

B.Sc. PHYSICAL EDUCATION, HEALTH EDUCATION AND SPORTS

CHOICE BASED CREDIT SYSTEM –

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(Applicable to the candidates admitted from the academic year 2022-2023 onwards)

Updated on 23.02.2025

Sem.	Part	Course	Title	Ins. Hrs	Credit	Exam Hours	Marks		Total
							Int.	Ext.	
I	I	Language Course – I Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - I		6	3	3	25	75	100
	III	Core Course – I (CC)	History and Foundations of Physical Education	5	5	3	25	75	100
		Core Practical – I (CP)	Major Games-I (Ball Badminton, Kabaddi & Kho-Kho)	4	4	3	40	60	100
		First Allied Course – I (AC)	Anatomy and Physiology	4	4	3	25	75	100
		First Allied Practical (AP)	Yoga & Indigenous Activities I & II (Yoga & Indigenous Activities I: Yoga)	3	-	-	-	-	-
	IV	Value Education		2	2	3	25	75	100
	TOTAL			30	21	-	-	-	600
II	I	Language Course - II Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - II		4	3	3	25	75	100
	III	Core Course – II (CC)	Exercise Physiology	5	5	3	25	75	100
		Core Practical – II (CP)	Major Games-II(Basketball, Handball & Volleyball)	4	4	3	40	60	100
		First Allied Practical (AP)	Yoga & Indigenous Activities I & II (Yoga & Indigenous Activities II: Dands, Baithaks, Lezium & Minor Games)	3	2	3	40	60	100
		First Allied Course – II (AC)	Computer Applications	4	4	3	25	75	100
		Add on Course – I ##	Professional English – I	6*	4	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Language Proficiency for Employability - Effective English	2	2	3	25	75	100
	TOTAL			30	29	-	-	-	900

III	I	Language Course – III Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - III		6	3	3	25	75	100
	III	Core Course – III (CC)	Sports Training	5	5	3	25	75	100
		Core Practical - III (CP)	Major Games-III (Badminton, Table Tennis and Tennis)	4	4	3	40	60	100
		Second Allied Course – I (AC)	Sports Psychology	4	4	3	25	75	100
		Second Allied Practical (AP)	Mass Demonstration Activities I & II (Mass Demonstration Activities I: Marching, Callisthenics)	3	-	-	-	-	-
		Add on Course – II ##	Professional English - II	6*	4	3	25	75	100
	IV	Non-Major Elective I @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10 th & 12 th std.		2	2	3	25	75	100
	TOTAL			30	25	-	-	-	700
IV	I	Language Course –IV Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course – IV		6	3	3	25	75	100
	III	Core Course - IV (CC)	Test and Measurement in Physical Education	5	5	3	25	75	100
		Core Practical - IV (CP)	Major Games-IV (Cricket, Football and Hockey)	4	4	3	40	60	100
		Second Allied Practical (AP)	Mass Demonstration Activities I & II (Mass Demonstration Activities II: Light Apparatus, Aerobics & Gymnastics)	3	2	3	40	60	100
		Second Allied Course – II (AC)	Health Education and First Aid	4	4	3	25	75	100
	IV	Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10 th & 12 th std.		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Digital Skills for Employability	-	2	3	25	75	100
	TOTAL			30	25	-	-	-	800

V	III	Core Course - V (CC)	Sports Management	5	5	3	25	75	100
		Core Course – VI (CC)	Kinesiology & Sports Biomechanics	5	5	3	25	75	100
		Core Course – VII (CC)	Theories of Games	5	5	3	25	75	100
		Core Practical -V (CP)	Athletics - Track Events	4	4	3	40	60	100
		Major Based Elective – I (Any one)	1. Counselling in Sports 2. Sports Journalism	5	4	3	25	75	100
	IV	Skill Based Elective I (Any one)	1. Fundamentals of Yogic Practices 2. Stress Management Through Yoga	4	2	3	25	75	100
		Soft Skills Development		2	2	3	25	75	100
	TOTAL			30	27	-	-	-	700
VI	III	Core Course - VIII (CC)	Sports Entrepreneurship	6	5	3	25	75	100
		Core Course - IX (CC)	Theories of Track and Field	6	5	3	25	75	100
		Core Practical – VI (CP)	Athletics -Field Events	4	4	3	40	60	100
		Major Based Elective – II (Any one)	1.Adapted Physical Education 2.Talent Identification	5	4	3	25	75	100
		Project		4	3	-	20	80	100
	IV	Skill Based Elective – II (Any one)	1. Introduction to Asanas and Pranayamas 2. Asanas and Pranayamas	4	2	3	25	75	100
	V	Gender Studies		1	1	3	25	75	100
		Extension Activities **		-	1	-	-	-	-
	VI	Naan Mudhalvan Scheme (NMS) @@		-	-	-	-	-	-
	TOTAL			30	25	-	-	-	700
GRAND TOTAL			180	152	-	-	-	4400	

\$ For those who studied Tamil upto 10th +2 (Regular Stream).

+ Syllabus for other Languages should be on par with Tamil at degree level.

Those who studied Tamil upto 10th +2 but opt for other languages in degree level under Part- I should study special Tamil in Part – IV.

The Professional English – Four Streams Course is offered in the 2nd and 3rd Semester (only for 2022-2023 Batch) in all UG Courses. It will be taught apart from the Existing hours of teaching / additional hours of teaching (1 hour /day) as a 4 credit paper as an add on course on par with Major Paper and completion of the paper is must to continue his / her studies further. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).

* The Extra 6 hrs / cycle as per the G.O. 76/2020 will be utilized for the Add on Professional English Course.

@ NCC Course is one of the Choices in Non-Major Elective Course. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.

** Extension Activities shall be outside instruction hours.

@@ Naan Mudhalvan Scheme.

SUMMARY OF CURRICULUM STRUCTURE OF UG PROGRAMMES

Sl. No.	Part	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	I	Language Courses	4	12	400
2.	II	English Courses	4	12	400
3.	III	Core Courses	9	45	900
4.		Core Practical	6	24	600
5.		Allied Courses I & II	4	16	400
6.		Allied Practical	2	4	200
7.		Major Based Elective Courses	2	8	200
8.		Add on Courses	2	8	200
9.		Project	1	3	100
10.	IV	Non-Major Elective Courses (Practical)	2	4	200
11.		Skill Based Elective Courses	2	4	200
12.		Soft Skills Development	1	2	100
13.		Value Education	1	2	100
14.		Environmental Studies	1	2	100
15.	V	Gender Studies	1	1	100
16.		Extension Activities	1	1	--
17.	VI	Naan Mudhalvan Scheme	2	4	200
	Total		45	152	4400

BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI - 620 024

B.Sc. Physical Education, Health Education and Sports

Course Structure under CBCS

(Applicable to the candidates admitted from the academic year 2022-2023 onwards)

Admission Guidelines

1. DURATION:

The duration of the B.Sc. Physical Education, Health Education and Sports shall be three-year programme consisting of six semesters.

2. ELIGIBILITY:

Applicants should have passed the +2 examination of the Government of Tamil Nadu or any other equivalent examination recognized by the Government of Tamil Nadu or approved by the Bharathidasan University. School representation in any games or sports is preferred for the applicants.

The candidates should not have completed 21 years of age as on 1st July. However relaxation of 3 years may be given for SC / ST alone.

3. ADMISSION:

Admission shall be made on the basis of ranking for a total of 150 marks as detailed below.

1.	Qualifying examination	25 marks
2.	Participation in Sports and games	25 marks
3.	Sports proficiency test	50 marks
4.	Physical fitness test a. 100 mts – 20 marks b. Shot put – 15 marks c. Long Jump – 15 marks	50 marks

4. QUALIFYING EXAMINATION (Maximum marks: 25):

The marks to be awarded for qualifying examination is to be calculated as under: Marks obtained in part - III at the Degree level should be reduced to a maximum of 25.

For example, if a candidate has secured 400 marks out of 600 in part - III at the Degree level, his marks for the qualifying examination is

$$\frac{400}{600} \times 25 \left(= 16.66. \right)$$

5. PARTICIPATION IN SPORTS AND GAMES (Maximum marks: 25):

The norms for award of marks for the sports and games participation are furnished hereunder:

Any one which is applicable / advantageous.

1.	Representation for the Country / National placing (I,II,III and IV)	25
2.	State Representation (Form-II / IV in games/sports)	20
3.	Inter Division (Participation) BDS /RDS Inter District (Participation) / CBSC CLUSTER	15
4.	Pongal / District (BDS /RDS)	10
5.	Inter-School Representation	05

Note: Participation marks are awarded only to Sports discipline, which is part of Inter-University competitions under auspices of Association of Indian Universities (AIU).

6. SPORTS PROFICIENCY TEST (Maximum marks: 50):

The applicant should choose any one of the following games (Badminton, Ball Badminton, Basketball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho& Volleyball) for assessment.

7. MEDICAL CERTIFICATE:

All applicants should submit along with the application a latest Medical Certificate issued by a Government Doctor not below the rank of a Civil Surgeon to the effect that the candidate is fit to undergo strenuous activities.

8. RESERVATION POLICY:

The Government of Tamil Nadu rules of reservation of seats must be scrupulously followed.

PROGRAMME OUTCOMES:

- B.Sc. Physical Education, Health Education and Sports is basically a science programme meant for preparing students for excellence in Physical Education and Sports.
- To prepare highly competent and skilled person in the field of Physical Education & Sports and to serve the society.
- To acquire basic knowledge on higher academic system in Physical Education.
- Practical training gives better understanding of Physical education and sports.
- The programme basically to train the sports person systematically and scientifically.
- Development of personality, communication and leadership qualities.
- Have the skills and traits to working across the globe.
- Earning capabilities of livelihood for comfortable life.

PROGRAMME SPECIFIC OUTCOMES:

- To integrate the study of childhood, social context of Physical Education.
- To update the subject knowledge, pedagogical knowledge and communication skills.
- To attain the skills and knowledge on competitive exams, national and state level eligible test and other equivalent competitive exam in the field of Physical Education.
- The programme comprises of compulsory and optional theory as well as practical courses.
- The programme gives practical exposure to the various physical activities and sports.
- Hand-on training will be given in teaching of Physical Education, Sports and Yoga.
- To learn the fundamental skills and rules of major games and sports.
- B.Sc. Physical Education, Health Education and Sports is basic science degree, which leads to professional degree such as B.P.Ed. programme meant for preparing students for teaching / coaching profession.

First Year

**CORE COURSE I
HISTORY AND FOUNDATIONS OF
PHYSICAL EDUCATION
(Theory)**

Semester I

Code:

Credit: 5

COURSE OBJECTIVES:

- To study the fundamental concepts of Physical Education and General Education.
- To understand the multiple development in Physical Education.
- To acquire the knowledge of historical development of Physical Education in India.
- To know the philosophical foundation of Physical Education.
- To learn the foundations of Physical Education.

UNIT - I INTRODUCTION TO PHYSICAL EDUCATION:

Meaning and Definition of Education and Physical Education. Relationship of Physical Education with General Education. Need, nature, importance and scope of Physical Education. Physical training and Physical culture.

