

University of Kalyani

Kalyani, Nadia

Accredited by NAAC ('A' Grade)



Department of Physical Education

Recognized by NCTE

Bachelor of Physical Education Course

2021-2023



Information Brochure

(Including Syllabi)

Department Of Physical Education University Of Kalyani

About The University

University of Kalyani was established in the year 1960 with a sprawling campus over 324 acres of land. By now, The University has completed almost six decades of commendable existence in the arena of Higher Education. Territorial jurisdiction of the University of Kalyani, by order of the Govt. spans from the entire district of Murshidabad and the entire district of Nadia and a small police station i.e. Bijpur, in the district of North 24 Paraganas. During these six decades of journey the University has been able to evolve itself as one of the reach Centre of Higher Education in the state of West Bengal.

Presently the University has more than fifty five undergraduate colleges including two Law colleges under its affiliation and three of the under graduate colleges have been granted permission to impart Post Graduate level education in selected subjects.

Over the years the University has grown into an institution with a very strong administrative set-up, adequately qualified faculties, quality researchers and more than 3000 strong and willing students.

About respective Department:

- ▶ Department of Physical Education under University of Kalyani started as a teaching department in 1963. It has the unique distinction of being pioneer, with only two other universities in India, in starting a teaching course in Physical Education as a University Department.
- ▶ Department has started courses with 19 students and the student strength increased to 25 with five women students in 1965. It has been increased to 65 in 1974. With introduction of Physical Education as a compulsory subject in the Secondary Education Curriculum, to meet the huge demand, the University has increased the student strength to 80 including 20 women students in 1977.
- ▶ The department started B.P.Ed. Course of four semesters under NCTE regulation 2014 from 2015-2017batch. Similarly the department has also received NCTE recognition for M.P.Ed. Course with the intake of 40 students from 2015-2017 batch.

1.Mission & Vision of the Departments:

The Department has kept the visions with distinct objectives:

- a.To develop knowledge and management skill for efficient functioning as
 - i.Professional leaders for educational institution;
 - ii.Recreational leaders;
 - iii. Organizers and managers for sports and games;
- b. To help in acquiring a depth of knowledge of academic discipline of Physical Education.
- c. To develop professional competence and sense of dedication;
- d. To foster and promote research in Exercise and Health Science;
- e. To provide leadership for the development of Physical Education as an integral part in all levels of educational system;

- f. To provide facilities and organizational infrastructure for sports activities of the general students and employees of the University and its feeder areas and
- g. To fulfill professional requirement for Physical Education and Sports of the State and the Region.

2. Course offered

- i. Two-year Bachelor course of Physical Education (B.P.Ed)
- ii. Two-year Master course of Physical Education.(M.P.Ed)
- iii. Two-year M.Phil Course of Physical Education
- iv. Six Months Course work for Ph.D. & M.Phil students

3. Teaching Plan:

In our Department B.P.Ed and M.P.Ed programme is running semester system wise. There are four semester in each course, one semester ends after six months. There are theoretical as well as practical classes. Practical class start from 5.55 am up to 8.00am and from 4.00pm to 5.40 pm. Theoretical classes lasts from 10.40 am to 2.10 pm. The department has multipurpose gymnasium hall utilized for the purpose of badminton, table tennis, gymnastics and yoga besides outdoor facilities like volleyball court, football ground and 400m athletic track for conducting practical classes as well as several team preparatory classes for university level participation.

Library: University Central Library – Main library facilities lie in the University Central Library.

4. Student intake:

B.P.Ed-50

M.P.Ed-40

M.Phil-10

Ph.D- As per UGC norms

Department Of Physical Education University Of Kalyani

Our Faculty Members

1	Dr. Susanta Sarkar (HOD)	9748511599	sankar.sarkar246@gmail.com
2	Prof. Madhab Chandra Ghosh	9433828586	madhabg573@rediffmail.com
3	Dr. Saikot Chatterjee	9475675255	saikotchatterjee@gmail.com
4	Dr. Nita Bandyopadhyay	9474365375	nitabandyopadhyay@gmail.com
5	Mr. Pathikrit Bandopadhyay	9836347627	pbandopadhyayku@gmail.com
6	Ms. Laden Lepcha	9734146244	laadean67@gmail.com

Sports Division

1	Dr. Susanta Sarkar	Director	9748511599
2	Mr. Kamal Krishna Das	Coach (Kho-Kho & Kabaddi)	8648084676
3	Mr. Hari SadhanBetal	Physical Instructor	9432863683
4	Dr. Tanmoy Saha	Physical Instructor	9432960917
5	Mr. SubhenduBauli	Coach(Gymnastics)	9804188991
6	Mr. Suman Ch. Roy	Physical Instructor	9831946536

Members of Yoga Centre

1 Mr. Pratap Santra Yoga Instructor 9804409958 **Non-Teaching Staff:**

	Name	Designation
1.	Subinoy Chakraborty	Junior Assistant
2.	Santanu Guha	Senior Assistant
3.	Bhabotosh Biswas	Office Attendant
4.	Amal Roy	Lab Attendant & Junior Assistant
5.	Kamal Mondal	Office Attendant
6.	Samir Nath	Junior Store keeper
7.	RupkamalSarkar	Ground Attendant
8.	Tarak Shyamal	Ground Attendant
9.	Asish Nandi	Ground Attendant
10.	Nirmal Tarafder	Ground Attendant
11.	SabitriBasfore	Sweeper

Important Phone No.:

1	University of Kalyani (EPBX)	033-2582-8750/8220/8348
2	Department of Physical Education	Extn. No. Office- 273,phone/Fax-033-2582-9925
3	Health Centre	268/269
4	Medical Officer	033-2582-9334
5	Banyan Hall (Jagadish Chandra Bhavan)	033-2582-3282
6	B.T. Hostel (Radha Krishnan Bhavan)	033-2582-3305
7	L.H.-I (Matangini Bhavan)	033-2582-8288
8	L.H.-II (Nivedita Bhavan)	033-2582-3451
9	L.H.-III (Lilabati Bhavan)	033-2582-3292
10	P.G.-I (Dwijendralal Bhavan)	033-2582-3284
11	P.G.-II (Vivekananda Bhavan)	033-2582-3294
12	P.G.-III (MeghnadSaha Bhavan)	033-2582-3283
13	Research Scholar Hall (Satyendranath Bhavan)	033-2582-3293

Some important information / guide lines

- ❖ The course is residential
 - ❖ Morning activity classes commence from 6.00 a.m.
 - ❖ Theory classes are held from 10.40 a.m. to 2.10 p.m.
 - ❖ Afternoon activity classes commence from 4.20 p.m. during summer months and 3.40 p.m. during winter months.
 - ❖ Appropriate sportswear required for practical classes.
-
- **Never be late.**
 - **Never be absent.**
 - **Maintain strict discipline of the Department.**
 - **Be regular in your studies.**
 - **Do not leave the campus without permission of the authority.**

Departmental Program:

- ▶ Fresher's Welcome
- ▶ Celebration of Independence Day
- ▶ Celebration of Teachers' Day
- ▶ Sports Day celebration
- ▶ Intramural Program
- ▶ International Yoga Day Celebration
- ▶ Annual Camp
- ▶ Annual Reunion
- ▶ Departmental Tour
- ▶ Departmental Picnic
- ▶ Academic Exchange Program
- ▶ Adventures Sports
- ▶ Observation of Republic Day
- ▶ Farewell Program

Semester I

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
BCC-101	History, Principles and foundation of Physical Education & Olympic Movement	4	4	30	70	100
BCC-102	Anatomy and Physiology	4	3+1=4	30	70	100
BCC-103	Health Education and Environmental Studies	4	4	30	70	100
Elective Course (Any one)						
BECC-101	Sports Management	4	4	30	70	100
BECC-102	Officiating and Coaching					
Part-B Practical Course						
BPCC-101	Track & Field (Running & Jumping events only Long jump & Triple Jump)	6	2+2=4	30	70	100
BPCC-102	Gymnastics/Swimming/ Shooting (any one)	6	2+2=4	30	70	100
BPCC-103	Indigenous Sports: Kabaddi / Malkhambh/ Lezim / March past (any two)	6	2+2=4	30	70	(50+50)=100
BPCC-104	Mass Demonstration Activities: Kho-Kho / Dumbbells / Tipri / Wands / Hoops /Umbrella (any two)	6	2+2=4	30	70	(50+50)=100
Total		40	32	240	560	800

Semester II

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
BCC-201	Yoga Education & Inclusive Education	4	2+2=4	30	70	100
BCC-202	Educational Technology and Methods of Teaching in Physical Education	4	2+2=4	30	70	100
BCC-203	Test, Measurement and Evaluation	4	3+1=4	30	70	100
Elective Course (Any one)						
BECC-201	Contemporary issues in Physical Education, Fitness and Wellness	4	4	30	70	100
BECC-202	Sports Nutrition and Weight Management					
Part-B: Practical Course						
BPCC-201	Track and Field (Throwing & Vertical Jump)	6	2+2=4	30	70	100
BPCC-202	Gymnastics or Swimming	6	4	30	70	100
BPCC-203	Racket Sports: Badminton/ Table Tennis/ Squash/ Tennis (any two)	6	2+2=4	30	70	(50+50)=100
Part – C: Teaching Practices						
BTPCC-201	Internal Teaching (Classroom Teaching- 5, Field Activities- 5 : General and Specific lessons)	6	2+2=4	30	70	(50+50)=100
Total		40	32	240	560	800

