exercises according to individual abilities and health conditions.
- Utilize appropriate assessment tools and techniques.
- Ensure compliance with health and safety regulations.

**COURSE CODE: CC-SPE** 

**DURATION: 5 MONTHS** 

**ELIGIBILITY: 10TH PASS** 

## **MEDIUM OF MEDIUM OF INSRUTCTION:**

English/Marathi

**MAXIMUM STRENGTH: 30 students** 

FEES: Per Student Rs.4000/- for 5 months course + 150 Evaluation

#### **COURSE STRUCTURE:**

**Contact hours-75** 

Credits-4

No.		Hours
1	Theory	45
2	Practical	30

#### A] SCOPE:

- Special Population Fitness Trainer
- Rehabilitation Exercise Specialist
- Senior Fitness Instructor
- Wellness Coach for Chronic Conditions

## **B] STAFF QUALIFICATION:**

- 1. M.B.B.S./B.A.M.S./B.H.M.S.
- 2. M.P.Ed.
- 3. Certified personal trainer with minimum 2 years of experience.

# C] INFRASTRUCTURE & OTHER REQUIREMENTS :

- 1. Lecture hall
- 2. Gym with all essential equipment

#### D] COURSE TIME TABLE

3 days per week / 1 hour per day or 3 hours weekend batches

## F] COURSE EVALUATION:

External evaluation - 50 marks (**Practical and Oral examination**)
Internal evaluation - 50 marks (Attendance, Project, Class perform., Visits)

## F] SYLLABUS:

## 1) Physical activity and Health- 3 Hours.

Physical Activity Recommendations for normal persons, Benefits of Physical Activity and Chronic Disease, The Health Consequences of Physical Inactivity and Sedentary Behavior

#### 2) Preparticipation Screening, Fitness Assessment, and Interpretation-8 Hour

American College of Sports Medicine Preparticipation Screening Algorithm Method, Cardiorespiratory Fitness Assessment, Muscle Strength Assessment, Body Composition Assessment, Flexibility and Functional Movement Assessments.

#### 3) Exercise Prescription- 10 Hours.

 $\label{thm:common} General\ Principles\ of\ Exercise\ Prescription\ ,\ Current\ FITT-VP\ Recommendations\ from\ the\ American\ College\ of\ Sports\ Medicine\ ,$ 

## 4) Special Considerations across the Lifespan: 4 Hours.

Pregnancy, Children and Youth, and Older Adults

## 5) Special Considerations for Cardiovascular Diseases - 4 Hours.

- 6) Special Considerations for Type 1 and Type 2 Diabetes Mellitus 4 Hours.
- 7) Special Considerations for Metabolic Syndrome, Hypertension, 4 Hours.

  Dyslipidemia-
- 8) Special Considerations for Chronic Obstructive Pulmonary Disease, Asthma- 4 Hours.
- 9) Special Considerations for Weight Management 4 Hours.
- 10) Special Considerations for Chronic Pain-4 Hours.

-low back pain, fibromyalgia, rheumatoid arthritis

- 11) Special Considerations for Cancer 4 Hours.
- 12) Special Considerations for Psychological Health-Anxiety, Depression 4 Hours.
- 13) Special Considerations for Physical and Intellectual Disabilities-

Spinal cord injury, Cognitive impairments - 4 Hours.

14) Special Yogic management across the life span -

Pregnancy, Children and Youth, and Older Adults. - 5 Hours.

15) Yogic management of different diseases - 9 Hours.

#### **REFERANCE BOOKS:**

- 1. Complete guide to fitness and health, second edition, American College of Sports Medicine.
- 2. Exercise Testing and Prescription, first edition, American College of Sports Medicine
- 3. Resources for the personal Trainer, sixth edition, American College of Sports Medicine.
- 4. Essentials of training special population, First edition, National strength and conditioning Association
- 5. The complete guide to teaching exercise to special populations, Morc Coulson, First edition.
- 6. Asana Pranayama Mudra Bandha, Swami Satyanand Saraswati, Yog Publication Trust.
- 7. Yogic management of common diseases, First edition, Dr. Swami Karmananda, Yog Publication trust.
- 8. Light on Yoga, B.K.S. Iyengar, Harper Collins Publications, New Delhi.
- 9. Teaching methods of Yogic practices, M.L.Gharote, Kaivalyadhama Ashram, Lonvala
- 10 Asana Why and How?, O.P.Tiwari, Kaivalyadhama, Lonavla.