UNIT - II MULTIPLE DEVELOPMENTS:

Aim and Objectives of Physical Education. Misconceptions about Physical Education. Physical Education as an arts and science. Development of Physical, Cognitive, Neuro-muscular, Affective, Social, Emotional, Spiritual and Recreational.

UNIT - III HISTORICAL DEVELOPMENT OF PHYSICAL EDUCATION IN INDIA:

Vedic period (2500 BC - 600 BC) - Early Hindu period (600 BC - 320 AD) and Later Hindu period (320 AD - 1000 AD) - Medieval period (1000 AD- 1757 AD) - British period (Before 1947) - Physical Education in India (After 1947).Y.M.C.A. and its contributions.

UNIT - IV PHILOSOPHICAL FOUNDATIONS OF PHYSICAL EDUCATION:

Idealism, pragmatism, naturalism, realism. Philosophy and culture. Sports for all and its role in the maintenance and promotion of fitness.

UNIT - V FOUNDATIONS OF PHYSICAL EDUCATION:

Biological: Growth and development. Age and gender characteristics. Body types. Psychological: Attitude, interest. Cognition, emotions and sentiments. Sociological: Society and culture. Leadership in Physical Education.

UNIT - VI CURRENT CONTOURS (For continuous internal assessment only):

SAI, NSNIS, LNIPE, LNCPE, SNIPES, Central & State Sports Universities in India, AIU Sports. National Sport Federation / Association.

REFERENCES:

1. Bucher, Charles A., (1983). *Foundations of Physical Education*. St. Louis: The C.V. Mosby Company.
2. Nixon, E.E & Cozen, F.W (1969). *An introduction to physical education*. Philadelphia: W.B. Saunders Co.
3. Singh, Ajmer., et. al. (2005). *Essential of Physical Education*. New Delhi: Kalyani Publication.
4. Thirunarayanan, C. and Hariharan, S., (1990). *Analytical History of Physical Education*. Karaikudi: C.T. & S.H. Publications.
5. Deshpande, S.H. (2014). *Physical Education in Ancient India*. Amravati: Degree College of Physical Education.
6. Kamlesh, M.L. (2014). *Fundamental elements of Physical Education*. New Delhi: KSK Publishers and distributors.
7. Perinbaraj, Bevinson. S. (2002). *History of Physical Education*. Karaikudi: Vinsi Publication.
8. Sharma, O.P., (1998). *History of Physical Education*. New Delhi: Khel Shitya Kendra.
9. Wakharkar, D.G., (1967). *Manual of Physical Education in India*. Bombay: Pearl Publications Pvt. Ltd.
10. <https://ncert.nic.in/textbook/pdf/kehp101.pdf>

COURSE OUTCOMES:

- Acquired fundamentals of Physical Education and General Education.
- Understood the multiple development in Physical Education.
- Learned the historical development of Physical Education in India.
- Attained knowledge about philosophical foundation of Physical Education.
- Learned the foundation of Physical Education.

First Year

**CORE PRACTICAL I
MAJOR GAMES I
(Ball Badminton, Kabaddi and Kho-Kho)
(Practical)**

Semester I

Code:

Credit: 4

COURSE OBJECTIVES:

- To learn the fundamental and advance skills in selected sports discipline.
- To educate how to assess the performance level in players in the selected sports discipline.
- To understand on marking in selected sports discipline.
- To study the rules and regulation related to respective sports.
- To know the organization structure various sports bodies in selected sports.

UNIT – I FUNDAMENTALS AND ADVANCE SKILLS:

Fundamentals and advance – skills, techniques, drills and lead-up games in Ball Badminton, Kabaddi and Kho-Kho.

UNIT - II PLAYING ABILITY / PERFORMANCE:

Assessment of playing ability / performance - Ball Badminton, Kabaddi and Kho-Kho. Specific conditioning / training for above said sports disciplines. Team selection.

UNIT – III MARKING:

Basic requirements of courts. Dimensions, layout & markings of court - Ball Badminton, Kabaddi and Kho-Kho.

UNIT – IV OFFICIATING:

Rules/laws and interpretations, duties of the officials, official signals, system of officiating, equipment specifications and score sheet for selected sports disciplines.

UNIT – V RECORD NOTE:

Preparation of record for Ball Badminton, Kabaddi and Kho-Kho. History, organisational set-up at International, national and state level sports bodies, skill, technique, tactics, major competitions for selected sports disciplines.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Performance / Skill Assessment for Ball Badminton, Kabaddi, and Kho-Kho. Major Competition. Leading players.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Rao, E.Prasad (2002). *The complete hand book on Kabaddi*. Vizianagaram: Jagadamba publication.
4. Kirubakar.G.S., and Glory.J. (2009). *Play Ball Badminton*. Chennai: SS Publication.
5. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
6. Rao, C. V. (1971). *Kabaddi*, Patiala, N.I.S. Publications.
7. Yadav, Yogesh. (1969). *Kho-Kho*, Maharashtra Kho-Kho Association.
8. <http://www.indiankabaddi.org/>

COURSE OUTCOMES:

- Learned fundamental and advance skills involved in selected court games and indigenous sports practically.
- Studied the playing ability /performance in selected sports.
- Understood the marking of selected court games and indigenous sports.
- Attained knowledge of rules and regulation related to respective sports.
- Gained the basic knowledge on state, national and international level governing bodies of selected sports.

First Year

**FIRST ALLIED COURSE I
ANATOMY AND PHYSIOLOGY
(Theory)**

Semester I

Code:

Credit: 4

COURSE OBJECTIVES:

- To provide basic knowledge about human anatomy and physiology.
- To study the basics of skeletal and excretory systems.
- To know the fundamentals of nervous and digestive systems.
- To understand the structure & functions of respiratory and circulatory systems.
- To gain knowledge on endocrine and muscular systems.

UNIT - I INTRODUCTION TO ANATOMY AND PHYSIOLOGY:

Meaning of Anatomy and Physiology – Need and Scope of Anatomy and Physiology in Physical Education. Cell – Structure and Functions. Tissues – Types and Function. Organ and Systems.

UNIT - II SKELETAL AND EXCRETORY SYSTEMS:

Skeleton: Meaning and Functions – Bones: Classification and Functions - General Features of Various Bones: Vertebral Column, Pelvic Bone, Radius and Ulna, Scapula, Femur and Bones of Skull – Joints: Definition and Classification of Joints. Structure and functions of excretory system.

UNIT - III NERVOUS AND DIGESTIVE SYSTEMS:

Nervous System: Neuron – Central Nervous System (CNS): Brain and Spinal Cord – Peripheral Nervous System (PNS): Cranial Nerves and Spinal Nerves. Digestive System: Structure & Functions – Digestive Process – Liver, Pancreas – Functions.

UNIT - IV RESPIRATORY AND CIRCULATORY SYSTEMS:

Respiratory System – Respiration – Respiratory Track – Alveoli – Lungs: Structure & Functions – Gaseous Exchange – Vital Capacity. Circulatory System – Heart: Structure & Functions – Cardiac Cycle, Cardiac Output, Stroke Volume and Second wind.

UNIT - V ENDOCRINE AND MUSCULAR SYSTEMS:

Endocrine Glands – Functions of Endocrine Glands: Pituitary, Thyroid, Para-Thyroid, Thymus, Pancreas, Adrenal & Sex – their role, in growth, development and regulations of body functions. Muscular System – Types of Muscles: Skeletal Muscle, Cardiac Muscle, and Smooth Muscle.

UNIT - VI CURRENT CONTOURS (For continuous internal assessment only):

Measuring – Height, Weight and BMI. Waist circumference.

REFERENCES:

1. Guyton A.C., (1969). *Functions of the Human Body*. London: W.B. Saunders Company.
2. Pearce, Evelyn B., (1979) *Anatomy and physiology for Nurses*. London: Faber and Faber Ltd.
3. Prarce, J.W., (1984). *Anatomy for students and Teachers of Physical Education*. Edward Arnold & Co. London.
4. Srivastava et. al, (1976). *Text Book of Practical Physiology*. Calcutta: Scientific Book Agency.
5. Gupta, A.P., (2010). *Anatomy and physiology*. Agra: Sumit Prakashan.
6. Moorthy, A.M., (2014). *Anatomy Physiology and Health Education*. Karaikudi: Madalayam publication.
7. Sivaramakrishnan, S., (2002). *Anatomy and Physiology*. New Delhi: Friends Publication.
8. Wilmore, Jack H and Costill, David L. (1994). *Physiology of Sports and Exercise*. Human kinetics.
9. Wilson, Kathleen J. W. (1987). *Anatomy and Physiology, Health and illness*. 6thEd. Churchill Livingstone Edinburgh.
10. www.teachPE.com

COURSE OUTCOMES:

- Provided the basic knowledge about the human anatomy and physiology.
- Studied the basics of skeletal and excretory systems in the human body.
- Gained fundamental knowledge on nervous and digestive systems.
- Understood the structure and function of respiratory and circulatory systems.
- Gained knowledge on endocrine and muscular system.

First Year

**FIRST ALLIED PRACTICAL
YOGA AND INDIGENOUS
ACTIVITIES I & II
(PRACTICAL)**

Semester I & II

Code:

Credit: 2

Semester - I (Yoga and Indigenous Activities – I: Yoga)

Semester - II (Yoga and Indigenous Activities–II: Dands, Baithaks, Lezium & Minor Games)

COURSE OBJECTIVES:

- To provide the practical knowledge of asanas and suryanamaskar.
- To know the selected pranayama techniques practically.
- To understand the common meditation techniques.
- To study the basics of dands, baithaks and lezium.
- To learn the selected minor games.

UNIT – I ASANA:

Loosening exercises. Asanas: Relaxative Asanas – Shavasana, Makarasana, Meditative Asanas: Padmasana, Vajrasana Cultural Asanas: Bhujangasana, Dhanurasana, Saravangasana, Halasana, Thadasana, Patchimottasana. Surya Namaskara.

UNIT – II PRANAYAMA:

Pranayama: Nadisuddhi, Ujjayi, Kapalabhati, Sitali, Sitkari.

UNIT – III MEDITATION:

Meditation: Silent, Mantra, Object and Breathing. Competitions in yogasanas.

UNIT – IV DANDS, BAITHAKS AND LEZIUM:

Dands & Baithaks. Lezium exercise

UNIT – V MINOR GAMES:

Selected 20 minor games

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

International Yoga day. Common yoga protocol for international day of yoga. Yoga competition.

REFERENCES:

1. Gharote, M.L. & Ganguly, H. (1988). *Teaching methods for yogic practices*. Lonawala: Kaivalayadhama.
2. Iyengar, B.K.S., (2001). *Yoga the path to holistic health*. Dorling: Kindersley

3. Saraswati, Niranjanananda., (2010). *Prana and Pranayama*. Munger: Bihar School of Yoga.
4. Saraswati, Satyananda. (2008). *Four Chapters on Freedom*, Munger: Bihar School of Yoga.
5. Athichan, A, et. al., (2007). *Hand book of Indigenous Activities*. Karaikudi: Vinsi publication.
6. Chandrasekaran, K., (1999). *Sound Health through Yoga*. Sedapatti: PremKalyan publication.
7. Mariayyah, P., (2000). *Suriyanamaskar*. Perunthurai: Jaya Publishing House.
8. Mathew, Thomas., (2009). *150 Minor Games*. Karaikudi: Vinsi publication.
9. www.ayush.gov.in
10. www.yogamdniy.nic.in

COURSE OUTCOMES:

- Provided the practical knowledge of asanas and suryanamaskar.
- Gained knowledge in pranayama techniques.
- Understood the concept of meditation techniques practically.
- Studied the fundamental concepts of dands, baithaks and lezium.
- Given fair idea about selected minor games.