Semester III

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
BCC-301	Sports Training (with applications)	4	3+1=4	30	70	100
BCC-302	ICT in Physical Education & Sports Sciences (with applications)	4	3+1=4	30	70	100
BCC-303	Sport psychology & Sociology (with experiments)	4	3+1=4	30	70	100
Elective Course (Any one)						
BECC-301	Sports Medicine, Physiotherapy & Rehabilitation	4	3+1=4	30	70	100
BECC-302	Curriculum Design					
Part-B: Practical Course						
BPCC-301	Volleyball and Hockey	6	2+2=4	30	70	(50+50)=100
BPCC-302	Combative Sports: Karate/ Judo/ Boxing/Lathi/ Taekwondo/ Wrestling (Any one)	6	2+2=4	30	70	(50+50)=100
BPCC-303	Team Games: Baseball/ Cricket/ Football/ Hockey/ Softball/ Handball/ Basketball/ Netball (Any two of these)	6	2+2=4	30	70	(50+50)=100
Part – C: Teaching Practices						
BTPCC-301	Ten Teaching Lessons (on Practical Activities taught, out of which six lessons internal and four lessons external at nearby institutions)	6	4	30	70	(50+50)=100
Total		40	32	240	560	800

Semester IV

Part-A: Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
BCC-401	Theories of Games & Sports	4	4	30	70	100
BCC-402	Kinesiology and Biomechanics	4	3+1=4	30	70	100
BCC-403	Research and Statistics in Physical Education	4	3+14	30	70	100
Elective Course (Any one)						
BECC-401	Adapted Physical Education	4	2+2=4	30	70	(50+50)=100
BECC-402	Physical Literacy					
Part-B: Practical Course						
BPCC-401	Softball and Youth Fitness test	6	2+2=4	30	70	(50+50)=100
BPCC-402	Sports specialization: Kabaddi/ Kho-Kho/ Cricket/ Football/ Volleyball/ Handball/ Basketball/ Netball/ Badminton/ Table Tennis/ Tennis (Any one of these)	6	4	30	70	100
Part – C: Teaching Practices						
BTPCC-401	Sports specialization: Coaching lessons Plans (One from Sports 5 lessons)	6	4	30	70	100
BTPCC-402	Games specialization: Coaching lessons Plans (One from Games 5 lessons)	6	4	30	70	100
Total		40	32	240	560	800
		160	128	960	2240	3200

DETAILED SYLLABUS

B. P. Ed.

Semester – I

Theory Courses

Subject: - HISTORY, PRINCIPLES AND FOUNDATION OF PHYSICAL EDUCATION AND OLYMPIC MOVEMENT

Course Code: BCC-101

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I: Principles of Physical Education

- Meaning, Definition and Scope of Physical Education Aims and Objective of Physical Education Misconceptions about Physical Education.
- Relationship of Physical Education with General Education.
- Physical Education as an Art and Science.

Unit–II: Historical Development of Physical Education in India

- Indus Valley Civilization Period. (3250 BC – 2500 BC)
- 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) with reference to development of Physical Education in West Bengal
- Contribution of Akhadas, Vyayamshals and Bratachari Movement

Unit- III: Foundation of Physical Education

○Philosophical foundation:

Idealism, Pragmatism, Naturalism, Realism, Humanism and Existentialism

○Biological Foundation:

Evolution of Man, Biped Position: Advantages and Disadvantages, Age, Gender characteristics, Body Types, Anthropometric differences

○Psychological Foundation:

Learning types, Learning curve, Laws and principles of learning, Attitude, Interest, Cognition, Emotions

○ Sociological Foundation:

Socialization through Physical Education

Leadership

Social Integration, Cohesiveness and facilitation

Unit- IV: Olympic Movement

Origin of Olympic Movement, History of ancient Olympic movement, Significant stages in the development of the modern Olympic Movement, Modern Olympic Games, Significant of Olympic Ideals, Olympic Flag, Olympic Rings, Olympic Oath, Olympic Code of Ethics, IOC and its Structure and Function.

References:

1. Bucher, C. A. (n.d.) *Foundation of physical education*. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014). *Physical Education in Ancient India*. Amravati: Degree college of Physical education.
3. Mohan, V. M. (1969). *Principles of physical education*. Delhi: Metropolitan Book Dep.
4. Nixon, E. E. & Cozen, F.W. (1969). *An introduction to physical education*. Philadelphia: W.B. Saunders Co.
5. Obertuffer, (1970). *Delbert physical education*. New York: Harper & Brothers Publisher.
6. Sharman, J. R. (1964). *Introduction to physical education*. New York: A.S. Barnes & Co.
7. William, J. F. (1964). *The principles of physical education*. Philadelphia: W.B. Saunders Co.

Semester – I

Theory Courses

Subject: - ANATOMY AND PHYSIOLOGY

Course Code: BCC-102

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30) Unit-I

- 1.1. Brief Introduction of Anatomy and physiology in the field of Physical Education, Elementary concept of cell and tissue. Definition of physiology and its importance in the field of physical education and sports.
- 1.2. Introduction of Cell –concept, difference between prokaryotic and eukaryotic cell, Concept of protoplasm and cytoplasm.
- 1.3. Different cellular organelles- mitochondria, lysosome, endoplasmic reticulum, Golgi bodies(location, elementary structure and functions only)
- 1.4. Tissue- Different types and functions only. Anatomical and physiological differences between male and female.

Unit-II

- 2.1 **Blood and circulatory system:** Constituents of blood and their function –Blood groups and blood transfusion, clotting of blood, the structure of the heart-properties of the heart muscle, circulation of blood, cardiac cycle, blood pressure. Cardiac output.-elementary concept
- 2.2 **The Respiratory system:** The Respiratory passage – the lungs and their structure and exchange of gases in the lungs, mechanism of respiration (internal and external respiration) lung capacity, tidal volume.
- 2.3 **Muscular System:** Structure, Composition, Properties and functions of skeletal muscles. Different types of muscle-cardiac, skeletal and smooth there difference and functions. Concept of Red and white muscle.
- 2.4 **Skeletal System:** Structure of bones and its different types, concept of Axial and Appendicular skeleton, Name of the bones of the skeleton system (only names, detail structure are excluded), Functions of Vertebral column, rib cage, skull. Elementary concept of joint, ligament and tendon.

Unit-III

- 3.1 **The Endocrine glands:** Functions of glands pituitary, Thyroid, Adrenal, Pancreatic glands.
- 3.2 **Nervous systems:** Structure of neurons, Elementary concept of nervous system, function of the Autonomic nervous system and Central nervous system. Reflex Action-concept and types only.
- 3.3 **The Digestive system:** Structure and functions of the digestive system, Digestive organs, Digestion process of carbohydrate, protein and fat. Elementary concept of metabolism.
- 3.4 **The Excretory system:** Structure and functions of the kidneys and nephrons, Mechanism of urine formation

Unit-IV

- 4.1 Effect of exercise and training on cardiovascular system.
- 4.2 Effect of exercise and training on respiratory system.
- 4.3 Effect of exercise and training on muscular system
- 4.4 Physiological concept of physical fitness, warming up, conditioning and fatigue. Concept of EPOC, O₂ debt and Second wind

References:

1. Gupta, A. P. (2010). *Anatomy and physiology*. Agra: SumitPrakashan.
2. Gupta, M. and Gupta, M. C. (1980). *Body and anatomical science*. Delhi: Swaran Printing Press.
Guyton, A.C. (1996). *Textbook of Medical Physiology*, 9th edition. Philadelphia: W.B. Saunders.
3. Karpovich, P. V. (n.d.). *Philosophy of muscular activity*. London: W.B. Saunders Co. Lamb, G. S. (1982). *Essentials of exercise physiology*. Delhi: Surjeet Publication.
4. Moorthy, A. M. (2014). *Anatomy physiology and health education*. Karaikudi: Madalayam Publications.
5. Morehouse, L. E. & Miller, J. (1967). *Physiology of exercise*. St. Louis: The C.V. Mosby Co. Pearce, E. C. (1962). *Anatomy and physiology for nurses*. London: Faber & Faber Ltd.
6. Sharma, R. D. (1979). *Health and physical education*, Gupta Prakashan.
7. Singh, S. (1979). *Anatomy of physiology and health education*. Ropar: Jeet Publications.

Semester – I

Theory Courses

Subject: - HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

Course Code: BCC-103

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I: Health Education

- Concept, Dimensions, Spectrum and Determinants of Health

- Definition of Health, Health Education, Health Instruction, Health Supervision
- Aim, Objective and Principles of Health Education
- Health Service and guidance instruction in personal hygiene

Unit – II: Health Problems in India

- Communicable and Non Communicable Diseases
- Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population,
- Personal and Environmental Hygiene for schools
- Objective of School Health Service, Role of Health Education in schools
- Health Services – Care of Skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

Unit – III: Environmental Science

- Definition, Scope, Need and Importance of Environmental Studies.
- Concept of Environmental Education, Historical background of Environmental Education,
- Celebration of various days in relation with environment.
- Plastic recycling & probation of plastic bag / cover.
- Role of school in environmental conservation and sustainable development.

