

Savitribai Phule Pune University

# B.P.Ed.Syllabus 2015

Two years Credit & Semester based Program

## **B.P. Ed Syllabus**

### **Two Year semester & Credit Based course Structure from April 2015**

General objectives of the Bachelor of physical education (**B. P. Ed**) course:

**To enable the PE student teacher,**

1. To know and apply discipline specific scientific and theoretical concepts critical to development of physically educated person.
2. To plan, design and implement learning experiences that facilitate and enhance the growth of learners of diverse needs from varying backgrounds.
3. To use effective communication and pedagogical skills and strategies to enhance student engagement & learning.
4. To utilize assessments and reflection to foster student learning and to inform instructional decisions.
5. To demonstrate dispositions essential to becoming effective professionals.
6. To understand the disciplinary content knowledge, application of content knowledge to teaching physical education. To be reflective practitioner who evaluates self and seek opportunities to grow professionally and humanistically.
7. To be informed about and use appropriate technology to enhance teaching and learning and to enhance personal and professional productivity.
8. To foster relationship with colleagues, parents, community and associated agencies to support student's growth & wellbeing.

**1. Duration of the Course:**

The B. P. Ed program shall be of duration of two academic years, that is, four semesters. However, the students shall be permitted to complete the program requirements within a maximum of three years from the date of admission to the program.

**2. Eligibility for Admission:**

Candidate should have passed the Bachelor's Degree/Master Degree of Savitribai Phule Pune University or of any other university recognized by this university, with at least 45% marks and should have offered at least one school subject at the first and / or second degree level as principal or subsidiary or allied or optional subject. (School subject means the subject included in the syllabus of secondary / Higher secondary level

in Maharashtra state.) Relaxation of 5% marks will be given to the candidates belonging to S.C. & S.T. and other notified categories as per Government Rules.

**3. Selection Procedure:**

Admission to the eligible candidates will be given as per the selection procedure laid down by the State Government of Maharashtra from time to time.

**4. Eligibility Norms for appearing at B. P. Ed examination:**

Student teachers should have kept all four terms with at least 80% attendance for the classes in college in all the terms. He should have completed all the practical and other work expected in all the three parts (theory, practical and teaching practice) of the syllabus up to the satisfaction of the principal. He should have obtained such a certificate from the principal of the college. Unless and until he obtains such a certificate, he will not be allowed to appear for university examination.

**5. Medium of Instruction:**

Medium of Instruction at the B. P. Ed. program will be Marathi and/or English. However, the medium of Instruction for the optional course no. 104 Methodology of teaching optional subject i.e. Marathi Education, English Education, or Hindi Education will be Marathi, English, and Hindi respectively.

The candidates appearing for B. P. Ed. Examination will have the option of answering all courses in Theory part either in English or in Marathi.

**6. Credit System (CS):**

Credit System (CS) is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

**7. Course:**

The term course usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and /or learning outcomes. A course may be designed to comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.

## **8. Courses of Program:**

The B.P.Ed. Program consists of a number of courses, the term 'Course' applied to indicate a logical part of subject matter of the program and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of courses suggested for the B.P.Ed. Program.

- **Theory Courses**
- **Teaching skill development program**
- **Proficiency in physical education and sports**

## **9. Semesters:**

An academic year is divided into two semesters. The semester schedule may be in accordance with the existing rules of the university. There shall be at least 200 working days per year exclusive of admission and examination processes etc.

## **10. Credits:**

The term 'Credit' refers to a unit by which the program is measured. It determines the number of hours of instructions required per week. The term 'Credit' refers to the weight given to a course, usually in relation to the instructional hours assigned to it. Learning load per credit is 16 clock hours. All courses do not carry the same weight. The total minimum credits, required for completing a B. P. Ed. Program is 144 credits and 20, 49, 25 and 50 credits in semester I, II, III, and IV respectively.

## **11. Examinations:**

- a. There shall be examinations at the end of each semester. A candidate who does not pass the external examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations
- b. A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance according to the rules prescribed, such candidates will not be permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be

admitted in the second semester, if he/she has successfully kept the term in first semester.

- c. A student cannot register for the third semester, if she/he fails to complete 50% of the credits of the total credits expected to be ordinarily completed within first two semesters.
- d. The teaching of course 206 will start from semester I and it will be evaluated in semester II. The teaching of course 406 will start from semester II and it will be evaluated in semester IV.

## **12. Evaluation**

A candidate appearing for B.P. Ed course will be evaluated for the Degree of "Bachelor of Physical Education" in the manner given below.

### **a. External Examination**

**Theory Courses** - 101, 102, 103, 104, 201, 202, 203, 204, 301, 302, 303, 304, 401, 402, 403, 404 Candidate will be evaluated through the external examination conducted by the university at the end of each respective semester. 80 Marks will be allotted for each course.