First Year

**CORE COURSE II
EXERCISE PHYSIOLOGY
(Theory)**

Semester II

Code:

Credit: 5

COURSE OBJECTIVES:

- To understand the fundamentals of exercise physiology.
- To study the basic concept about energy system.
- To learn the muscular physiology.
- To know the influence of exercise on cardiovascular system.
- To provide knowledge on the impact of exercise on respiratory system.

UNIT – I INTRODUCTION TO EXERCISE PHYSIOLOGY:

Definition of Exercise Physiology. Nature, Aim and Scope of Exercise Physiology. Physical Fitness and Physiological Fitness. Physiological bases warming-up and cooling down-conditioning and training.

UNIT – II ENERGY SYSTEM:

Introduction to energy system. ATP-CP, anaerobic and aerobic energy, Relationship between nutrition and energy. Sliding filament theory.

UNIT – III MUSCULAR SYSTEM:

Muscular Physiology – Structural Properties of skeletal muscles – Types of muscles. Muscle fiber types – slow – twitch and fast – twitch (A,B,C) –slow oxidative and fast glycolytic. Fiber distribution (percentage of fibers) and performance – anaerobic and aerobic activity. Hypertrophy and hyperplasia of muscles - types of muscle contraction.

UNIT – IV CARDIOVASCULAR SYSTEM AND EXERCISE:

Shape and structure of the heart - heartbeat and pulse rate. Cardiac cycle – cardiac out-put before and after activity. Stroke volume response to exercise, regulation of Stroke volume, Diastolic and Systolic Pressure, Electrocardiogram.

UNIT – V RESPIRATORY SYSTEM AND EXERCISE:

Respiratory process- internal and external phase – pulmonary ventilation. Lungs and its structural properties. Mechanics of breathing – respiratory muscles and training – minute ventilation – ventilation at rest. Ventilation during exercise – diffusion of gaseous exchange in the lungs and tissues. Exercise to develop endurance capacities.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Heart rate – Resting & Maximum heart rate. Counting the heart rate. Measuring of blood pressure.

REFERENCES:

1. Srivastava et. al, (1976). *Text Book of Practical Physiology*. Calcutta: Scientific Book Agency
2. Wilson, Kathleen J. W. (1987). *Anatomy and Physiology, Health and illness*. 6th Edition. Churchill Livingstone Edinburgh.
3. Gupta, A.P., (2010). *Anatomy and physiology*. Agra: Sumit Prakashan
4. Moorthy, A.M., (2014). *Anatomy Physiology and Health Education*. Karaikudi: Madalayam publication.
5. Pearce, Evelyn B., (1979) *Anatomy and physiology for Nurses*. London: Faber and Faber Ltd.
6. Sivaramakrishnan, S., (2002). *Anatomy and Physiology*. New Delhi: Friends Publication.
7. Wilmore, Jack H and Costill, David L. (1994). *Physiology of Sports and Exercise*. Human kinetics.
8. <https://www.teachpe.com/>

COURSE OUTCOMES:

- Understood the fundamentals of exercise physiology.
- Attained the basic concept about energy system.
- Studied the basic of muscular physiology.
- Gained knowledge on effects of exercises on cardiovascular system.
- Provided basic knowledge about impact of exercises on respiratory system.

First Year

**CORE PRACTICAL II
MAJOR GAMES - II
(Basketball, Handball and Volleyball)
(Practical)**

Semester II

Code:

Credit: 4

COURSE OBJECTIVES:

- To learn the fundamental and advance skills in selected sports discipline.
- To educated how to assess the performance level in players in the selected sports discipline.
- To understand on marking in selected sports discipline.
- To study the rules and regulation related to respective sports.
- To know the organization structure various sports bodies in selected sports.

UNIT – I FUNDAMENTALS AND ADVANCE SKILLS:

Fundamentals and advance – skills, techniques, drills and lead-up games in Basketball, Handball and Volleyball.

UNIT - II PLAYING ABILITY / PERFORMANCE:

Assessment of playing ability / performance - Basketball, Handball and Volleyball. Specific conditioning / training for above said sports disciplines. Team selection.

UNIT – III MARKING:

Basic requirements of courts. Dimensions, layout & markings of court - Basketball, Handball and Volleyball.

UNIT – IV OFFICIATING:

Rules/laws and interpretations, duties of the officials, official signals, system of officiating, equipment specifications and score sheet for selected sports disciplines.

UNIT – V RECORD NOTE:

Preparation of record for Basketball, Handball and Volleyball. History, organisational set-up at International, national and state level sports bodies, skill, technique, tactics, major competitions for selected sports disciplines.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Performance / Skill Assessment for Basketball, Handball and Volley ball. Major Competition. Leading players.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
4. Colberk A.L. (1966). *Modern Basketball-A Fundamental Analysis of Skills and Tactics*. London: Nicholas Kaya.
5. Dhanaraj, V. Hubert, (1991). *Volleyball – A Modern Approach*. Patiala: Sainsoris
6. Reita, Clanton and Phyl, Dwight Mary (1997) *Team Handball Steps to Success*. Human Kinetics
7. <http://www.indiankabaddi.org/>

COURSE OUTCOMES:

- Learned fundamental and advance skills involved in selected court games and indigenous sports practically.
- Studied the playing ability /performance in selected sports.
- Understood the marking of selected court games and indigenous sports.
- Attained knowledge of rules and regulation related to respective sports.
- Gained the basic knowledge on state, national and international level governing bodies of selected sports.

First Year

**FIRST ALLIED COURSE II
COMPUTER APPLICATIONS
(Theory)**

Semester II

Code:

Credit: 4

COURSE OBJECTIVES:

- To provide basic knowledge about Computer and ICT.
- To learn more about software and hardware.
- To understand the fundamentals of internet and e-resources.
- To give fair about the MS Word and Excel.
- To study the basics of presentation software

UNIT – I INTRODUCTION TO COMPUTER:

Meaning and definition of Computer. Components of Computer – Central Processing Unit, Monitor, Keyboard and Mouse, Other input/output devices. Computer memory. Uses of Computer. Information and Communication Technology (ICT).

UNIT – II SOFTWARE AND HARDWARE:

Applications of Computers in Physical Education. Concepts of Software and hardware. Concept of Computing, Data and Information. Application software used in Physical Education and sports.

UNIT– III INTERNET AND E-RESOURCES:

Introduction to Internet and World Wide Web. E-mail, Mail attachment, Downloading, Chat, Website. Search Engines. Online & offline e-resources. e-journal, e-book, e-library, data base. Application of internet in Physical Education & Sports.

UNIT – IV WORD PROCESSING AND SPREADSHEET SOFTWARES:

Introduction to Word document, spread sheet and PDF. Getting start with Microsoft Word and Excel. Creating, saving and open a document / spread sheet. Formatting and editing features.

UNIT – V PRESENTATION SOFTWARE:

Introduction to Microsoft Power Point – Getting start with Microsoft Power Point - Creating, Saving and opening a PPT. file – Format and editing features, slide show, design, inserting slide number, picture, graph, table.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Preparation of Bio-data. Basic statistical analysis through excel. Preparation PPT.

REFERENCES:

1. Deitel.H.M.,Deitral, P.J. and Goldberg, A.B. (2005) *Internet & World Wide Web How to program* (3 Ed) New Delhi: Prentice Hall India Private Limited.
2. Irtegov, D. (2004). *Operating system fundamentals*. Firewall Media.
3. Marilyn, M.& Roberta, B.(n.d.).*Computers in your future*. 2nd edition, India: Prentice Hall.
4. Milke, M.(2007). *Absolute beginner's guide to computer basics*. Pearson Education Asia.
5. Rajasekar. S. (2005) *Computer Education and Educational Computing*, Hyderabad: Neel Kamal Publications
6. Sinha, P. K. & Sinha, P. (n.d.).*Computer fundamentals*. 4th edition, BPB Publication.
7. Snell, Ned., (1998) *Sams Teach Yourself The Internet Starter kit in 24 hours*. New Delhi: Techmedia.
8. <http://www.freebookcentre.net/ComputerScience-Books-Download/Introduction-to-Computer Science.html>

COURSE OUTCOMES:

- Provided the basic knowledge of Computer and ICT.
- Learned about software and hardware.
- Understood the fundamentals of internet and e-resources.
- Given fair idea about MS word and excel.
- Studied the presentation software.

COURSE OBJECTIVES:

- To provide basic knowledge about sports training and training load.
- To understand the various training methods.
- To know the basics of the motor components.
- To learn the technical training and tactical training concept.
- To understand the planning and periodisation in training.

UNIT – I SPORTS TRAINING & TRAINING LOAD:

Definition and Meaning of Sports training – Meaning of Coaching – Aim and Objectives of Sports training – Principles & Characteristics of Sports Training. Load, Recovery, Intensity, Density, Duration and Frequency. Optimum Load – Over Load, Fatigue – causes, symptoms and remedial measures.

UNIT – II TRAINING METHODS:

Principles of training concern to fitness & sports – Types of different training method – Circuit training – Fartlek training – Interval training – Weight training – Plyometric training. Muscle Contraction – Isometric, Isotonic, Isokinetic.

UNIT – III DEVELOPMENT OF MOTOR COMPONENTS:

Definition, importance, classification & methods of development – Strength – Endurance – Speed – Flexibility – Co-ordinative abilities.

UNIT – IV TECHNICAL & TACTICAL PREPARATION:

Technique: Meaning, definition and importance – Stage of technical development, correction of faults – Methods of Technical training – Strategy & Tactics: Meaning and importance. Methods of Tactical training – Principles of attack & defence.

UNIT – V PLANNING AND PERIODISATION:

Meaning and importance of planning – Types of Plan: Short term, Medium term and long-term training programme. Periodisation: Meaning & importance – Types of Periodisation. Aim and content of periods.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Basic method of conditioning: continuous method, interval method and repetition method. Preparation of training schedule for different duration.

REFERENCES:

1. Bompa, Tudor O. (1990). *Periodization theory and methodology of training*. (4Ed) Champaign: Human Kinetics

2. Harre, Dietrich, (ed). (1982) *Principles of sports training*. Berlin. Sportverlag,
3. Matreyev, I. (1982) *Fundamentals of sports training*. Berlin. Sportverlag,
4. Singh, Hardayal, (1995). *Science of Sports training*. New Delhi: D.V.S. Publications.
5. Anderson, Bob., Pearl, Bill., and Burke, Edmund R., (2001). *Getting in Shape Workout Programs for Men & Women*. Mumbai: Jaico Publishing House.
6. Baechle, Thomas. R, & Earle, Roger. W., (2000). *Essentials of Strength training and Conditioning*. Champaign: Human Kinetics.
7. Brooks, Douglas. S., (2004). *The Complete Book of Personal training*. Champaign: Human Kinetics.
8. Fahey, Thomas. D., (2005). *Weight training basics*. New York: McGraw-Hill.
9. Sandler, David., (2010). *Fundamental Weight training*. Champaign: Human Kinetics.
10. Uppal, A,K. (2009). *Science of sports training*. New Delhi: Publishers of books on physical education & sports sciences.
11. www.teachPE.com

COURSE OUTCOMES:

- Provided the basic knowledge in sports training and training load.
- Understood the various training methods.
- Studied the basics of the motor components.
- Learned the technical training and tactical training concept.
- Understood the basics of planning and periodization in sports training.