Unit – IV: Natural Resources and related environmental issues

- Water resources, food resources and Land resources
- Definition, effects and control measures of: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution
- Management of environment and Govt. policies, Role of pollution control board.

References:

1. Agrawal, K.C. (2001). *Environmental biology*. Bikaner: Nidhi publishers Ltd.
2. Frank, H. & Walter, H., (1976). *Turners school health education*. Saint Louis: The C.V. Mosby Company.
3. Nemir, A. (n.d.). *The school health education*. New York: Harber and Brothers. Odum, E.P. (1971). *Fundamental of ecology*. U.S.A.: W.B. Saunders Co.

Semester – I
Theory Courses

Subject: - SPORTS MANAGEMENT (ELECTIVE)

Course Code: BECC-101

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30) Unit-I:

Introduction

- 1.1 Concept, Objectives of Management and related terms
- 1.2 Qualification and responsibilities of Physical Education teacher
- 1.3 Selection of pupil and their qualification
- 1.4 Program planning: Meaning, Importance, Principles of program planning in Physical Education.

Unit-II: Office Management, Record, Register & Budget

- 2.1 Office Management: Meaning, definition, functions and kinds of office management.
- 2.2 Records and Registers: Maintenance of attendance Register, Stock register, Cash register, Physical efficiency record, Medical examination Record.
- 2.3 Budget: Meaning, Importance of Budget making, Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.
- 2.4 Principles and Scope of Budgeting

Unit-III: Facilities & Time-Table Management

- 3.1 Facilities and Equipment management: Types of facilities: Infrastructure-indoor, outdoor.
- 3.2 Cure and Maintenance of School building, Gymnasium, Swimming pool, play fields, Play Grounds.
- 3.3 Equipment: Need, Importance, purchase, care and maintenance.
- 3.4 Time Table Management: Meaning, Need, Importance and Factor affecting time table.
- 3.5

Unit-IV: Organization of Competition

- 4.1 Importance of Tournament
- 4.2 Types of Tournament and its organizational structure – Knock-out, League or Round Robin, Combination and challenge Tournaments.
- 4.3 Athletic Meet: Planning Structure and Organization.
- 4.4 Sports Events, Intramurals & Extramural Planning and organization

References:

1. Ashton, D. (1968). *Administration of physical education for women*. New York: The Ronal Press Cl.
2. Bucher, C.A. *Administration of physical education and athletic programme*. 7th Edition, St.Louis: The C.V. Mosby Co.

3. Daughtrey, G. & Woods, J.B. (1976). *Physical education and intramural programmes, organisation and administration*. Philadelphia U.S.A. : W.B. Saunders Cp.
4. Earl, F. Z,& Gary, W. B. (1963).*Management competency development in sports and physical education*. Philadelphia: W. Lea and Febiger.

Semester – I
Theory Courses

Subject: - OFFICIATING AND COACHING (ELECTIVE)

Course Code: BECC-102

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit- I: Introduction of Officiating and coaching

- Concepts of officiating and coaching
- Importance and principles of officiating
- Relation of official and coach with management, players and spectators
- Measures of improving the standards of officiating and coaching

Unit- II: Coach as a Mentor

- Duties of coach in general, pre, during and post game.
- Philosophy of coaching
- Responsibilities of a coach on and off the field

- Psychology of competition and coaching

Unit- III: Duties of Official

- Duties of official in general, pre, during and post game.
- Philosophy of officiating
- Mechanics of officiating – position, singles and movement etc.
- Ethics of officiating

Unit- IV: Qualities and Qualifications of Coach and Official

- Qualities and qualification of coach and official
- General rules of games and sports
 - Eligibility rules of intercollegiate and inter-university tournaments, preparation of TA, DA bills
- Integrity and values of sports

References:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice Hall. Bunn,
2. J. W. (1972). *Scientific principles of coaching*. Englewood cliffs N. J. Prentice Hall. Dyson,
3. G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd. Dyson, 4.G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther,
5. J.D. (1965). *Psychology of coaching*. New York: Pre. Hall.
6. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.

Semester – II Theory Courses

Subject: - YOGA EDUCATION AND INCLUSIVE EDUCATION

Course Code: BCC-201

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit- I: Foundation of Yoga

- 1.1 Meaning and Definition of Yoga, Aims and Objectives of Yoga
- 1.2 The Yoga Sutras: General Consideration, Need and Importance of Yoga in Physical Education and Sports.
- 1.3 The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- 1.4 Yoga in the Bhagavadgita - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

Unit - II: Yoga Education and Yogic Practices

- 2.1 Effect of Asanas and Pranayamas on various system of the body.
- 2.2 Classification of Asanas with special reference to Physical Education and Sports influences of relaxative and meditative posture on various system of the body.
- 2.3 Types of Bandhas and Mudras, Type of Kriyas- Their benefits
- 2.4 Yoga as active healthy life, Yoga as Therapy

Unit - III: Introduction to Inclusive Education

- 3.1 Concept and history of Special Education, integrated education and Inclusive Education and their relationships Philosophical, Sociological, Economical and Humanitarian dimensions of Inclusive Education.
- 3.2 Factors affecting inclusion, Advantages of Inclusive Education for the individual and society.
- 3.3 Problems in inclusion in the class room situations; ways for overcoming the problems in inclusions. Review of existing educational programs offered in secondary school (General and Special School).
- 3.4 Class room management and organizations, curricular adaptations, learning designing and development of suitable TLM.

Unit – IV: Inclusion in Operation & Teacher Preparation for Inclusive School

- 4.1 Pedagogical strategies to respond to individual needs of students: Cooperative learning strategies in the class room, peer tutoring, social learning, buddy system, reflective teaching, multisensory teaching.
- 4.2 Technological Advancements and its applications- ICT, Adaptive and Assistive devices, equipments, aids and appliances.
- 4.3 Skills and competencies of teachers and teacher educators for secondary education in inclusive settings.
- 4.4 Teacher preparation for Inclusive Education in light of NCF, 2005. Characteristics of inclusive school.

References:

1. Brown, F. Y.(2000). *How to use yoga*. Delhi:Sports Publication.
2. Gharote, M. L. &Ganguly, H. (1988). *Teaching methods for yogic practices*.Lonawala: Kaixydahmoe.
3. Rajjan, S. M. (1985). *Yoga strentheningofrelexation for sports man*. New Delhi:Allied Publishers.
4. Shankar,G.(1998). *Holistic approach of yoga*. New
5. Delhi:Aditya Publishers. Shekar,K. C. (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra.

Semester – II

Theory Courses

Subject: - EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICALEDUCATION

Course Code: BCC-202

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I: Introduction

- 1.1 Education and Education Technology- Meaning and Definitions
- 1.2 Types of Education- Formal, Informal and Non- Formal Education.
- 1.3 Educative Process

1.4 Importance of Devices and Methods of Teaching and Class Management

Unit – II: Teaching Technique

- 2.1 Teaching Technique – Lecture method, Command method, Demonstration method, Imitation method, Project method etc. Teaching Procedure – Whole method, Whole – part – whole method, Part – whole method Command- Meaning, Types and uses in different situations.
- 2.2 Presentation Technique – Personal and Technical preparation
- 2.3 Verbal and Non-verbal Communication technique.
- 2.4 Bloom Taxonomy, AD Model. Blended learning.

Unit – III: Teaching Aids and Competition

- 3.1 Teaching Aids – Meaning, Importance and its criteria for selecting teaching aids. Community Aids, Co-curricular Aids
- 3.2 Teaching aids – Audio aids, Visual aids, Audio – visual aids,
- 3.3 Team Teaching – Meaning, Principles and advantage of team teaching.
- 3.4 Group Competition, Intramural and Extramural Competition

Unit – IV: Learning Designing and Teaching Innovations

- 4.1 Meaning, Type and principles of Learning Designing.
- 4.2 General and Specific Learning Designing, Simulation Teaching - Meaning, Types and steps of simulation teaching.
- 4.3 Meaning, Types and steps of Macro and Micro teaching.
- 4.4 Classification of Students

References:

1. Bhardwaj, A. (2003). *New media of educational planning*. New Delhi: Sarup of Sons. Bhatia, & Bhatia,
2. (1959). *The principles and methods of teaching*. New Delhi: Doaba House. Kochar, S.K. (1982). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
3. Sampath, K., Pannirselvam, A. & Santhanam, S. (1981). *Introduction to educational technology*. New Delhi: Sterling Publishers Pvt. Ltd.
4. Walia, J.S. (1999). *Principles and methods of education*. Jullandhar: Paul Publishers.

Semester –II

Theory Courses

Subject: Test, Measurement and Evaluation in Physical Education

Course Code: BCC-203

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit- I: Introduction to Test & Measurement & Evaluation

- Meaning of Test & Measurement & Evaluation in Physical Education
- Need & Importance of Test & Measurement & Evaluation in Physical Education
- Principles of Evaluation
- Criteria of good Test- Classification of test; Test construction; Steps in constructing knowledge test.

