

**"Fitness: A Way of Positive Life"**

**HEALTH & FITNESS**

Programme: B.Tech.

Students (Max.):50

Course: Extra Curricular Course

Credits: 2

Hours : 40

Instructor: Dr. Raghuveer Singh

**Course Context and Overview:**

The objective of the course is to make students fit, healthy and gain sufficient knowledge of Health & Fitness. Physical fitness is a general state of health and well being and more specifically the ability to perform aspects of sports, occupations and daily activities.

**Prerequisites Courses:** None

**Course outcomes (COs):**

<b>On completion of this course, the students will have the ability to:</b>
CO1: Students will know the importance of Health & fitness.
CO2: Know the basics of Motor fitness components.
CO3: Know the basics of Fundamental human movements and Postural Deformities.
CO4: Know the basics of General anatomy.

**Course Topics:**

(A) THEORY:

<b>UNIT – I</b>	
<b>1. Physical Education &amp; Health education</b> 1.1 Concept of physical education & health education. 1.2 Types of Body (structure) 1.3 Basic concepts of Balance diet- Diet before, during and after competition.	
<b>UNIT-II</b>	
<b>2. Physical Fitness</b> 2.1 Definition, Concept, aim & objectives of Physical Fitness. 2.2 Components of physical Fitness. 2.3 Importance of Physical fitness. 2.4 Motor ability. 2.5 Development of physical fitness components. 2.6 Principles of Sports Training.	
<b>UNIT – III</b>	
<b>3. General Anatomy and Physiological Concepts</b> 3.1 Anatomical Structure of the Human Body & types of Joints 3.2 Human Systems - Skeletal System, Muscular System & Respiratory System. 3.3 Physiological Concepts - Oxygen Debt, Second wind, Vital capacity & Fatigues. 3.4 Posture –Types of postural deformities 3.5 Warm up and cooling down.	

**(B) PRACTICAL**

**1. General and Specific Warm Up**

**3. Developing Personal Fitness components.**

**4. Conditioning & Training**

- 1.) Strengthening Exercise
- 2.) Flexibility Exercise
- 3.) Weight Training
- 4.) Endurance Training
- 5.) Speed Drill

**5. All students will be tested and measured for Fitness and will be provided the Fitness Score Card:**

S.No.	Test/ Measurement	
1.	Height	
2.	Body Weight	
3.	BMI	
4.	Speed	
5.	Strength	
6.	Cardiovascular Endurance	
7.	Flexibility	
8.	Agility	
9.	Muscular Endurance	

\*Standard physical fitness tests will be used for measuring various physical variables.

**Evaluation Methods:**

Item	Weightage
<b><u>Practical</u></b> – 1. Physical Fitness Test 2. Motor Fitness Test. a) General motor ability test b) Specific motor ability test	70
<b><u>Theory</u></b> 1. Written Exam (objective.) 2. Attitude and Attendance	30

---

## **REFERENCES: -**

1. Olympic Abhiyan: - Ajmer singh (Publisher: KALYANI PUBLISHER, PHYSICAL EDUCATION, ISBN: 9788097331863, 8097331861).
2. Sports training and fitness: - Haridyal Singh.
3. Magill, R.A. (2004) Motor Learning and Control: Concepts and Applications, McGraw Hill, New York, USA
4. Sandhu, K., (1993), Sports Dynamics-Psychology, Sociology and Management, Delhi: Galgotia Publishers.
5. Kamlesh ML (2000). Management Concept in Physical Education and Sport. Metropolitan Book Co. Pvt. Ltd. New Delhi.