COURSE OBJECTIVES:

- To learn the fundamental and advance skills in selected sports discipline.
- To educate how to assess the performance level in players in the selected sports discipline.
- To understand on marking in selected sports discipline.
- To study the rules and regulation related to selected sports.
- To know the organization structure various sports bodies in selected sports.

UNIT – I FUNDAMENTAL AND ADVANCE SKILLS:

Fundamental and advance – skills, techniques, drills and lead-up games in Badminton, Table Tennis and Tennis.

UNIT – II PLAYING ABILITY / PERFORMANCE:

Assessment of playing ability / performance - Badminton, Table Tennis and Tennis. Team selection.

UNIT – III MARKING:

Basic requirements of courts /field. Dimensions, layout & markings of court/field - Badminton, Table Tennis and Tennis.

UNIT – IV OFFICIATING

Rules/Laws and interpretations, duties of the officials, official signals, system of officiating, equipment specifications and score sheet for selected sports disciplines.

UNIT – V RECORD NOTE:

Preparation of record for Badminton, Table Tennis and Tennis. History, organisational set-up at International, national and state level sports bodies, skill, technique, tactics and Major Competitions for selected sports disciplines.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Performance / Skill Assessment for Badminton, Table Tennis and Tennis. Major Competition. Leading players.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.

3. Hodges, Larry (2013). Table Tennis Tactics for Thinkers. Create Space Independent Publishing Platform
4. Gillmeister&Heiver (1998). *Tennis: A cultural history*, Washington square: New York University press.
5. Part, Davic (1979) *Better Badminton Learn in Your-self Book*. London: Orient Paper Books.
6. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
7. Srivastava, A.K (2007). *How to coach badminton*, New Delhi: Sports publication.

COURSE OUTCOMES:

- Learned fundamental and advance skills involved in selected sports practically.
- Studied the playing ability /performance in selected sports.
- Understood the marking of selected sports.
- Attained knowledge of rules and regulation related to selected sports.
- Gained the basic knowledge on state, national and international level governing bodies of selected sports.

COURSE OBJECTIVES:

- To understand the fundamentals about sports psychology.
- To study the various dimensions and theories of personality.
- To learn the basics of motivation and learning.
- To give an overview about sports sociology.
- To know the qualities and types of leadership.

UNIT – I SPORTS PSYCHOLOGY:

Meaning, nature and scope of Sports Psychology - Importance of Sports Psychology – types of Sports Psychology. Historical evolution of Sports Psychology. Relevance of Sports Psychology in Physical Education and coaching. Psychological factors affecting sports performance.

UNIT – II PERSONALITY AND SPORTS:

Meaning, nature and definition of personality. Theories of personality in sports. Dimensions of personality and development of personality. Measuring the personality.

UNIT – III MOTIVATION AND LEARNING:

Definition of motivation: Types of motivation - Factors influencing motivation - Motivational techniques and sports performance. Meaning, nature and principles of learning, types of learning. Laws of learning, transfer of learning. Factors affecting learning. Learning curve. Plateau.

UNIT – IV SPORTS SOCIOLOGY:

Meaning, Scope and nature of Sports Sociology. Importance of Sports Sociology in Physical Education. Socialization and value education through Physical Education. Impact of society on sports and vice versa.

UNIT – V LEADERSHIP IN SPORTS:

Meaning and Definition of leadership – Types of leadership - Qualities of a Leader - Need & Importance of leadership in Physical Education & Sports.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Psychological preparation for competition, long term psychological preparation, short term psychological preparation.

REFERENCES:

1. Alderman, R.S. (1974). *Psychological behavior in Sports*, Philadelphia: Saunders Company.
2. Cratty, B. J., (1968). *Psychology and Physical activity*. Eaglewood Cliffs. Prentice Hall.
3. Cratty, Bryant, J. (1975). *Psychology of Contemporary Sports*, Englewood Cliffs, N.J, prentice Hall Inc.
4. Butt, Doras Susan, (1989). *Psychology of Sports*, New York: Van. Nostrand Reinhold Co.
5. Cratty, Bryant, J. (1975). *Movement Behaviour and Motor Learning*, Philadelphia: Lea & Fogger.
6. Kamlesh, M.L. (1998). *Psychology in Physical Education and Sport*, New Delhi: Metropolitan Book Co.
7. Mathew, Gita (1997). *Sports Psychology*. Karaikudi: Shaju and Shiju Brother publication.
8. Orlick, Terry (1980). *In pursuit of Excellence*, Champaign: Human Kinetics
9. Weinberg, Robert S and Gould, Daniel (1995). *Foundations of Sport and Exercise Psychology*. Champaign: Human Kinetics.
10. www.teachPE.com

COURSE OUTCOMES:

- Understood the fundamentals about sports psychology.
- Studied the various dimensions and theories of personality.
- Learned the basics of motivation and learning.
- Gained knowledge about nature, importance and scope of sports sociology.
- Attained knowledge on the qualities and types of leadership.

Second Year

**SECOND ALLIED PRACTICAL I
MASS DEMONSTRATION ACTIVITIES I & II
(Practical)**

Semester III

Code

Credit: 2

**(Mass Demonstration Activities I: Marching, Callisthenics
Mass Demonstration Activities II: Light Apparatus, Aerobics & Gymnastics)**

Semester - III (Mass Demonstration Activities – I: Marching & Callisthenics)

Semester - IV (Mass Demonstration Activities – II: Light Apparatus, Aerobics and Gymnastics)

COURSE OBJECTIVES:

- To provide fundamental practical knowledge on callisthenics.
- To learn the basics of marching.
- To teach the light apparatus activities such as Indian clubs and wands.
- To educate on hoops and dumb bells.
- To study the basics of pyramid, aerobic and gymnastics practically.

UNIT – I CALLISTHENICS:

Callisthenics exercises - with verbal command, drum and music (2, 4, 8, 16 & 32 counts).

UNIT – II MARCHING:

Marching: Stationary marching (On the spot) - Quick march and halt. Marching with salute. Marching with above-turn.

UNIT – III INDIAN CLUBS AND WANDS:

Light apparatus exercises - with verbal command, drum and music (2, 4, 8, 16 & 32 counts) - Indian Clubs and Wands. Standing Exercise, Jumping Exercise, Moving Exercise and combination of these exercises with wands and Indian clubs.

UNIT – IV HOOPS AND DUMBBELLS:

Light apparatus exercises - with verbal command, drum and music (2, 4, 8, 16 & 32 counts) – Hoops and Dumbbells. Standing Exercise, Jumping Exercise, Moving Exercise and combination of these exercises with Hoops and Dumbbells.

UNIT – V PYRAMID, AEROBICS AND GYMNASTICS:

Formation of Pyramid. Aerobics with and without music / equipment. Gymnastics - Forward Roll, Backward Roll, Sideward Roll.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Flag hoisting and lowering. Protocol to be followed while hoisting and lowering of national flag.

REFERENCES:

1. Athichan, A, et. al., (2007)*Hand book of Indigenous activities*. Karaikudi: Vinsi publication.
2. Bava, Gurdial Singh, (1994). *Fundamentals of Men's gymnastics*. New Delhi: Friends publications
3. Tirunaryanan, C. and Hariharan. S, (1993). *Methods in Physical Education*. Karaikudi: South India Press.
4. Bava, Gurdial Singh, (1994). *Fundamentals of Men's gymnastics*. New Delhi: Friends publications
5. Mathew, Thomas., (2009). *150 Minor Games*. Karaikudi: Vinsi publication.
6. Lawrence, Debbie. (1999). *Exercise to music*. London: A& C Black publishers.
7. Perinbaraj, Bevinson. S. (2006). *Methods in Physical Education*. Karaikudi: Vinsi publication.
8. Schlegel, Elfi& Dunn, Claire Ross (2012). *The Gymnastics Book: The Young Performer's Guide to Gymnastics*. Richmond Hill: Firefly book publisher.
9. Sheelakumar, S. et. al. (2009). *Fitness, Aerobics and Gym Operations*. New Delhi: KhelSathiya Kendra Publication.
10. Thomas, J.P., (1969). *Physical Education Lesson*. Madras: Gnanodya press.
11. https://books.google.co.in/books/about/Teaching_with_Rhythm_and_Rhyme.html?id=Tv3hCgAAQBAJ&redir_esc=y

COURSE OUTCOMES:

- Provided the practice in callisthenics exercises.
- Learned the marching practically.
- Attained practical knowledge on Indian clubs and wands exercises.
- Gained knowledge of hoops and dumb bells.
- Studied the pyramid, aerobic and gymnastics practically.

COURSE OBJECTIVES:

- To know the fundamentals of Test, Measurement and Evaluation.
- To teach the test classification and administration.
- To provide knowledge of physical fitness tests.
- To understand the various motor fitness tests.
- Give a clear understanding of sports skill tests.

UNIT – I INTRODUCTION TO TEST, MEASUREMENT AND EVALUATION:

Meaning and definition of Test, Measurement and Evaluation in Physical Education. Need and importance of Test, Measurement and Evaluation in Physical Education.

UNIT – II TEST CLASSIFICATION AND ADMINISTRATION:

Classification of test - Sports Knowledge test. Standardised and Teacher made test - skill test classification - objective test - subjective test - qualities of the test - administration of the test. Criteria of test selection - validity, reliability, objectivity, norms, administrative feasibility.

UNIT – III PHYSICAL FITNESS TEST:

Strength endurance test – Bend knee sit ups test. Flexibility test – Sit and reach test. Speed test – 50 mts run. Cardio respiratory Endurance - Cooper 12-minute Run / Walk test. Explosive power test – Sargent jump.

UNIT – IV MOTOR FITNESS TEST:

AAHPERD Youth Fitness test. Motor fitness – Philips JCR test. Barrow motor ability test. Harvard step test. Beep test. Tuttle pulse ratio test. Newton Motor ability test.

UNIT – V SPORTS SKILL TEST:

Johnson Basketball ability test. McDonald Soccer test. Brady Volleyball test. SAI Hockey test. Lockhart and McPherson Badminton test.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Beep test, Yo-Yo Endurance test and 2 kms run.