Unit- II: Physical Fitness Tests

- Physical Fitness, Concept and Types – (a) Barrow Motor Ability Test, (b) AAHPERD Youth Fitness Test, (c) Queen’s College Step Test, (d) J.C.R Test, (e) Surgent Test: P.F.I, (f) Kraus Weber Muscular Fitness Test, (g) Harvard Step Test

Unit- III: Sports Skill Tests

- a) Lockhart and McPherson badminton test
- b) Miller Wall Volley Test
- c) Harbans Hockey Test
- d) Cornish Handball Test
- e) Russel Launge Volleyball Test
- f) Johnson Basketball Ability Test
- g) McDonald Soccer Test

Unit- IV: Sports Skill Tests

- a) Grading- Concept of grading in Physical Education; Purpose of grading; Evaluation criteria.
- b) b)Posture Test- Iowa postural Test
- c) Social Efficiency Test- Social Distance Scale; McColys behavior rating scale

References:

1. Bangsbo, J. (1994). *Fitness training in football: A scientific approach*. Bagsvaerd, Denmark: Ho+Storm.
2. Barron, H. M., & Mchee, R. (1997). *A practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
3. Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi: D.V.S. Publications.

Semester –II

Theory Courses

Subject: CONTEMPORARY ISSUES IN PHYSICAL EDUCATION, FITNESS AND WELLNESS(ELECTIVE)

Course Code: BECC-201

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I Concept of Physical Education and Fitness

- Definition, Aims and Objectives of Physical Education, fitness and Wellness
- Importance and Scope of fitness and wellness
- Modern concept of Physical fitness and Wellness
- Physical Education and its Relevance in Inter Disciplinary Context.

Unit – II: Fitness, Wellness and Lifestyle

- Fitness – Types of Fitness and Components of Fitness
- Understanding of Wellness
- Modern Lifestyle and Hypo kinetic Diseases – Prevention and Management

- Physical Activity and Health Benefits

Unit – III: Principles of Exercise Program

- Means of Fitness development – aerobic and anaerobic exercises
- Exercises and Heart rate Zones for various aerobic exercise intensities
- Concept of free weight Vs Machine, Sets and Repetition etc
- Concept of designing different fitness training program for different age group.

Unit – IV: Safety Education and Fitness Promotion

- Health and Safety in Daily Life
- First Aid and Emergency Care, CPR and Heimlich Maneuver.
- Common Injuries and their Management
- Modern Life Style and Hypo-kinetic Disease –Prevention and Management

References:

1. Difiore, J.(1998). *Complete guide to postnatal fitness*. London: A & C Black,.
2. Giam, C.K & K.C. (1994). *Sport medicine exercise and fitness*. Singapore: P.G. Medical Book.
- 3.Mcglynn, G., (1993). *Dynamics of fitness*. Madison: W.C.B Brown. Sharkey,
- 4.B. J.(1990). *Physiology of fitness*, Human Kinetics Book.

Semester-II

Theory Courses

SPORTS NUTRITION AND WEIGHT MANAGEMENT (ELECTIVE)

Course Code: BECC-202

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I: Introduction to Sports Nutrition

- Meaning and Definition of Sports Nutrition
- Basic Nutrition guidelines
- Role of nutrition in sports
- Factor to consider for developing nutrition plan

Unit – II: Nutrients: Ingestion to energy metabolism

- Carbohydrates, Protein, Fat – Meaning, classification and its function
- Role of carbohydrates, Fat and protein during exercise
- Vitamins, Minerals, Water – Meaning, classification and its function
- Role of hydration during exercise, water balance, Nutrition – daily caloric requirement and expenditure.

Unit – III: Nutrition and Weight Management

- Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
- Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss
- Obesity – Definition, meaning and types of obesity,
- Health Risks Associated with Obesity, Obesity - Causes and Solutions for Overcoming Obesity.

Unit – IV: Steps of planning of Weight Management

- Nutrition – Daily calorie intake and expenditure, Determination of desirable body weight
- Balanced diet for Indian School Children, Maintaining a Healthy Lifestyle
- Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

References:

1. Bessesen, D. H. (2008). Update on obesity. *J ClinEndocrinolMetab.*93(6), 2027-2034.
2. Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091- 3096.
3. Chu, S.Y. & Kim, L. J. (2007). Maternal obesity and risk of stillbirth: a metaanalysis. *Am J ObstetGynecol*, 197(3), 223-228.
4. DeMaria, E. J. (2007). Bariatric surgery for morbid obesity. *N Engl J Med*,356(21), 2176- 2183.
5. Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA*. 299(3), 316-323.

Theory Courses

SPORTS TRAINING (WITH APPLICATIONS)

Course Code: BCC-301

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit – I: Introduction to Sports Training

- 1.1 Meaning and Definition of Sports Training, Aim and Objective of Sports Training
- 1.2 Principles of Sports Training and characteristics of sports training
- 1.3 Components of performance capacity
- 1.4 Means and Method of Sports Training

Unit – II: Process of development of motor fitness Components

- 2.1 Strength – Mean and Methods of Strength Development
- 2.2 Speed – Mean and Methods of Speed Development
- 2.3 Endurance - Mean and Methods of Endurance Development
- 2.4 Flexibility – Mean and Methods of Flexibility Development

Unit – III: Training Load, load dynamic and concepts of Technique & Tactics Strategies

- 3.1 Training Load- Concepts, Definition and Types of Training Load
- 3.2 Components of Training Load & Adaptation
- 3.3 Concepts of load dynamic and its principles
- 3.4 Concepts of Technique, skill, Tactics & Strategies

Unit – IV: Programming and Planning of Sports Training and Identification of talent in Sports

- 4.1 Periodization – Meaning, Definition and types, Aim and Objectives of Periodization
- 4.2 Content of Periods – Preparatory, Competition, Transitional etc.
- 4.3 Planning – Training sessions for Micro, Meso and Macro Cycles 4.4 Talent Identification, Steps and Principles of Talent Identification

References:

- 1. Dick, W. F. (1980).*Sports training principles*. London: Lepus Books.
- 2. Harre, D.(1982).*Principles of sports training*. Berlin: Sporulated.
- 3. Jensen, R. C.& Fisher, A.G. (1979). *Scientific basis of athletic conditioning*. Philadelphia: Lea and Fibiger, 2ndEdn.
- 4. Matvyew, L.P. (1981).*Fundamental of sports training*. Moscow: Progress Publishers. Singh, H. (1984).*Sports training, general theory and methods*. Patials: NSNIS.
- 5. Uppal, A.K., (1999).*Sports Training*. New Delhi: Friends Publication.

Theory Courses

ICT IN PHYSICAL EDUCATION & SPORTS SCIENCES (WITH APPLICATION)

Course Code: BCC-302

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30, Except Attendance Practical may be conducted on Internal.)

Unit – I: Introduction to Computer Application

- 1.1 Meaning, need and importance of information and communication technology (ICT).
- 1.2 Components of computer- input and output unit, storage unit, CPU, ALU, control unit
- 1.3 Use of Computers in teaching Physical Education
- 1.4 Software and their uses in Physical Education and Sports

Unit – II: MS Word

- 2.1 Introduction to MS Word
- 2.2 Preparation of MS Word document
- 2.3 Creating, saving and opening a document
- 2.4 Page setup, Paragraph alignment, Spelling and Grammar check, Bullets and Page number, Header and Footer, Footnote and Endnotes, Mail merge, printing option

Unit – III: MS Excel

- 3.1 Introduction to MS Excel
- 3.2 Creating, saving and opening spreadsheet
- 3.3 Creating formulas, Inserting Graph and Pictures, Printing option.
- 3.4 Format and editing features, adjusting columns width and row height for understanding charts.

Unit – IV: MS Power Point

- 4.1 Introduction to MS Power Point

- 4.2 Creating, saving and opening a ppt. file
- 4.3 Format and editing features, slide show, design, inserting slide number, picture, graph and table, Hyperlink.
- 4.4 Preparation of Power point Presentations and Animation.

References:

1. Irtegov, D. (2004). *Operating system fundamentals*. Firewall Media.
2. Marilyn, M.& Roberta, B.(n.d.).*Computers in your future*. 2nd edition, India: Prentice Hall.
3. Milke, M.(2007). *Absolute beginner's guide to computer basics*. Pearson Education Asia.
4. Sinha, P. K. & Sinha, P. (n.d.).*Computer fundamentals*. 4th edition, BPB Publication.

Theory Courses

SPORTS PSYCHOLOGY AND SOCIOLOGY (WITH EXPERIMENTS)

Course Code: BCC-303

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit -I: Introduction to Psychology

- 1.1 Meaning, Definition and scope of Sports Psychology
- 1.2 Biological basis of Human Behavior
- 1.3 States of Consciousness, Heredity and Environment
- 1.4 Attention and Interest, Psycho-social Aspects of Human Behavior in Relation to Physical Education and Sports.

Unit-II: Learning and Growth & Development

- 2.1 Meaning, Definition of learning & Motor learning and principles of Motor learning.
- 2.2 Factors of Learning, Learning Curve and its types& transfer of training- Definition and Types.
- 2.3 Growth and Development – Definition, Meaning and difference between the terms
- 2.4 Growth and Development Characteristics during – Infancy, Childhood, Adolescence and Adulthood.

