

## CATEGORY-IV

### COMMON POOL OF GENERIC ELECTIVES (GE) COURSES OFFERED BY DEPARTMENT OF ANTHROPOLOGY

#### Credit distribution, Eligibility and Pre-requisites of the Course

##### GENERIC ELECTIVES (GE-7): Physical fitness, Activity and Performance

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Physical fitness, Activity and Performance	4	3	0	1	12 <sup>th</sup> Pass	---

#### Learning Objectives:

The course is structured around the relevance of being physically fit in today's environment. It will further focus on increasing one's performance and activity through anthropological knowledge.

#### Learning Outcomes:

1. The students will learn about various components of health-related and skill related physical fitness.
2. The students will learn about the importance of physical fitness in performing and sustaining daily activities.
3. They will also learn about the relevance of physical fitness and performance in sports science and how it helps in designing the most appropriate athletic training program.
4. They will learn how anthropological knowledge is of immense importance in fitness and performance.

#### Syllabus

##### Unit I: Introduction to physical fitness and performance (12 Hours)

Definition, scope, and relevance of physical fitness and performance, ways to improve physical fitness and performance, various types of physical fitness and performance test

##### Unit II: Measure of physical fitness and performance (12 Hours)

Cardiovascular endurance, Muscular strength, Muscular endurance, Flexibility, Body composition, skill related components of physical fitness

### **Unit III: Physical fitness and performance in sports and health science (12 Hours)**

Importance of physical fitness and performance in preventing chronic and lifestyle disease, talent identification in sport science by determining an athlete's strengths and weaknesses, doping and performance.

### **Unit IV: Anthropological knowledge in physical fitness and performance (09 Hours)**

Relevance of anthropology in studying physical fitness, activity and performance, understanding physical fitness and performance by taking into consideration the ethnic and racial differences

### **Practical – 30 Hours**

1. Physical fitness and performance test
2. **Physiological Measurements-** Blood pressure, Heart rate, Pulse rate
3. **Somatometric Measurements-** Height, weight, skinfolds, hip circumference, waist circumference, mid-upper arm circumference, neck circumference, calf circumference, thigh circumference

1-2 workshops/projects over the academic semester on topics related to anthropology. It would bring students to brainstorming discussions on current issues and help them develop innovative ideas.

### **References:**

1. Physical working capacity and physical fitness; relationship of body measurements with cardio-vascular and respiratory functions- Physical Activity and Health by C. Bouchard, S.N Blair, W.L Haskell Chapter 3 (Page 37-42)
2. Irurtia, Alfredo, Víctor M. Torres-Mestre, Álex Cebrián-Ponce, Marta Carrasco-Marginet, Albert Altarriba-Bartés, Marc Vives-Usón, Francesc Cos, and Jorge Castizo-Olier. "Physical Fitness and Performance in Talented & Untalented Young Chinese Soccer Players." In *Healthcare*, vol. 10, no. 1, p. 98. MDPI, 2022.
3. Vaara, Jani P., Heikki Kyröläinen, Jaakko Niemi, Olli Ohrankämmen, Arja Häkkinen, Sheila Kocay, and Keijo Häkkinen. "Associations of maximal strength and muscular endurance test scores with cardiorespiratory fitness and body composition." *The Journal of Strength & Conditioning Research* 26, no. 8 (2012): 2078-2086.
4. Pate, Russell, Maria Oria, and Laura Pillsbury. "Health-related fitness measures for youth: flexibility." In *Fitness Measures and Health Outcomes in Youth*. National Academies Press (US), 2012.
5. Chen, W., Hammond-Bennett, A., Hypnar, A., & Mason, S. (2018). Health-related physical fitness and physical activity in elementary school students. *BMC public health*, 18(1), 195. <https://doi.org/10.1186/s12889-018-5107-4>

6. Donnelly, J. E., Hillman, C. H., Castelli, D., Etnier, J. L., Lee, S., Tomporowski, P., Lambourne, K., Szabo-Reed, A. N., & This summary was written for the American College of Sports Medicine by (2016). Physical Activity, Fitness, Cognitive Function, and Academic Achievement in Children: A Systematic Review. *Medicine and science in sports and exercise*, 48(6), 1223–1224.  
<https://doi.org/10.1249/MSS.0000000000000966>
7. Eston, R. and Reilly, T. (2009). KINANTHROPOMETRY AND EXERCISE PHYSIOLOGY LABORATORY MANUAL Volume One: Anthropometry. Tests, procedures and data. Routledge.

#### **Teaching Learning Process**

- Classroom teachings
- Seminars and Interactive sessions
- Practical classes/ Field work

**Keywords:** Physical fitness, performance, health science

**Note:** Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.