REFERENCES:

1. Barrow, Harold M. Rosomany (1964). *A physical approach to measurement in physical education*, Philadelphia: Lea and Febiger
2. Clarke, H. (1967). *Application of measurement in Health and Physical Education*. Prentice Hall Inc.
3. Donald, Mathews K. (1977). *Measurement in Physical Education*. London W.S. Saunders Company.
4. Bosco, James S. (1983). *Measurement and Evaluation in Physical Education and Sports*. New Jersey: Prentice Hall Inc.
5. Kansal, K. Devinder (2012). *A practical approach to test, measurement and evaluation*. New Delhi: SSS publication
6. Michael, P. Reiman, Robert C. Manske (2009), *Functional Testing in Human Performance*, United states of America: Human kinetics.
7. Safrit, Margarit J. (1986). *Measurement in Physical Education and Exercise Science*. St. Louis: Times Mirror Mosby College publishing.
8. Yobu, A, (1988). *Test, Measurement and Evaluation*. Madras: Rajmohanpathippagam.
9. <https://www.studyrankers.com/2019/08/revision-notes-for-test-measurement-and-evaluation-physical-education.html>

COURSE OUTCOMES:

- Studied the fundamentals of test, measurement and evaluation.
- Gained knowledge on test classification and administration.
- Attained knowledge about physical fitness test.
- Provided the knowledge about motor fitness test.
- Learned the various sports skill tests.

Second Year

**CORE PRACTICAL IV
MAJOR GAMES – IV
(Cricket, Football and Hockey)
(Practical)**

Semester IV

Code

Credit: 4

COURSE OBJECTIVES:

- To learn the fundamental and advance skills in selected sports discipline.
- To educated how to assess the performance level in players in the selected sports discipline.
- To understand on marking in selected sports discipline.
- To study the rules and regulation related to selected sports.
- To know the organization structure various sports bodies in selected sports.

UNIT – I FUNDAMENTAL AND ADVANCE SKILLS:

Fundamental and advance – skills, techniques, drills and lead-up games in Cricket, Football and Hockey.

UNIT – II PLAYING ABILITY / PERFORMANCE:

Assessment of playing ability / performance - Cricket, Football and Hockey. Team selection.

UNIT – III MARKING:

Basic requirements of courts / field. Dimensions, layout & markings of court/field - Cricket, Football and Hockey.

UNIT – IV OFFICIATING:

Rules/Laws and interpretations, duties of the officials, official signals, system of officiating, equipment specifications and score sheet for selected sports disciplines.

UNIT – V RECORD NOTE:

Preparation of record for Cricket, Football and Hockey. History, organisational set-up at International, national and state level sports bodies, skill, technique, tactics and Major Competitions for selected sports disciplines.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Performance / Skill Assessment for Cricket, Football and Hockey. Major Competition. Leading players.

REFERENCES:

1. Aibara, E.B., (1975). *Cricket*. Patiala: National Institute of Sports
2. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
3. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
4. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
5. Thompson, William, (1996). *Teaching Soccer*. Delhi: Surjeet Publications.
6. Wein, Horts, (1979). *The Science of Hockey*. London: Pelham Books.
7. <https://www.bcci.tv/>

COURSE OUTCOMES:

- Learned fundamental and advance skills involved in selected sports practically.
- Studied the playing ability /performance in selected sports.
- Understood the marking of selected sports.
- Attained knowledge of rules and regulation related to selected sports.
- Gained the basic knowledge on state, national and international level governing bodies of selected sports.

COURSE OBJECTIVES:

- To provide the fundamentals concepts of health education.
- To understand the basic concepts of mental health.
- To create awareness about global health issues.
- To study the basic concepts of safety education.
- To educate on the fundamentals of first aid.

UNIT – I INTRODUCTION TO HEALTH EDUCATION:

Meaning and definition of Health Education – Aim, Scope of Health Education - role of International Organizations (WHO, UNICEF), National, State Level Health Organizations.

UNIT – II MENTAL HEALTH:

Meaning of mental health - factors of mental health - mental health issues of college student - principles of mental health - characteristics of a health personality.

UNIT – III GLOBAL HEALTH ISSUES:

Communicable and Non- Communicable Diseases and their Prevention - Causes, modes of spread – Tuberculosis, Malaria, Smallpox, Chicken box and AIDS. Overweight and obesity.

UNIT – IV SAFETY EDUCATION:

Definition of Safety Education- factors affecting Safety Education – Need and Importance of Safety Education - Safety in Play fields, Swimming pool, Gymnasium.

UNIT – V FIRST AID:

Definition - Importance of First Aid - Athletic injuries: Sprain, Strain, Contusion, Fracture, Dislocation, Muscle Cramp, Abrasion and Puncture.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Climate change, global warming and ozone layer depletion.

REFERENCES:

1. Wellgoose. (1977). *Health Teaching in secondary Carl. E. Schools*: W.B. Saunders.
2. Wilson, Kathleen J. W. (1987). *Anatomy and Physiology, Health and illness*. 6th Edition. Churchill Livingstone Edinburgh.

3. Anderson. T. Mc. Clerg, (1961). *Human Kinetics and Analyzing Body Movements*, London: William Heinman Medical Books Ltd.
4. Frank, H. &Walter, H., (1976). *Turners school health education*. Saint Louis: The C.V. Mosby Company.
5. Nemir, A. (n.d.). *The school health education*. New York: Harber and Brothers.
6. Prarce, J.W. (1984). *Anatomy for students and Teachers of Physical Education*, Edward Arnold & Co.
7. <https://www.cdc.gov/HealthyYouth/SHER/standards/index.htm>

COURSE OUTCOMES:

- Provided the fundamentals concepts of Health Education.
- Understanding the basic concepts of mental health.
- Creating awareness about global health issues.
- The basic concepts of safety education were studied.
- The fundamentals of first aid was educated.

COURSE OBJECTIVES:

- To educate on sports management and its various dimensions.
- To provide fundamentals about organisation and leadership.
- To learn the role of motivation and fundamentals public relation.
- To study the basics of guidance.
- To know about the finance management.

UNIT – I INTRODUCTION TO SPORTS MANAGEMENT:

Meaning and definition of Sports Management and its functions. Importance and Historical Background of Sports Management. Interpersonal Roles in Manpower planning. Meaning of Recruitment. Sports Organization.

UNIT – II ORGANISATION:

Nature, Principles and Purpose of Organization – Systems of Organization – Leadership: Meaning – Personal Traits – Attitude and Behaviour approach – Qualities of a Leader – Positional power.

UNIT – III MOTIVATION AND PUBLIC RELATION:

Concepts and Need of Motivation in Sports Organization – Job feedback – Types of Public Relation – Role of Government, Media, and Conference – Finances – Qualities of Good Public Relation Organization.

UNIT – IV GUIDANCE:

Concepts, Objectives and Need for Strategies for Vocational Guidance; Principles – Approaches – Career Talk – Industrial visit – Personal, Social, Vocational Counseling, Social Guidance; Purpose-Types of Social Problems – Social Needs and Social Life. Personal Guidance: Concepts, Purpose – Emotional Characteristics of Adolescents.

UNIT - V FINANCE:

Infrastructure – Equipment – Salaries and Wages – Raising of Funds – Budget, Record maintenance and Purchase of Equipment – Advantages – Essentials – Types of Budget – Research and Development, Budget – Funds collection prices.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Event management. Career Sports Management. Academic programmes in sports management offered in Indian institution. Leading sports management institutions in India.

REFERENCES:

1. Janet A. Wessel, Luke Keely, (1986). Achievement – Based Curriculum Development in Physical Education: Lea & Febiger.
2. Tirunarayanan, C. & Hariharan, S. (1969). *Methods in Physical Education*. Karaikudi: South India Press.
3. Broyles, F. J. & Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach*. New York: Prentice hall Inc.
4. Kozman, H.C. Cassidly, R. & Jackson, C. (1960). *Methods in Physical Education*. London: W.B. Saunders Co.
5. Samiran, Chakrabarty, (1998) Sports Management. Delhi Sports: Publications.
6. Thomas, J. P.(1967). *Organization & administration of Physical Education*. Madras: Gyanodayal Press.
7. Voltmer, E. F. & Esslinger, A. A. (1979). *The organization and administration of Physical Education*. New York: Prentice Hall Inc.
8. <https://www.yumpu.com/en/document/view/63968199/e-book-free-international-sport-management>

COURSE OUTCOMES:

- Educated on sports management and its functions & importance.
- Given fair idea about organisation and leadership.
- Learned the role of motivation and fundamentals public relation.
- Studied the basics of guidance.
- Provided knowledge on finance.

COURSE OBJECTIVES:

- To understand the basics of kinesiology and sports biomechanics.
- To know the various origin, insertion and muscle action.
- To educate basic concepts of linear kinematics and kinetics.
- To study the fundamentals aspects of levers and its types.
- To provide an overview on force and movement analysis.

UNIT – I INTRODUCTION TO KINESIOLOGY AND SPORTS BIOMECHANICS:

Definition & Meaning of Kinesiology & Sports Biomechanics - Scope - Need and importance of Sports Kinesiology and Biomechanics - Historical development of Kinesiology and Sports Biomechanics.

UNIT – II ORIGIN, INSERTION AND ACTION OF THE MUSCLES:

Involvement of various muscles during different fundamental and auxiliary movements of hip, knee, shoulder, elbow joint, shoulder girdle and trunk region. Origin, insertion and action of the muscles - Pectoralis major – Deltoid – Biceps – Sartorius - Quadriceps.

UNIT – III LINEAR KINEMATICS & KINETICS:

Definition & meaning - Distance, displacement, speed, velocity, acceleration due to gravity, inertia, mass, force, weight, momentum. Newton's law of motion – Law of Inertia, Law of acceleration, Law of action and reaction. Forms of motion – Linear, Angular and General motion.

UNIT – IV LEVERS:

Definitions & meaning - angular distance, angular displacement, angular velocity, angular acceleration. Levers – Types of levers, Advantages of levers in sports movement. Definition of Centre of gravity and its importance.

UNIT – V FORCE:

Definition of forces, types of forces, internal and external forces, centripetal and centrifugal force. Biomechanical analysis of walking, running, jumping and throwing.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Evaluation of athlete's performance. Video analysis of skills and techniques.

REFERENCES:

1. Hay, J. (1993). *The Biomechanics of Sports Techniques*. New Jersey: Prentice Hall Inc.
2. Thompson. (1998). *Structural Kinesiology*. New York: McGraw-Hill.
3. Wells, Katherine F., and Kathryn, Luttgens. (1976). *Kinesiology the scientific basis of human motion*. Philadelphia: Saunders Company
4. Gladys, Scott., M. (2005). *Text book in Kinesiology*. New York: Warren's Books.
5. Peter, McGinnis. (2005). *Biomechanics of Sport and Exercise*. Champaign: Human Kinetics.
6. Shaw, Dhananjay. (1998). *Pedagogic Kinesiology*, Delhi: Sports publication.
7. Susan, J Hall. (2004). *Basic Biomechanics*. New York: McGraw Hill Education.
8. www.teachPE.com

COURSE OUTCOMES:

- Understand the basics of kinesiology and sports biomechanics.
- Given fair idea about the various origin, insertion and muscle action.
- Provided the basic concepts of linear kinematics and kinetics.
- Studied the fundamentals aspects of levers and its types.
- Gained knowledge about force and movement analysis.

COURSE OBJECTIVES:

- To impart the theoretical knowledge on wide range such as origin, growth and development of selected major games.
- To learn the layout and marking of court/field of the selected major games.
- To study the rules / laws and their interpretations in the selected games.
- To understand the mechanics of officiating in selected major games.
- To give basic knowledge of organization set-up of the selected games.