Unit-III: Motivation, Emotion, Personality and Psychology of Competition

- 3.1 Motivation – Definition, Meaning, Types and its Role in life
- 3.2 Emotion – Definition, Meaning, Classifications, Regulatory Instincts, Aggression and Sports
- 3.3 Personality– Meaning, Definition, Types, Physical Education's role in Personality development
- 3.4 Psychology of Sports and Competition: Psychological Effects of Physical Activity – Psychological Well-being, Mental Health Competition –Nature, types, Reinforcements, Situational Components of Competition.

Unit-IV: Sociological Aspects

- 4.1 Basic Issues/ Sociology as one of the social sciences- its development and its relationship with other social sciences. Individual and social organization – Social Groups: Primary and Secondary Groups, Remote group, Formal and Informal groups. Socialization – meaning & nature; Social Networks, Social Learning, Socialization through Physical Education
- 4.2 Group Processes – Social Facilitation, Social Norms, Status and role; Values, Group Decision making and Group Cohesion, Social conglomeration, Social Inequalities, Crowds and Public, Role of Games and Sports in the group processes.
- 4.3 Social transformation – Self-development, Social roles, Social Perception, family – Types and

Roles, Changing Family Structure, Role of Games and Sports

- 4.4 Other Issues – Gender Identities and Inequalities, Unity in Diversity, Health, Sport as a Vocation, Caste and class, customs and ways of life, Role of Games and Sports.

References:

1. Ball, D. W. & Loy, J. W. (1975). *Sport and social order; Contribution to the sociology of sport*. London: Addison Wesley Publishing Co., Inc.
2. Blair, J. & Simpson, R. (1962). *Educational psychology*, New York: McMillan Co. Cratty, B. J. (1968). *Psychology and physical activity*. Eaglewood Cliffs. Prentice Hall.
3. Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi: Metropolitan Book Co.
4. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). *Sport and social system*. London: Addison Wesley Publishing Company Inc.
5. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). *Sports culture and society*. Philadelphia: Lea & Febiger.
6. Mathur, S.S., (1962). *Educational psychology*. Agra. Vinod Pustak Mandir. Skinner, C. E., (1984). *Education psychology*. New Delhi: Prentice Hall of India.
7. William, F. O. & Meyer, F. N. (1979). *A handbook of sociology*. New Delhi: Eurasia Publishing House Pvt Ltd.

Semester-III

Theory Courses

Subject: - SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION (ELECTIVE)

Course Code: BECC-301

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit-I: Sports Medicine

- 1.1 Sports Medicine: Concepts, Aim & Objective and Importance in the field of Sports Science.
- 1.2 Development of Sports medicine as a discipline, different aspects of Sports Medicine.
- 1.3 Injury- concept, classification (acute and chronic injury), common regional injuries shoulder, wrist, elbow, and ankle- signs and symptoms and diagnosis.
- 1.4 Concept of Doping, Doping agents and their use-

Unit-II: Physiotherapy

- Definition – Guiding principles of physiotherapy, Importance of physiotherapy, Introduction and demonstration of treatments - Electrotherapy – infrared rays – Ultraviolet rays –short wave diathermy – ultrasonic rays.

Unit-III: Hydrotherapy:

- Introduction and demonstration of treatments of Cry therapy, Thermo therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation – Massage: History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.

Unit-IV: Therapeutic Exercise:

- Definition and Scope – Principles of Therapeutic Exercise – Classification, Effects and uses of Therapeutic exercise – passive Movements (Relaxed, Forced and passive - stretching) – active movements (concentric, Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Shoulder, Elbow – Wrist and Finger Joints – Hips, Knee, ankle and Foot joints – Trunk. Head and Neck exercises.

References:

Christine, M. D., (1999). *Physiology of sports and exercise*. USA: Human Kinetics.

Conley, M. (2000). *Bioenergetics of exercise training*. In T.R. Baechle, & R.W. Earle, (Eds.), *Essentials of Strength Training and Conditioning* (pp. 73-90). Champaign, IL: Human Kinetics.

David, R. M. (2005). *Drugs in sports*, (4th Ed). Routledge Taylor and Francis Group.

Hunter, M. D. (1979). *A dictionary for physical educators*. In H. M. Borrow & R. McGee, (Eds.), *A Practical approach to measurement in Physical Education* (pp. 573-74). Philadelphia: Lea &Febiger.

Jeyaprakash, C. S., *Sports Medicine*, J.P. Brothers Pub., New Delhi, 2003.

Khanna, G.L., (1990). *Exercise physiology & sports medicine*. Delhi:Lucky Enterprises.

Mathew, D.K. & Fox, E.L, (1971). *Physiological basis of physical education and athletics*.

Philadelphia:W.B. Saunders Co.

Pandey, P.K., (1987). *Outline of sports medicine*, New Delhi: J.P. Brothers Pub.

Williams, J. G. P. (1962). *Sports medicine*. London: Edward Arnold Ltd.

Semester-III

Theory Courses

CURRICULUM DESIGN (ELECTIVE)

Course Code: BECC-301

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit-I: Modern concept of the curriculum

- Need and importance of curriculum, Need and importance of curriculum development, the role of the teacher in curriculum development.
- Factors affecting curriculum - Social factors - Personnel qualifications - Climatic consideration - Equipment and facilities -Time suitability of hours.
- National and Professional policies, Research finding

Unit-II: Basic Guide line for curriculum construction; contest (selection and expansion).

- Focalization
- Socialization
- Individualization
- Sequence and operation
- Steps in curriculum construction.

Unit-III: Curriculum-Old and new concepts, Mechanics of curriculum planning.

- Basic principles of curriculum construction.
- Curriculum Design, Meaning, Importance and factors affecting curriculum design.
- Principles of Curriculum design according to the needs of the students and state and national level policies.
- Role of Teachers

Unit-IV: Under-graduate preparation of professional preparation.

- Areas of Health education, Physical education and Recreation.
- Curriculum design-Experience of Education, Field and Laboratory.
- Teaching practice.
- Professional Competencies to be developed-Facilities and special resources for library, laboratory and other facilities.

References:

- 1) Barrow, H. M. (1983). *Man and movement: principles of physical education*. Philadelphia: Lea and Febiger.
- 2) Bucher, C. A. (1986). *Foundation of physical education*: St. Louis: The C. V. Mosby & Company.
- 3) Cassidy, R. (1986). *Curriculum development in physical education*. New York: Harper & Company.
- 4) Cowell, C.C. & Hazelton, H.W. (1965). *Curriculum designs in physical education*.
- 5) Englewood Cliffs: N.J. prentice Hall Inc.
- 6) Larson, L.A. (n.d.). *Curriculum foundation in physical education*. Englewood Cliffs: N.J. Prentice Hall Inc.
- 7) Underwood, G. L. (1983). *The physical education curriculum in secondary school: planning and implementation*. England: Taylor and Francis Ltd.
- 8) Willgoose, C.E. (1979). *Curriculum in physical education*. 3rdEd. Englewood Cliffs.: N.J. Prentice Hall, Inc.

Semester-IV

Theory Courses Subject:

THEORIES OF GAMES AND SPORTS

Course Code: BCC-401

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit-I: Introduction of Officiating and Coaching

Concepts of Officiating and Coaching, Philosophy of Officiating and Coaching, Duties of Coach in general- Pre, during and Post game.

Responsibilities, Qualities and Qualification of a Coach on and off the field

Unit-II: Theory of Sports and Games

General Introduction of specialized games and sports– Athletics, Badminton, Basketball, Cricket, Football, Gymnastic, Hockey, Handball, Kabaddi, Kho-Kho, Netball, Volleyball and Yoga.

Each game or sports to be dealt under the following heads

- History and development of the Game and Sports
- Ground preparation, dimensions and marking
- Standard equipment and their specifications
- Ethics of sports and sportsmanship

Unit-III: Advanced Training (for particular specialized games and sports)

- Concepts of Conditioning and Warming up
- Role of Weight training in Games and Sports
- Teaching of fundamental skill and their mastery (Technique, tactics and skill acquisition)
- Recreational and lead-up games

Unit-IV: Competition

- Function of Competition
- Competition system
- Competition frequency
- General guidelines of Preparation for competition

References:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice Hall. Bunn, 2.J. W. (1972). *Scientific principles of coaching*. Englewood cliffs N. J. Prentice Hall. Dyson,
3. G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Lawther, J.D. (1965). *Psychology of coaching*. New York: Pre. Hall.
5. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.

Subject:- KINESIOLOGY AND BIOMECHANICS

Course Code: BCC-402

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment

Unit-I: Introduction to Kinesiology and Sports Biomechanics

- 1.1 History, Meaning and Definition of Kinesiology and Sports Biomechanics
- 1.2 Importance of Kinesiology and Sports Biomechanics in Physical Education Teacher, Athletes and Sports Coaches.
- 1.3 Terminology of Fundamental Movements.
- 1.4 Fundamental concepts of following terms – Axes and Planes, Centre of Gravity, Equilibrium, Line of Gravity.

Unit- II: Fundamental Concept of Anatomy and Physiology

- 2.1 Classification of Joints and Muscles.
- 2.2 Types of Muscle Contractions.
- 2.3 Posture – Meaning, Types and Importance of good posture.
- 2.4 Fundamental concepts of following terms- Angle of Pull, All or None Law, Reciprocal Innovations.

