

Subject Title : **EXERCISE PHYSIOLOGY AND ENDURANCE TRAINING**
Subject Code : **FIT3209-E**
Credit Points : **3.0 (Theory)**
Teaching Hours : **2100 Minutes/35 Hours**
Subject Type : **Elective**
Semester : **3 & 4**

Subject Description:

The focus of this subject is to study the physiological response of the human body towards exercise and endurance training, specially focusing on different methods of endurance training. It will be emphasized knowledge of various methods of endurance sessions and how this effects the cardiorespiratory adaptation to training. that are relevant to customers regarding to interests, objectives, available time and other parameters this customer group operates.

Objective:

The objective of this subject is that students will gain knowledge about the physiological response of the human body to endurance training and understand the effect of endurance exercise on various systems of the human body. It is also important that the students have knowledge of different methods of training of endurance, and how testing can be used to analyze progress in endurance training.

Subject Content:

1. Physiology with emphasis on respiration, circulation and metabolism.
2. Exercise physiology, cardiorespiratory adaptation to exercise, hormonal regulation, metabolic adaptation to exercise.
3. Bioenergy and energy metabolism during endurance exercise, aerobic and anaerobic metabolism, aerobic and anaerobic endurance methods, intensity and duration.
4. Functional relationship between cardiorespiratory system, body fluids and nervous system.
5. Oxygen/CO₂ transport – O₂ debt.
6. Training – fatigue and recovery.
7. Endurance training in different sports
8. The physiological effect in different training methods for endurance training
9. Testing and analysis in endurance training.