UNIT – I HISTORY:

Origin and development - Basketball, Cricket, Football, Handball, Hockey, Volleyball and Kabaddi.

UNIT – II MARKING:

Layout & markings of field / court - Basketball, Cricket, Football, Handball, Hockey, Volleyball and Kabaddi.

UNIT – III RULES AND REGULATION:

Rules and their interpretations of Basketball, Cricket, Football, Handball, Hockey, Volleyball and Kabaddi.

UNIT – IV MECHANICS OF OFFICIATING:

Duties of officials – official signals, system of officiating, score sheet - Basketball, Cricket, Football, Handball, Hockey, Volleyball and Kabaddi.

UNIT – V SPORTS BODIES:

International, national and state level sports bodies. International Olympic committee, Indian Olympic association. Organisational setup of various sports bodies.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Tournament, Competition and Championship organization. Various committees involved in tournament organization. Major Competitions.

REFERENCES:

1. Aibara, E.B., (1975). *Cricket*. Patiala: National Institute of Sports
2. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
3. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
4. Rao, C. V. (1971). *Kabaddi*, Patiala: N.I.S. Publications.

5. Colberk A.L. (1966). *Modern Basketball-A Fundamental Analysis of Skills and Tactics*. London: Nicholas Kaya.
6. Dhanaraj, V. Hubert, (1991). *Volleyball – A Modern Approach*. Patiala: Sainsoris
7. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: vinis publication.
8. Rao, E.Prasad (2002). *The complete hand book on Kabaddi*. Vizianagaram: Jagadamba publication.
9. Reita, Clanton and Phyl, Dwight Mary (1997) *Team Handball Steps to Success*. Human Kinetics
10. Thompson, William, (1996). *Teaching Soccer*. Delhi: Surjeet Publications.
11. Wein, Horts, (1979). *The Science of Hockey*. London: Pelham Books.
12. www.teachPE.com

COURSE OUTCOMES:

- Attained knowledge on the history of selected major games.
- Learned the layout and marking of court / field of the selected major games.
- Studies the rules / laws and their interpretation in the selected games.
- Understood the mechanics of officiating in selected major games.
- Gained knowledge on organizational set-up in the selected games.

Third Year

**CORE PRACTICAL V
ATHLETICS - TRACK EVENTS
(Practical)**

Semester V

Code

Credit: 4

COURSE OBJECTIVES:

- To study the fundamental and advance skills in track events.
- To learn basics of assessment and training methods.
- To understand the marking techniques for track events.
- To educate on rules and their interpretation of track events.
- To impart knowledge history and organizational set-up at various levels.

UNIT – I FUNDAMENTAL AND ADVANCE SKILLS:

Fundamental and advance skills, techniques, drills and lead-up games / activities –Sprints, Middle distance, Long distances, Relays, Steeple chase, Walking races, Hurdles and Cross country.

UNIT – II PERFORMANCE:

Assessment of performance - Sprints, Middle distance, Long distances, Relays, Steeple chase, Walking races, Hurdles and Cross-country events. Specific conditioning / training for above said events.

UNIT – III MARKING:

Markings of 200 m and 400 m track. Specific marking for Sprints, Middle distance, Long distances, Relays, Steeple chase, Walking races, Hurdles and Cross-country events. Equipment's and their specifications.

UNIT - IV OFFICIATING:

Rules and interpretations, duties of the officials, official signals and score sheet for Sprints, Middle distance, Long distances, Relays, Steeple chase, Walking races, Hurdles and Cross-country events.

UNIT – V RECORD NOTE:

Preparation of record for Sprints, Middle distance, Long distances, Relays, Steeple chase, Walking races, Hurdles and Cross-country events. History, organisational set-up at International, national and state level athletic federation / association, technique, World & Olympic records and other major competitions.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Track events - Coaching camps, Training schedules for athletics, Selection trails, Competition and academies for athletics.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Conling, David, (1980) *Athletics*, London: Robert Hale
4. Joseph, Rogers L. (2000) *USA Track & Field Coaching Manual*. Champaign: Human Kinetics Publications.
5. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
6. <https://www.iaaf.org/>

COURSE OUTCOME:

- Studied the fundamental and advance skills in track events.
- Attained the knowledge on assessment and training methods.
- Understood the basics of marking in track events.
- Learned the rules and their interpretation of track events.
- Got clear idea about history and organizational setup at various levels.

Third Year

**MAJOR BASED ELECTIVE I
1. COUNSELLING IN SPORTS
(Theory)**

Semester V

Code

Credit: 4

COURSE OBJECTIVES:

- To understand the fundamentals of counselling in physical education and sports.
- To study the concept of stress and anxiety in sports.
- To learn the fundamental of motivation.
- To give basic idea about counselling to athletes.
- To provide knowledge on career in counselling.

UNIT – I COUNSELLING IN PHYSICAL EDUCATION AND SPORTS:

Meaning, definition and scope of counselling in sports. Aims and objectives of counselling in sports. Principles of counselling. Need and importance of counselling.

UNIT – II STRESS AND ANXIETY IN SPORTS:

Meaning and definition of stress and anxiety. Types of stress and anxiety. Symptoms and effects of stress, anxiety and competition anxiety. Management of stress and anxiety.

UNIT – III MOVIVATION AND SPORTS PERFORMANCE:

Meaning and definition of motivation. Types and techniques of motivation. Principles and importance of motivation. Role of coach / teacher / government in motivation.

UNIT – IV COUNSELLING TO ATHLETES:

Counselling on injuries and rehabilitation. Counselling on handling success and failure in sports. Counselling on drugs in sports.

UNIT – V CAREER IN COUNSELLING:

Qualities and Qualifications of Counsellor. Counselling on job opportunities and life after retirement from sports. Career in counselling.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Gambling - Drug Abuse – Violence - Burnout of young athletes. SWOT / SWOC analysis.

REFERENCES:

1. Authors Guide (2013) *National Library of Educational and Psychological Test (NLEPT) Catalogue of Test*, New Delhi: National Council of Educational Research and Training Publication.

2. John D Lauther (2000) *Psychology of Coaching*. New Jersey: Prentice Hall Inc.
3. Robert N. Singer. (1989) *The Psychology Domain Movement Behaviour*. Philadelphia: Lea and Febiger.
4. Jain, R (2002), *Sports Sociology*, Delhi: Khel Sahitya Kendra
5. Jay Coakley. (2001) *Sports in Society-Issues and Controversies in International Education*, Mc-Craw Seventh Ed.
6. Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi: Metropolitan Book Co.
7. Richard, J. Crisp. (2000). *Essential Social Psychology*. Sage Publications.
8. Thelma Horn. (2002). *Advances in Sports Psychology*. Human Kinetic.
9. www.teachPE.com

COURSE OUTCOMES:

- Understood the fundamentals of counselling in physical education and sports.
- Studied the basics of stress and anxiety in sports.
- Learned the motivation concepts.
- Gained fair idea about counselling to athletes.
- Knowledge on career in counselling was gained.

COURSE OBJECTIVES:

- To provide the basic knowledge on journalism.
- To educate about sports bulletin.
- To give an over view of mass media.
- To know basics of report writing on sports.
- To understand working nature of media houses.

UNIT – I INTRODUCTION TO JOURNALISM:

Meaning and definition of journalism. Ethics of Journalism. Sports ethics and sportsmanship. Reporting sports events. National and International sports news agencies.

UNIT – II SPORTS BULLETIN:

Concept of sports bulletin. Types of bulletin. Journalism and sports education. Structure of sports bulletin – compiling a bulletin. General news reporting and sports reporting.

UNIT – III MASS MEDIA:

Mass media in journalism: Radio and Television. Commentary – running commentary on the radio – Sports expert's comments. Role of Advertisement in journalism. Sports Photography. Editing and publishing.

UNIT – IV REPORT WRITING ON SPORTS:

Brief review of Olympic Games, Asian Games, Common Wealth Games, World Cup, National Games and Indian Traditional Games.

UNIT – V ASSIGNMENT:

Practical assignments to observe the matches and prepare report and news of the same. Visit to newspaper office and TV centre to know various department and their work.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Collection of Album of newspaper cuttings of sports news.

REFERENCES:

1. Ahiya B.N. (1988) *Theory and Practice of Journalism: Set to Indian context* Ed3. Delhi: Surjeet Publications
2. Bhatt S.C. (1993) *Broadcast Journalism Basic Principles*. New Delhi. Haranand Publication

3. Ahiya B.N. Chobra S.S.A. (1990) *Concise Course in Reporting*. New Delhi: Surjeet Publication
4. Shiv Khera (2002) *You Can Win*, New Delhi: Macmillan India Limited.
5. Varma A.K. (1993) *Journalism in India from Earliest Times to the Present Period*. Sterling publication Pvt. Ltd.
6. <https://infolearners.com/books/sports-journalism-pdf-free-download/>

COURSE OUTCOMES:

- Created awareness about sports journalism.
- Learned about sports bulletin.
- Fair idea about mass media was given.
- Attained the knowledge of report writing on sports.
- Studied the working nature of media houses.

1. FUNDAMENTALS OF YOGIC PRACTICES

Code

(Theory)

Credit: 4

COURSE OBJECTIVES:

- To understand the fundamental concepts of yogic practices.
- To study the limbs and types of yoga.
- To know the various classification of asanas.
- To learn the basics of pranayamas and meditation techniques.
- To acquire the knowledge of impact of yoga on selected systems in the human body.

UNIT – I INTRODUCTION TO YOGA:

Meaning and Definition of Yoga. Aims and objectives of Yoga. Historical background of yoga. Contributions of Thirumoolar & Patanjali. Schools of Yoga: Kaivalyadhama, Bihar School of Yoga and SVYASA. International Yoga day.

UNIT – II LIMBS AND TYPES OF YOGA:

Eight limbs of Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. Types of Yoga: Karma Yoga, Jnana Yoga, Hatha Yoga, Mantra Yoga, Raja Yoga and Bhakthi Yoga. Principles of practicing asana, pranayama and meditation.

UNIT – III ASANAS:

Classification of Asanas - Meditative Asanas – Relaxative Asanas – Cultural Asanas. Safety measure and precautions while performing asanas. Technique and benefits of Suryanamaskar.

UNIT – IV PRANAYAMAS AND MEDITATIONS:

Pranayama – different phases in Pranayama practices: Puraka (Inhalation), Kumbhaka (Retention) and Recaka (Exhalation). Safety measures and precautions while performing pranayama. Meditation - Its techniques & benefits.

UNIT – V INFLUENCES OF YOGIC PRACTICES:

Impact of Yogic practices on Cardio-respiratory system, Nervous system and Endocrine system. Need and importance of Yoga in Physical Education and Sports.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Difference between Yogic practices and Physical exercises.