Unit- III: Mechanical Concepts

- 3.1 Force - Meaning, definition, types and its application to sports activities

- 3.2 Lever - Meaning, definition, types and its application to human body.
- 3.3 Newton's Laws of Motion – Meaning, definition and its application in sports activities.
- 3.4 Projectile – Types, Factors and its application in sports.

Unit- IV: Kinematics and Kinetics of Human Movement

- 4.1 **Linear Kinematics** – Distance and Displacement, Speed and Velocity, Acceleration.
- 4.2 **Angular kinematics** – Angular Distance and Displacement, Angular Speed and Velocity, Angular Acceleration.
- 4.3 **Linear Kinetics** – Inertia, Mass, Momentum, Friction.
- 4.4 **Angular Kinetics** – Moment of Inertia , Couple, Stability.

References:

- 1) Bunn, J. W. (1972). *Scientific principles of coaching*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- 2) Hay, J. G. & Reid, J. G.(1982). *The anatomical and mechanical basis of human motion*. EnglewoodCliffs, N.J.: prentice Hall Inc.
- 3) Hay, J. G. & Reid, J. G.(1988). *Anatomy, mechanics and human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- 4) Hay, J. G. (1970). *The biomechanics of sports techniques*. Englewood Cliffs, N.J.: Prentice Hall, Inc.

RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

Course Code: BCC-403

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Unit-I: Introduction to Research

- 1.1 Definition of Research, Need and Importance of Research in Physical Education and Sports.
- 1.2 Scope of Research in Physical Education & Sports, Quality of a good researcher.
- 1.3 Types of Research - Basic Research, Action Research, Applied Research.
- 1.4 Research Problem- Definition, Source of Research Problem, Steps of locating Research Problem.

Unit-II: Research Proposal and Research Report

- 2.1 Research Proposal – Meaning, Significance and Characteristics of Research Proposal.
- 2.2 Need for surveying related literature and Literature Sources.
- 2.3 Tools used for Collection of data- Field Test, Questionnaire, Observation, Interview.
- 2.4 Preparation of Research proposal Research Report.

Unit-III: Basics of Statistical Analysis

- 3.1 Statistics: Meaning, Definition, Nature and Importance.
- 3.2 Class Intervals: Raw Score, Continuous and Discrete Series & Computing for Group and Ungroup data.
- 3.3 Frequency and Frequency Distribution, Construction of Frequency Distribution Tables.
- 3.4 Measure of Central Tendency: Mean Median and Mode.

Unit- IV: Statistical Models in Physical Education and Sports

- 4.1 Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data.
- 4.2 Measures of Variability: Meaning, Importance.

- 4.3 Percentiles and Quartiles: Meaning, Importance, Computing for Group and Ungroup data.
- 4.4 Graphical presentation of data: Histogram, Frequency Polygon, Frequency Curve.

References:

1. Brown, L. E., & Ferrigno, V. A. (2005). Training for speed, agility and quickness, 2nd ed.
2. Champaign, IL: Human Kinetics.
3. Carl, E. K., & Daniel, D. A. (1969). Modern principles of athletes training. St. Louis: St. Louis's Mosby Company.
4. Clark, H. H., & Clark, D. H. (1975). *Research process in physical education*. Englewood cliffs, New Jersey: Prentice Hall, Inc.
5. Garrett, H.E. (1981). *Statistics in psychology and education*. New York: VakilsFeffer and Simon Ltd.
6. Uppal, A. K. (1990). *Physical fitness: how to develop*. New Delhi: Friends Publication.
7. Verma, J. P. (2000). *A text book on sports statistics*. Gwalior: Venus Publications.

ADAPTED PHYSICAL EDUCATION (ELECTIVE)

Course Code: BECC-401

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment)

Unit-I: Concept of Adapted Physical Education

- 1.1 Meaning of disability and handicapped, Definition of Adapted Physical Education, relation between special education, adapted physical education and physical education, objectives of adapted physical education.
- 1.2 Types of disability and their cause: Hearing impairment, Visual impairment. Orthopedically handicapped, mentally retarded, Cerebral palsy and Learning disability.
- 1.3 Adjustment problems of the disabled, factor affecting adjustment, role of teacher for promotion of adjustment, least restrictive environment.
- 1.4 Causes report on disability and national plan- disability act

Unit-II: Teaching Adapted Physical Education

- 2.1 Individualized education program, teaching methods and safety needs.
- 2.2 Class organizations, facilities and equipments for various tests, physical fitness for the disabled.
- 2.3 Identification of students and adapted physical education records, tests for identification.
- 2.4 Adapted Physical Education activities, sports for the disabled, coaching attitudes with disability.

Unit-III: Types of Disabilities and their causes

- 3.1 Hearing disabled, Visual Impairments, Orthopedically challenged, Mentally retarded.
- 3.2 Cerebral palsy: Hearing disability, Behavioral disorder and other health impaired conditions.
- 3.3 Adapted physical education programme for the disabled.
- 3.4 Programme organization and administration: Adjustment problems of handicapped, Teaching methods for the disabled, safety needs.

Unit-IV Assessment technique

- 4.1 Assessment technique for disabled person- assessing basic physical and motor proficiency.

Semester-IV

Theory Courses

BECC-402:- Physical Literacy (Elective)

Unit-1 Introduction to Movement Education and Physical Literacy

- 1.1 Definition, Meaning and Importance of Movement Education.
- 1.2 Definition, Meaning and Importance of Physical Literacy
- 1.3 Concepts of developmentally Appropriate Physical Activities.
- 1.4 Standards based Physical Education curriculum (NASPE Standards).

Unit-II

- 2.1 Classification of Motor skills: Fundamental (Locomotor, Nonlocomotor, Body Management skill), Specialized (Manipulative, Rhythmic Movement, Game & Sport skill).
- 2.2 Skill Themes Approach and Development of skill Themes: Traveling, Chasing, Fleeing, Dodging, Jumping, Landing, Transferring body weight, striking, kicking, throwing and catching.
- 2.3 Introduction to Movement Concepts, Development of Movement Concepts: Space Awareness, Effort Concepts, Relationships.
- 2.4 Long Term Athlete Development. (LTAD)

Unit-III

- 3.1 Personal Development: Self-concept, Cognitive Functioning and Motivational outcomes.
- 3.2 Social Development: Altruism, Controlling Aggression, Cooperation, Group development.
- 3.3 United Nations and other organization using Sports and Traditional Sports for Social Development.
- 3.4 Sports for Development: Sports for Education, Economic, Gender, Health and Peace

Unit-IV

- 4.1 Need for child centered teaching models.
- 4.2 Teaching Games for Understanding (TGUFU) MODEL: Invasion Games, Net/Wall Games, Striking/Fielding Games, Target Games.
- 4.3 Education Through Movement (ETM) program.
- 4.4 Coaching life skills through sport.

Semester-I

Practical Courses

TRACK & FIELD (RUNNING & JUMPING EVENTS ONLY LONG JUMP & TRIPLE JUMP)

Course Code: BPCC-101

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Running Event

- a) Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
- b) Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug
- c) Ground Marking, Rules and Officiating
- d) Hurdles:
 - Fundamental Skills- Starting, Clearance and Landing Techniques.
 - Types of Hurdles
 - Ground Marking and Officiating.

Relays: Fundamental Skills

- a) Various patterns of Baton Exchange
- b) Understanding of Relay Zones
- c) Ground Marking

- d) Interpretation of Rules and Officiating. **Jumping:**
- Running Broad Jump and Triple Jump
 - Approach Run, Take-off, Flight and Landing

Semester-I

Practical Courses

GYMNASTICS/SWIMMING/ SHOOTING (ANY ONE) Course Code:

BPCC-102

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment

GYMNASTICS:

Gymnastics (for Women)

1. Floor Exercise
2. Vaulting Table
3. Balance Beam
4. Uneven bars

Gymnastics (for Men)

1. Floor Exercise
2. Vaulting Table
3. Balance Beam
4. Uneven bars

1. Skill for Floor Exercise:

- i) Forward Roll, ii) Backward Roll, iii) Cartwheel, iv) Straddle Roll, v) Arch, vi) Split Sitting, vii) 'T' Balance, viii) 'V' Balance, ix) Handspring, x) Handstand Roll, xi) Back walkover, xii) Drive Roll, xiii) Front walkover

A part from above compulsory skills, students may acquire advanced skill like handspring, round off, backlick, salta.

2. Vaulting Table:

- i) Straddle vault, ii) Through vault

3. Parallel Bars (for Men):

- i) Mount, ii) Suling, iii) One leg cutting (left & right side), iv) Straddle walking on parallel bars, v) Both leg cutting, vi) Shoulder stand on bar and roll forward, vii) Single and double step walk, viii) Dismount.

4. Balance Beam:

- i) Split sitting, ii) 'T' Balance, iii) 'V' Balance, iv) Forward Roll, v) Cartwheel, vi) 360° Turns $\frac{1}{2}$ turns, vii) Leap and Jumps, viii) Handstand, ix) Mount

5. Uneven Bars (for Women):

- i) Hip Circle (Forward, Backward), ii) Mount, iii) Grip, iv) Dismount

6. Horizontal Single Bar:

- i) Grip, ii) Sulings, iii) Fundamental Elements, iv) Dismount.

SWIMMING:

Fundamental Skills:

- a) Entry into the pool.
- b) Developing water balance and confidence
- c) Water fear removing drills.
- d) Floating-Mushroom and Jelly fish etc.
- e) Gliding with and without kickboard.
- f) Introduction of various strokes
- g) Body Position, Leg, Kick, Arm pull, Breathing and Co ordination.
- h) Start and turns of the concerned strokes.
- i) Introduction of Various Strokes.
- j) Water Treading and Simple Jumping.
- k) Starts and turns of concerned strokes.
- l) Rules of Competitive swimming-officials and their duties, pool specifications, seeding heats and finals, Rules of the races.

SHOOTING:

Fundamental Skills:

- a) Basic stance, grip, Holding rifle/ Pistol, aiming target
- b) Safety issues related to rifle shooting
- c) Rules and their interpretations and duties of officials

Semester-I

Practical Courses

Subject:- INDIGENOUS SPORTS

Course Code: BPCC-103

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment

MARCH PAST

KABADDI:

Fundamental Skills:

- a) **Skills in Raiding-** Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
- b) **Skills of Holding the Raider-** Various formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.

- c) **Additional skills in raiding-** Bringing the antis in to particular position, Escaping from various holds, Techniques of escaping from chain formation, combined formations in offence and defense.
- d) **Ground Marking, Rules and Officiating**

MALKHAMBH AND LIGHT APPARATUS:

- a) **Lathi-** Two counts exercises, Four Count exercises, eight count exercises, sixteen count exercises.
- b) **GhatiLezuim-** AathAawaaz, Bethakawaaz, AagePaon, Aagekadam, Do pherawaaz, Chau pherawaaz, Kadamtaal, Pavitra, Uchhakpavitra, Kadampavitra.
- c) **Mass P.T. Exercises-** Two count, four count and eight count exercises.
- d) **Hindustani Lezuim-** Char Awaaz, EkJagah, AantiLagaav, Pavitra, Do Rukh, Chau Rukh, Chau rukhbethak, Momiya.
- e) **Drill and Marching**
- f) **Malkhamb-** Salaami, Hold, Saadiudi, Bagaludi, Dashrangudi, Bagliudi, Veludi, Soydoro, Phirki, Padmasana, T.Balance, Pataka, Landing.
- g) **Rope Malkhamb-** Salaami, PadmasanaChadh, Katibandh1-2, Sadiadhi, Rikebpakkad, Rikebpagniadhi, Kamaradhi, Nakkikasadhi, Kamaradhi, Nakkikasadhi, Urubandhtedhi, Sadibagli, Do hatibagli, Kamarbandhbagli, nakkikasbagli, Dashrang, Hanuman pakad, Gurupakkad, various padmasana, Landing.

KHO-KHO:

- a) **General skills of the game-** Running, chasing, Dodging, Faking etc.
- b) **Skills in chasing-** Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgment in giving Kho, Rectification of Foul.
- c) **Skills in Running-** Zig zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.
- d) **Ground Marking**
- e) Rules and their interpretations and duties of officials.

Semester-I

Practical Courses

MASS DEMONSTRATION ACTIVITIES

Course Code: BPCC-104

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

DUMBELLS/ WANDS/ HOOP/ UMBRELLA/ TIPRI:

Fundamentals skills:

- a) Apparatus/ Light apparatus Grip
- b) Attention with apparatus/ Light apparatus
- c) Stand – at – ease with apparatus/ light apparatus
- d) Exercise with verbal command, drum, whistle and music – Two count, Four count, Eight count and Sixteen count.
- e) Standing Exercise
- f) Jumping Exercise
- g) Moving Exercise
- h) Combination of above all

Semester-II

Practical Courses

Subject: - TRACK & FIELD (THROWING AND VERTICAL JUMP)

Course Code: BPCC-201

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

Track and Field (Throwing Events)

- a) Discus Throw, Javelin, Hammer throw, shot-put
- b) Basic Skills and techniques of the Throwing events
- c) Ground Marking / Sector Marking
- d) Interpretation of Rules and Officiating.
- e) Grip
- f) Stance
- g) Release
- h) Reserve/ (Follow through action)
- i) Rules and their interpretations and duties of officials

Jumping Events

- a) High Jump
- b) Approach Run,
- c) Take off
- d) Clearance over the bar.
- e) Landing

Semester-II

Practical Courses

GYMNASTICS AND SWIMMING

Course Code: BPCC-202

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

GYMNASTICS:

Gymnastics (for Women)

1. Floor Exercise
2. Vaulting Table
3. Balance Beam
4. Uneven bars

Gymnastics (for Men)

1. Floor Exercise
2. Vaulting Table
3. Balance Beam
4. Uneven bars

1. Skill for Floor Exercise:

i) Forward Roll, ii) Backward Roll, iii) Cartwheel, iv) Straddle Roll, v) Arch, vi) Split Sitting, vii) 'T' Balance, viii) 'V' Balance, ix) Handspring, x) Handstand Roll, xi) Back walkover, xii) Drive Roll, xiii) Front walkover

A part from above compulsory skills, students may acquire advanced skill like handspring, round off, backlick, salta.

2. Vaulting Table:

- i) Straddle vault, ii) Through vault

3. Parallel Bars (for Men):

i) Mount, ii) Suling, iii) One leg cutting (left & right side), iv) Straddle walking on parallel bars, v) Both leg cutting, vi) Shoulder stand on bar and roll forward, vii) Single and double step walk, viii) Dismount.

4. Balance Beam:

i) Split sitting, ii) 'T' Balance, iii) 'V' Balance, iv) Forward Roll, v) Cartwheel, vi) 360° Turns
 ½ turns, vii) Leap and Jumps, viii) Handstand, ix) Mount

5. Uneven Bars (for Women):

- i) Hip Circle (Forward, Backward), ii) Mount, iii) Grip, iv) Dismount

6. Horizontal Single Bar:

- i) Grip, ii) Sulings, iii) Fundamental Elements, iv) Dismount.

SWIMMING:**Fundamental Skills:**

- a) Entry into the pool.
- b) Developing water balance and confidence
- c) Water fear removing drills.
- d) Floating-Mushroom and Jelly fish etc.
- e) Gliding with and without kickboard.
- f) Introduction of various strokes

- g) Body Position, Leg, Kick, Arm pull, Breathing and Co ordination.
- h) Start and turns of the concerned strokes.
- i) Introduction of Various Strokes.
- j) Water Treading and Simple Jumping.
- k) Starts and turns of concerned strokes.
- l) Rules of Competitive swimming-officials and their duties, pool specifications, seeding heats and finals, Rules of the races.

Semester-II

Practical Courses

RACQUET SPORTS: BADMINTON/TABLE TENNIS/SQUASH/TENNIS

(ANY TWO)

Course Code: BPCC-203

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

BADMINTON:

Fundamental Skills:

- a) Racket parts, Racket grips, Shuttle Grips.
- b) The basic stances.
- c) The basic strokes-Serves, Forehand-overhead and underarm, Backhand, overhead and underarm
- d) Drills and lead up games
- e) Types of games-Singles, doubles, including mixed doubles.
- f) Rules and their interpretations and duties of officials.

TABLE TENNIS:

Fundamental Skills:

- a) **The Grip**-The Tennis Grip, Pen Holder Grip.
- b) **Service**-Forehand, Backhand, Side Spin, High Toss.
- c) **Strokes**-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shot, Loop, Drive.
- d) Stance and Ready position and foot work of the game.
- e) Rules and their interpretations and duties of officials.

SQUASH:

Fundamental Skills:

- a) **Service**-Under hand and Over hand, Service Reception
- b) **Shot**- Down the line, Cross Court, Drop, Half Volley
- c) **Tactics** – Defensive, attacking in game
- d) Rules and their interpretations and duties of officials.

TENNIS:

Fundamental Skills:

- a) **Grips**- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
- b) **Stance and Footwork.**
- c) **Basic Ground strokes**-Forehand drive, Backhand drive.
- d) **Basic service.**
- e) **Basic Volley.**
- f) **Over-head Volley.**
- g) **Chop**
- h) **Tactics** – Defensive, attacking in game
- i) Rules and their interpretations and duties of officials.

Semester-II

Practical Courses

Subject: - INTERNAL TEACHING

Course Code: BTPCC-203

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

CLASS ROOM TEACHING: GENERAL AND SPECIFIC LESSONS

Classroom Teaching- 5, Field Activities- 5

Semester-III

Practical Courses

VOLLEYBALL AND HOCKEY

Course Code: BPCC-301

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

VOLLEYBALL:

- a) **Service:** Underarm, Sidearm, Spin, Tennis, Floater, Javelin and so on.
- b) **Passing:** Underarm, Forward, Sideways, Overhead and forward and Groups.
- c) **Boosting:** Low, Straight High, Forward, Backward and Sideways.
- d) **Spiking:** Leg movement, killing with either hand.
- e) **Blocking:** Individual and Group blocking.

- f) **Setting:** Straight and different directions.
- g) **Game Practice.**

HOCKEY:

1. Fundamental skills:

Player stance & Grip
 Rolling the ball
 Dribbling
 Push
 Stopping
 Hit
 Flick
 Scoop

Passing: Forward pass, Square pass, Triangular pass, diagonal pass, return pass.

Reverse hit

Dodging

Goal keeping –Hand defense, Foot defense.