REFERENCES:

1. Author's guide, (2003). *Yoga – The Science of Holistic living*. Chennai: Vivekananda Kendra Prakashana trust
2. Bhowmil, Sanjib kumar. (2012). *A text book on Yoga and Health*. Delhi: Sports publication.
3. Gharote, M.L. &Ganguly, H. (1988). *Teaching methods for yogic practices*. Lonawala: Kaivalayadhama.
4. Iyengar, B.K.S. (2001). *Yoga the path to holistic health*, Dorling Kindersley.
5. Saraswati, Niranjanananda. (2010). *Prana and Pranayama*, Munger: Bihar School of Yoga.
6. Chandrasekaran, K., (1999). *Sound Health through Yoga*. Sedapatti: Prem Kalyan Publications.
7. Iyengar, BKS., (2003). *The Art of Yoga*. New Delhi: Harper Collins Publishers.
8. Mariayyah, P., (2000). *Suriyanamaskar*. Perunthurai: Jaya Publishing House.
9. Shankar,G. (1998). *Holistic approach of yoga*. New Delhi: Aditya Publishers.
10. Tummers, Nanette, E., (2009) *Teaching Yoga for Life*. Champaign: Human Kinetics.
11. www.ayush.gov.in
12. www.yogamdniy.nic.in

COURSE OUTCOMES:

- Understood the fundamental concepts of yogic practices.
- Studied the limbs and types of yoga.
- Gained knowledge on various classification of asanas.
- Learned the basics of pranayamas and meditation techniques.
- Acquired the knowledge of impact of yoga on selected systems in the human body.

COURSE OBJECTIVES:

- To understand the fundamental concepts of health.
- To study the basics of stress.
- To provide knowledge on the various yogic text relevant to stress.
- To learn the basics of physiology of stress.
- To acquire the knowledge on stress control practices.

UNIT - I HEALTH:

Meaning and definition of Health – various dimensions of health (Physical, Mental, Social and Spiritual) – Yoga and health – Yoga as therapy. Physical fitness.

UNIT - II STRESS:

Meaning and Definition of Stress. Types: Eustress, Distress, Anticipatory Anxiety, Intense Anxiety and Depression. Meaning of Management – Stress Management.

UNIT - III YOGIC TEXT AND STRESS:

Concept of Stress according to Yoga: Patanjali aphorism (PYS II - 3) Avidya Asmita. Bhagavad – Gita (Gita II 62-63) Dhayato Visayam Punsah ... Yoga Vasistha and Upanishad.

UNIT - IV PHYSIOLOGY AND STRESS:

Physiology of Stress on: Autonomic Nervous System (ANS), Endocrine System, Hypothalamus, Cerebral Cortex and Neurohumours. Mechanism of Stress related diseases: Psychic, Psychosomatic, Somatic and Organic phase.

UNIT - V STRESS CONTROL PRACTICES:

Role of Meditation & Pranayama on stress – physiological aspect of Meditation. Constant stress & strain, anxiety, conflicts resulting in fatigue among Executive. Stress control exercise – Sitting meditation, Walking meditation, Progressive muscular relaxation, Gentle stretches and Massage.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Contribution of Yoga to solve the stress related problems of Executive.

REFERENCES:

1. Andrews, Linda Wasmer. (2005). *Stress Control for peace of Mind*. London: Greenwich Editions

2. Bhowmil, Sanjib kumar. (2012). *A text book on Yoga and Health*. Delhi: Sports publication.
3. Iyengar, B.K.S. (2001). *Yoga the path to holistic health*, Dorling Kindersley.
4. Lalvani, Vimla., (1998). *Yoga for stress*. London: Hamlyn
5. Nagendra, H.R., and Nagarathana, R., (2004). *Yoga perspective in stress management*. Bangalore: Swami VivekanandaYoga Prakashana.
6. Iyengar, BKS., (2003). *The Art of Yoga*. New Delhi: Harper Collins Publishers.
7. Nagendra, H.R., and Nagarathana, R., (2004). *Yoga practices for anxiety & depression*. Bangalore: Swami Sukhabodhanandha Yoga Prakashana.
8. Sukhabodhanandha, Swami., (2002). *Stress Management*. Bangalore: Prasanna trust.
9. Udupa, K.N., (1996). *Stress management by Yoga*. New Delhi: Motilal Banaridass Publishers Private Limited.
10. www.ayush.gov.in
11. www.yogamdniy.nic.in

COURSE OUTCOMES:

- Understood the fundamental concepts of health.
- Studied the basics of stress.
- Provided knowledge on various yogic text relevant to stress.
- Learned the basics of physiology of stress.
- Acquired the knowledge on stress control practices.

COURSE OBJECTIVES:

- To know the fundamental of entrepreneurship.
- To provide the basic of types of entrepreneurship.
- To study the concept of business.
- To give an idea about entrepreneurship in the sports goods.
- To educate on entrepreneurship in sports management.

UNIT – I INTRODUCTION TO ENTREPRENEURSHIP:

Meaning and definition of entrepreneurship. Concept and characteristics of entrepreneurship. Need and importance of entrepreneurship. Understanding Sports Business industry.

UNIT – II TYPES OF ENTREPRENEURSHIP:

Understanding the entrepreneurship process. Types of entrepreneurship. Risk and rewards in entrepreneurship. Leading sport companies and media channels.

UNIT – III BUSINESS:

Identifying the area of business. Understanding financial aspects of the business. Government and private organizations supporting entrepreneurs in India. Generating / arrangement funds for the business.

UNIT - IV ENTREPRENEURSHIP IN SPORTS GOODS:

Entrepreneurship in the sports goods /equipment. Entrepreneurship in sports wears.

UNIT – V ENTREPRENEURSHIP IN SPORTS MANAGEMENT:

Entrepreneurship in sports management / event management. Entrepreneurship in sports software / fitness / nutrition.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Sports Businesses and start-ups in India.

REFERENCES:

1. Ferreira, João J. and Ratten, Vanessa (2017). *Sport Entrepreneurship and Innovation*. Eds Oxon: Taylor & Francis
2. Ratten, Vanessa (2019). *Sport Entrepreneurship and Public Policy Building a New Approach to Policy-making for Sport*. Melbourne: Springer International Publishing.

9. Giuseppina Maria Cardella, Brizeida Raquel Hernández-Sánchez, and José Carlos Sánchez-García (2021). Entrepreneurship and Sport: A Strategy for Social Inclusion and Change. *Int J Environ Res Public Health*. May; 18(9): 4720
10. Ratten, Vanessa (2018). *Sport Entrepreneurship - Developing and Sustaining an Entrepreneurial Sports Culture*, Melbourne: Springer International Publishing.
11. Ratten, Vanessa (2020). *Sport Entrepreneurship - An Economic, Social and Sustainability Perspective*. Eds. Bingley: Emerald Publishing Limited.
12. Smith, David (2017). *Sports Entrepreneur: A Guide to Bring Your Sports Product or Service Business Idea to Life*, London: B180 Basketball, Inc
13. <https://www.elgaronline.com/view/edcoll/9781783473946/9781783473946.xml>

COURSE OUTCOMES:

- Attained knowledge on the fundamental of entrepreneurship.
- Provided the basic of types of entrepreneurship.
- Studied the concept of business in detail.
- Given fair idea about entrepreneurship in the sports goods.
- Educated on entrepreneurship in sports management.

COURSE OBJECTIVES:

- To impart the theoretical knowledge on wide range such as origin and development of track and field events.
- To learn the marking of track and field events.
- To study the rules and their interpretations of track and field events.
- To understand the mechanics of officiating in track and field events.
- To give basic knowledge of organization set-up of athletics.

UNIT – I HISTORY:

Origin and development of track and field events.

UNIT – II MARKING:

Layout & markings of 200 and 400 metres track. Marking for field events.

UNIT – III RULES AND REGULATION:

Rules and their interpretations of all track and field events including Combined events, Steeple chase and Cross country.

UNIT – IV MECHANICS OF OFFICIATING:

Duties of officials – official signals, score sheet – all track and field events including Combined events, Steeple chase and Cross country.

UNIT – V SPORTS FEDERATION / ASSOCIATION:

Organisational setup of International, national and state level federations / association. Marathon race. Major competitions. World and Olympic records.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Sports Meet organization. Various committees involved in sports meet organization. Project meet.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Bosen, Ken O. (1994). *Track & Field Fundamental Techniques*, Patiala: MS Publication.
4. Conling, David, (1980) *Athletics*, London: Robert Hale

5. Joseph, Rogers L. (2000) *USA Track & Field Coaching Manual*. Champaign: Human Kinetics Publications.
6. Mariayyah,P., (2005). *Track and Field*, Coimbatore: Teachers publication.
7. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication.
8. <https://www.iaaf.org/>

COURSE OUTCOMES:

- Attained knowledge on the history of track and field events.
- Learned the marking of track and field events.
- Studies the rules / laws and their interpretation of track and field events.
- Understood the mechanics of officiating in track and field events.
- Gained knowledge on organizational set-up of athletics.

COURSE OBJECTIVES:

- To study the fundamental and advance skills in field events.
- To learn basics of assessment and training methods.
- To understand the marking techniques for field events.
- To educate on rules and their interpretation of field events.
- To impart knowledge history and organizational set-up at various levels.

UNIT – I FUNDAMENTAL AND ADVANCE SKILLS:

Fundamental and advance skills, techniques, drills and lead-up games for jumps throws and combined events.

UNIT – II PERFORMANCE:

Assessment of performance – jumps, throws and combined events. Specific conditioning / training for above said events.

UNIT – III MARKING:

Markings of jumps, throws and combined events. Specific marking for jumps, throws and combined events. Equipment's and their specifications.

UNIT – IV OFFICIATING:

Rules and interpretations, duties of the officials, official signals and score sheet for jumps, throwing and combined events.

UNIT – V RECORD NOTE:

Preparation of record for jumps throwing and combined events. Technique and major competitions for jumps, throws and combined events. Organisational set-up at International, national and state level Olympic association. History, World & Olympic records and other major competitions.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Field events - Coaching camps, Training schedules for athletics, Selection trails, Competition and academies for athletics.

REFERENCES:

1. Anand. R.L. (1986). *Play field manual*, Patiala: NIS publication.
2. *Book of rules of games and sports*, (2005). New Delhi: National Council of Y.M.C.A of India.
3. Conling, David, (1980) *Athletics*, London: Robert Hale

4. Joseph, Rogers L. (2000) *USA Track & Field Coaching Manual*. Champaign: Human Kinetics Publications.
5. Perinbaraj, S.B., & et al. (2009). *Play field: Dimensions and its requirements*, Karaikudi: Vinis publication
6. <https://www.iaaf.org/>

COURSE OUTCOME:

- Studied the fundamental and advance skills in track events.
- Attained the knowledge on assessment and training methods.
- Understood the basics of marking in track events.
- Learned the rules and their interpretation of track events.
- Got clear idea about history and organizational setup at various levels.

COURSE OBJECTIVES:

- To impart the fundamental concepts of adapted physical education.
- To acquire knowledge on event organisation.
- To study development of individual education programme.
- To learn the development considerations of an individual.
- To identify the individual with unique need and activities.

UNIT – I INTRODUCTION TO ADAPTED PHYSICAL EDUCATION:

Meaning, Definition and importance of adapted physical education and sports. Purpose, aims and objectives of adapted physical education.

UNIT – II EVENT ORGANISATION:

Programme organization of adapted physical education and sports. Organizations addressing and giving opportunities to people with disabilities. Adapted sports – Para Olympics and other opportunities.

UNIT – III DEVELOPMENT OF INDIVIDUAL EDUCATION PROGRAMME:

The student with a disability. Components and development of IEP. Principles of adapted physical education and sports. Role of physical education teacher.

UNIT – IV DEVELOPMENT CONSIDERATIONS OF AN INDIVIDUAL:

Motor development. Perceptual motor development. Early childhood and adapted physical education. Teaching style, method and approach in teaching adapted physical education.

UNIT – V INDIVIDUAL WITH UNIQUE NEED AND ACTIVITIES:

Behavioural and special learning disability. Visual impaired and deafness. Health impaired students and physical education. HRPF and its development for individual with unique need. Role of games and sports in adapted physical education.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Adapted Physical Education Information/Resources.

REFERENCES:

1. Beverly, N (1986). *Moving and Learning*. Times Mirror/ Mosby College Publishing.
2. Carrty, B.J. (1989). *Adapted Physical Education in the mainstream* (4th Edition) Love Publishing Company

3. Housner, L.D. (2010). *Integrated Physical Education – A guide for the elementary classroom teacher*. 2nd Eds. U.S.: Fitness Information Technology Inc.,
4. Winnick, J.P. (2005). *Adapted Physical Education and Sports*. 4th Eds. U.S.: Human Kinetics
5. <https://www.readpbn.com/pdf/Adapted-Physical-Education-And-Sport-Sample-Pages.pdf>
6. <https://www.pecentral.org/adapted/adaptedmenu.html>

COURSE OUTCOME:

- Knowledge on the basics of adapted physical education was given.
- Attain knowledge on event organization.
- Studied the development of individual education programme.
- Learned the development considerations of an individual.
- Gained fair idea about the individual with unique need and activities.

COURSE OBJECTIVES:

- To provide basic knowledge on talent identification.
- To study the fundamental of body types.
- To know the basics of anthropometry and kinanthropometry.
- To provide an idea about basic and length measurements.
- To impart basic concept of body diameters / circumference.

UNIT – I INTRODUCTION TO TALENT IDENTIFICATION:

Meaning of talent identification. Need and importance of talent identification. Principles of talent identification, Scope of talent identification. Role of Physical Education teacher / coach in talent identification. Talent Identification in sports and games.

UNIT – II UNDERSTANDING HUMAN BODY:

Genetics and Environment and their role in sports performance. Body types and their relation to sports.

UNIT – III ANTHROPOMETRY AND KINANTHROPOMETRY:

Meaning and Definition of anthropometry and kinanthropometry. Relation between kinanthropometry and anthropometry. Applications of kinanthropometry. Relevance of Kinanthropometry in Physical Education and research.

UNIT – IV LENGTH MEASUREMENT:

Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Methods of measuring weight. Length measurement - Leg length - Upper leg length - Lower leg length.

UNIT – V DIAMETERS / CIRCUMFERENCE MEASUREMENTS:

Method of measuring diameters / circumference: Arm, Waist, Hip, Thigh. Skeletal Diameters - Knee Diameters - Ankle Diameter.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Method of measuring Body Girths: Body Girths - Calf girth - Thigh Girths - Hip Girths.

REFERENCE BOOKS:

1. Harre, Dietrich, (ed). (1982) *Principles of sports training*. Berlin. Sportverlag,

2. James A. P. Day. (1986). *Perspectives in Kinanthropometry*. Virginia: Human Kinetics Publishers.
3. John Mclester & Peter St. Pierre. (2008). *Applied Bio-Mechanics Concepts & Connections*. Canada: Thomson Wadsworth.
4. Matreyev, I. (1982) *Fundamentals of sports training*. Berlin. Sportverlag,
5. Harminder Singh Sodhi & L. S. Sidhu. (1984). *Physique and Selection of Sportsmen: A Kinanthropometric Study*. Punjab: Punjab Publishing House.
6. Singh, Hardayal, (1995). *Science of Sports training*. New Delhi: D.V.S. Publications.
7. <https://www.isak.global/>

COURSE OUTCOMES:

- Attained knowledge on talent identification.
- Given fair idea about the fundamental of body types.
- Learned the basics of anthropometry and kinanthropometry.
- Studied the basic and length measurements.
- Gained basics of body diameters / circumference.

Code:**Credit: 3**

The candidate shall be required to take up a Project Work by group or individual and submit it at the end of the final year. The Head of the Department shall assign the Guide who, in turn, will suggest the Project Work to the students in the beginning of the final year. A copy of the Project Report will be submitted to the University through the Head of the Department on or before the date fixed by the University.

The Project will be evaluated by an internal and an external examiner nominated by the University. The candidate concerned will have to defend his/her Project through a Viva-voce.

ASSESSMENT/EVALUATION/VIVA VOCE:**1. PROJECT REPORT EVALUATION (Both Internal & External)**

I. Plan of the Project - 20 marks

II. Execution of the Plan/collection of Data / Organisation of Materials / Hypothesis, Testing etc and presentation of the report. - 45 marks

III. Individual initiative - 15 marks

2. Viva-Voce / Internal & External - 20 marks

TOTAL - 100 marks

PASSING MINIMUM:

Project	Vivo-Voce 20 Marks 40% out of 20 Marks (i.e. 8 Marks)	Dissertation 80 Marks 40% out of 80 marks (i.e. 32 marks)
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A candidate who gets less than 40% in the Project must resubmit the Project Report. Such candidates need to defend the resubmitted Project at the Viva-voce within a month. A maximum of 2 chances will be given to the candidate.

COURSE OBJECTIVES:

- To provide the practical knowledge of meditative and relaxative asanas.
- To know the selected cultural asana techniques practically.
- To understand the techniques of suryanamaskara.
- To study the basics of selected pranayamas techniques.
- To learn the selected meditation practices.

UNIT - I MEDITATIVE AND RELAXATIVE ASANAS:

Loosening exercises. Prayer.Meditative Asanas: Sukhasana, Siddhaasana (or) Siddhayoniasana, Ardha Padmasana. Relaxative Asanas: Advasana, Matsya Kridasana, Jyestikasana

UNIT - II CULTURAL ASANAS:

Cultural Asanas: Ardha Katti Chakarasana, Pada Hastasana, Utkattasana, Parivruuthu Trikonasana, Garudasana, Bakasana, Sithilai Tadasana, Ardha Chakrasana, Vrksasana, Trikonasana, Natarajasana, Virabhadrasana

UNIT - III SURYA NAMASKARA:

Surya Namaskara. (12 counts)

UNIT-IV PRANAYAMAS:

Pranayamas: Suha Pranayama, Chandra Bhedana Pranayama, Sitkari Pranayama, Surya Bhedana Pranayama, Sitali Pranayama.

UNIT - V MEDITATION:

Preparation for Meditation, (sitting in meditative Asanas with concentration on Tip of the Nose and Centre of eye brow) pranadarana (Body awareness).Yoga Nidra.

UNIT – VI CURRENT CONTOURS (For continuous internal assessment only):

Kriyas: Kaphalabhathi, Trataka, Neti -JalaNeti, Sutra Neti, Dhauthi.Mudras

REFERENCES:

1. Bhowmil, Sanjib kumar. (2012). *A text book on Yoga and Health*. Delhi: Sports publication.
2. Iyengar, B.K.S. (2001). *Yoga the path to holistic health*, Dorling Kindersley.

3. Maguire, Imelda, (2005) *Yoga for a Healthy Body*. London: Greenwich Editions.
4. Chandrasekaran, K., (1999). *Sound Health through Yoga*. Sedapatti: Prem Kalyan Publications.
5. Iyengar, BKS., (2003). *The Art of Yoga*. New Delhi: Harper Collins Publishers.
6. Mariayyah, P., (2000). *Suriyanamaskar*. Perunthurai: Jaya Publishing House.
7. Ravishankar. N.S., (2001). *Yoga for Health*. New Delhi: Pustak Mahal.
8. Tummers, Nanette, E., (2009) *Teaching Yoga for Life*. Champaign: Human Kinetics.
9. Yogendra, Hansa Jayadeva and Desai, Armaiti Neriosand., (1991) *Yoga for back and joint disorders*. Mumbai: Dr.Jayadeva Yogendra for the yoga institute.
10. www.ayush.gov.in
11. www.yogamdniy.nic.in

COURSE OUTCOMES:

- Provided the practical knowledge of meditative and relaxative asanas.
- Acquired knowledge on the selected cultural asana techniques practically.
- Understood the suryanamaskara techniques.
- Studied the basics of selected pranayamas techniques.
- Learned the selected meditation practices.

COURSE OBJECTIVES:

- To provide the practical knowledge of asanas with sitting postures.
- To know the asanas with prone postures techniques practically.
- To understand the asanas with supine postures techniques.
- To study the basics of selected pranayamas techniques.
- To learn the selected meditation practices.

UNIT - I ASANAS - SITTING POSTURES:

Sitting Postures: Machiyasana, Sasangasana, Parvatasana, Dandasana, Janu Sirshasana, Ardha Padma Pachimottasana, Ustrasana, Baddha Padmasana, Tolasana Tolangulasana, Supta Vajrasana, Vakrasana, ArdhaSirsasana, Baddha Konasana, Sithilai Dandasana, ArdhaUstrasana, Yoga Mudra, Saithalyasana, Gomukasana, Veerasana, Baddha Padmasana.

UNIT - II ASANAS - PRONE POSTURES:

Prone Postures: Salabhasana, Naukasana, Ardha Salabasana, Sarpasana.

UNIT - III ASANAS - SUPINE POSTURES:

Supine Postures: Navasana, Viparitha Karani, Uttana Padasana, Chakrasana Tolangulasana, Matsyasana, Ardha Padma Halasana, Sethu Bandhasana, Pawanamuktasana, Padma sarvangasana, Marjariasana, ArdhaHalasana, UttanaPadasna

UNIT - IV PRANAYAMAS:

Pranayamas: Chandra Anuloma Viloma, Nadi Shodhana, Surya Anuloma Viloma Pranayama, Bharamari Pranayama.

UNIT - V MEDITATION:

Meditation: Silent, Mantra, Object and Breathing. Zen Meditation, TM

UNIT - VI CURRENT CONTOURS (For continuous internal assessment only):

Bandha: Uddiyana Bandha, Jalandhara Bandha, Mula Bandha, Maha Bandha

REFERENCE BOOKS:

1. Andrews, Linda Wasmer., (2005). *Stress Control for peace of Mind*. London: Greenwich Editions
2. Bhowmil, Sanjib kumar. (2012). *A text book on Yoga and Health*. Delhi: Sports publication.
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4. Lalvani, Vimla., (1998). *Yoga for stress*. London: Hamlyn
5. Nagendra, H.R., and Nagarathana, R., (2004). *Yoga perspective in stress management*. Bangalore: Swami Vivekananda Yoga Prakashana.
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12. www.yogamdniy.nic.in

COURSE OUTCOMES:

- Provided the practical knowledge of asanas with sitting postures.
- Acquired the asana with prone postures techniques practically.
- Understood the asana with supine postures techniques.
- Studied the basics of selected pranayamas techniques.
- Learned the selected meditation practices.