Positional play in attack and defense.

Rules and their interpretations and duties of officials.

Ground marking.

Semester-III

Practical Courses

Subject: - AEROBICS AND COMBATIVE SPORTS: KARATE/JUDO/BOXING/LATHI/TAEKWONDO/WRESTLING (ANY ONE)

Course Code: BPCC-302

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

AEROBICS:

- a) Aerobic foot marching.
- b) Starting.
- c) Aerobic step touch.
- d) Grapevine.
- e) Aerobic Lunges.
- f) Aerobic cha cha-cha.
- g) Side to side.
- h) 'V' Shape, 'L' Shape etc.

KARATE:

- a) **Player Stances** – walking, hand positions, front-leaning, side-fighting.
- b) **Hand Techniques** - Punches (form of a punch, straight punch, and reverse punch), Blocks (eight basic).
- c) **Leg Techniques** - Snap kicks, stretching straight leg, thrust kicks, sidekicks, round house.
- d) **Forms** - The first cause Katas.

- e) **Self Defense** - against punches, grabs and strikes, against basic weapons (knife, club sticks).
- f) **Sparring** - One step for middle punch, high punch and groin punch. (Defended by appropriate block from eight basic blocks).
- g) Rules and their interpretations and duties of officials.

JUDO:

- a) **Rei (Salutation)**-Ritsurei(Salutation in standing position), Zarai (Salutation in the sitting position)
- b) **Kumi kata** (Methods of holding judo costume)
- c) **Shisei**(Posture in Judo)
- d) **Kuzushi**(Act of disturbing the opponent posture)
- e) **Tsukuri and kake** (Preparatory action for attack)
- f) Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), Mae Ukemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)
- g) Shin Tai (Advance or retreat foot movement)-Suri-ashi (Gliding foot), Twugiashi (Following footsteps), Ayumi-ashi (Waling steps).
- h) **Tai Sabaki** (Management of the body)
- i) NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi (Drawing ankle throw), De ashihari (Advance foot sweep), O Goshi (Major loinm), SeoiNage (Shoulder throw).
- j) Katamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulder hold), Kami shihogatama (Locking of upper four quarters), Method of escaping from each hold.

BOXING:

- a) **Stances** – Upright Stances, Semi-crouch, Full crouch
- b) **Footwork** – Attack, defense.
- c) **Punches** – Jab, Cross, Hook, Overhead right, Bolo punch, check hook, Upper cut.
- d) **Defense** – Bob and Weave, Parry/Block, The Cover up, Clinch, Cross-armed, Philley Shell or Shoulder Roll.
- e) **Tactics** – Toe to toe, counter attack, fighting in close, feinting
- f) Rules and their interpretations and duties of officials.

LATHI:

- a) Holding, Height and weight of a Lathi.
- b) Anulom and Bilom- Uttar & Dakshin
- c) Sammukhuttarpresthabestan.
- d) Sandipani, Jamak, Chalit, Risramandal – Baddha, Chalit&Pluta.

- e) Ran of harua – Greda, Palat, Tamecha&Asar Man, Behera, Ratkathi, and Bhandar.

TAEKWONDO:

- a) **Player Stances** – walking, extending walking, L stance, cat stance.
- b) **Fundamental Skills** – Sitting stance punch, single punch, double punch, and triple punch.
- c) **Punching Skill from sparring position** – front-fist punch, rear fist punch, double punch, and four combination punches.
- d) **Foot Techniques (Balgisul)** – standing kick (soseochagi), Front kick (AP chagi), Arc kick (BandalChagi), Side kick, (YeopChagi), Turning kick (DollyoChagi), Back kick (Twit Chagi), Reverse turning kick (BandaeDollyoChagi), Jump kick (TwimyoChagi),
- e) **Poomsae (Forms)** – Jang, Yi Jang, Sam Jang, Sa Jang, O Jang, Yook Jang, Chil Jang, Pal Jang (Fundamental Movement – eye control, concentration of spirit, speed control, strength control, flexibility, balance, variety in techniques)
- f) **Sparring (Kyorugi)** – One Step Sparring (hand techniques, foot techniques, self defense techniques, combination kicks), Free Sparring.
- g) **Board Breaking (Kyokpa)** – eye control, balance, power control, speed, point of attack.
- h) Rules and their interpretations and duties of officials.

WRESTLING:

- a) **Escapes and Reversals:** (i) Sit out and turn in, (ii) Side roll, (iii) Outside switch, (iv) Stand up with inside leg.
- b) **Pinching Combination:** (i) Arm bar and half nelson, (ii) Half nelson, (iii) Near cradle, (iv) Cross face cradle.
- c) **Breakdowns and rides:** (i) Near arm, tight wrist breakdown and double waist ride, (ii) Head lever and tight waist breakdown, (iii) Head lever and tight face breakdown, (iv) Far ankle and near wrist breakdown..
- d) **Game Practice.**

Semester-III

Practical Courses

Subject: - TEAM GAMES:- BASEBALL/ CRICKET/ FOOTBALL/ HOCKEY/ SOFTBALL/HANDBALL/ BASKETBALL (ANY TWO)

Course Code: BPCC-303

Full Marks: 100 (Semester End Assessment -70 & Internal Assessment- 30)

BASEBALL:

- a) **Offence:** Hitting, Situational Hitting, Bunting, Base Running, Stealing & Sliding.

- b) **Defense:** Throwing, Fielding Ground Balls, Fielding fly balls, Fielding Positions 3 through 9, Executing Double Plays and Relays.
- c) **Pitching and Catching:** Pitching technique, Changing Speeds, Locating Pitches, Holding Runners, Pitcher Fielding Plays, Catching Technique and Catcher.

Cricket:

- a) **Batting:** Grip, Stance, Back lift, forward and backward defense, Cover, on, off and straight drives, Hook, square cuts, Pull, Running between wickets.
- b) **Bowling:** Grip, Run-up, delivery, Follow through, Pace bowling, off, Leg and Top spin, Googly, out and in swerves.
- c) **Fielding and Wicket keeping:** Keepers stance, Positional play, Stepping- long barrier and Orthodox, quick starting, Catching low and high ball, Deep field, Placement for different types of bowlers.
- d) **Game Practice.**

Football:

- a) **Kicking:** Push pass, Instep kick, Chip, High and low drive, Different types of volley kick, Bicycle kick, Flick in Swing, Out-swing.
- b) **Trapping or Receiving:** Sole trap, Instep, Inside of the foot, Outside of the foot, Thigh, Chest & Head.
- c) **Heading:** Forward downward, Forward Upward, Sideways and Backward.
- d) **Throw In:** Both free parallel, One foot forward, Running & Standing Throw- for accuracy and Distance.
- e) **Tackling:** Front, Side and Slide Tackling.
- f) **Goal-keeping:** Keeping a ground or a low ball, catching a wrist high ball, keeping chest high and overhead ball, Fisting, Diving.
- g) **Passing:** Short, Long, Square, Through, Diagonal, Wall & overhead passes.
- h) **Game Practice.**

Handball:

- a) **Passing:** Holding the ball, passing and inter passing in two, three etc.
- b) **Shooting.**
- c) **Dribbling**
- d) **Goalkeeping.**
- e) **Strategy & Tactics:** Offensive & Defensive
- f) **Game Practice.**

Basketball:

- a) **Passing & Receiving:** Ball Holding, Player's Stance, Chest, Bounce, Baseball and Side arm passes.
- b) **Shooting:** Lay-up shot with variations; Chest, overhead, Hook, One hand set shot with variation, jump shots.
- c) **Dribbling:** Start, High, Low, Either hand
- d) **Tactics:** Offensive & defensive (individual, combined and group tactics).

- e) **Strategy & Zone Defense:** 1:2:2, 2:1:2, 2:3, Man to man defense, half and full court press.
- f) **Game Practice.**

BTPCC-301:- Teaching Practice

Ten Teaching Lessons (on Practical Activities taught, out of which six lessons internal and four lessons external at nearby institutions)

Semester-IV

Practical Courses

BPCC-401:- Softball and Youth Fitness Test

Softball: Fundamental Skills

- a) **Catching:** One handed, two handed, with feet grounded, in flight.
- b) **Throwing (different passes and their uses):** one handed passes (shoulder, high shoulder, underarm, bounce, and lob); two handed passes (push, overhead, bounce).
- c) **Footwork:** Landing on one foot; landing on two feet; pivot; running pass.
- d) **Shooting:** One hand; two hands; forward step shot; backward step shot.
- e) **Techniques of getting free:** dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
- f) **Defending:** marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
- g) **Intercepting:** Pass; shot.
- h) **The toss-up.**
- i) **Role of individual players**
- j) Rules and their interpretations and duties of officials.

Youth Fitness Test

BPCC-402:- Sports Specialization (any one)

Sports specialization: Kabaddi

- Kho-Kho
- Cricket
- Football
- Volleyball
- Handball
- Basketball
- Netball
- Badminton
- Table Tennis

- Tennis

BTPCC-401:- Teaching practices: Lesson Plans

Sports specialization: Coaching Lessons Plans (One for Sports 5 lessons)

BTPCC-401:- Teaching practices: Lesson Plans

Games specialization:Coaching lessons Plans (One for Games 5 lessons)