(Total marks=1280)

**Practical Course** 407 Specialization will be evaluated for 80 marks.

- Candidate will be able to apply for **revaluation of only the external examination** of concerned courses in every semester. There shall be revaluation of answer scripts of semester-end examination but not of internal assessment papers as per Ordinance no. 134 A & B.

### **b. Internal Evaluation**

The evaluation approach to be followed for each semester will be continuous comprehensive evaluation.

- Internal evaluation of theory courses - minimum 2 tests should be conducted for each theory course in the respective semesters. Internal evaluation of theory courses prescribed in each semester shall be for 20 marks. It will be conducted in the respective semesters. (Total marks=320)

- Internal evaluation of teaching skill development program- Internal evaluation of this program will be conducted in respective semester. In semester I, the course 105 will be evaluated for 100 marks, in semester II, the course 205 will be evaluated for 125 marks, in semester III, the course 305 will be evaluated for 200 marks, and in semester IV, course 405 will be evaluated for 250 marks. (Total marks=675)
- Internal evaluation of practical- For Proficiency in Physical Education and Sports Activities (Course 206 and 406) Internal Evaluation will be done at the end of each respective activity in semester II and IV. Evaluation scheme will be developed by the college and each candidate will be evaluated by two internal examiners in internal evaluation of all the activities. Course 206 will be evaluated for 700 marks and course 406 will be evaluated for 500 marks. (Total marks=1200)
- Internal evaluation of professional development program- Course 306 will be evaluated for 25 marks in semester III. (Total marks=25)
- If a candidate misses an internal examination, he/she will have another chance or chances with the permission from college principal in consultation with the teacher. Such additional opportunities for internal assessment shall not be the right of the student.
- If the candidate fails the internal examination after repeated attempts provided by the teacher, candidate will not be allowed to appear for the external examination of the concerned course and will have to complete/repeat the course in the subsequent semester/ during 5<sup>th</sup> /6<sup>th</sup> semester whichever is applicable.
- Candidate must secure minimum passing standard in every internal assessment. Concerned teacher of the course may provide another opportunity to the student who misses an internal exam or who fails to obtain minimum passing standard in each of the internal assessment. It should be noted that the candidate who gets extra opportunity in the internal assessment will be awarded only minimum passing standard (i.e. 40%).
- c. For the rationalization of internal marks university will appoint a moderation committee. The college will produce all the relevant documents for verification by the committee. The committee will visit each college to take the review of the internal marks given by the college and advise the college if necessary. The college should take the appropriate action as per the advice of the committee & submit the internal marks to the University.

### 13. Norms for passing B. P. Ed examination

For all the assessment the college will give marks and will submit it to the university. The University will convert these marks into the grades and final assessment will be in the form of grades. There should be total transparency in the internal marks. The grades so obtained will be shown on the mark sheet of the candidate. Using the formula to convert the grades the University will provide the marks of converted grades also at the bottom of the mark sheet.

The following table shows the system of evaluation: **Marks/Grades/GP**

<b>Marks</b>	<b>Grade</b>	<b>Grade point</b>
75 to 100	O: outstanding	6
65 to 74	A: Very good	5
55 to 64	B: Good	4
50 to 54	C: Average	3
45 to 49	D: Satisfactory	2
40 to 44	E: Pass	1
0 to 39	F: Fail	0

### Final Grade Points

5.00 to 6.00	O
4.50 to 4.99	A
3.50 to 4.49	B
2.50 to 3.49	C
1.50 to 2.49	D
0.50 to 1.49	E
0.0 to 0.49	F

- The formula for GPA will be based on weighted averages. The final GPA will not be printed unless a student passes courses equivalent to minimum 144 credits.

<b>SGPA=</b>	$\frac{\sum \text{Grade points earned x Credits for each course}}{\text{Total credits}}$
<b>GPA=</b>	$\frac{\sum \text{Total Grade points earned x Credits for each course}}{\text{Total credits}}$

SGPA= Semester grade point average

GPA= Grade point average

- i. To pass, a candidate must obtain minimum 40% in internal evaluation and minimum 40 % in external evaluation and aggregate of 45% marks (D and above on grade point scale) in each course.
- ii. The semester end grades sheets will have only grades and final grade sheets and transcripts will have grade points average.
- iii. Result will be declared for each semester and at the end of two years/ on completion of all the credits, whichever is earlier. The marks obtained in each will be converted into grades and GPA.
- iv. IF the GPA is higher than the indicated upper limit in the three decimal digit, then the student be awarded higher final grade. (e.g. a student getting GPA of 4.495 may be awarded 'A').
- v. For grade improvement a student must reappear for semester-end examination for a minimum of 20 credits. These courses will be from the parent department. Grade improvement program will be implemented at the end of the academic year. A student can opt for the grade improvement program only after the declaration of final semester examination (i.e. at the end of the next academic year after passing the said examination and within two years of completion of program and only once).



## FORMAT OF QUESTION PAPER FOR EXTERNAL EVALUATION

<b>Question No.</b>	<b>Description</b>	<b>No of questions</b>	<b>Marks</b>	<b>Total marks</b>
1	Multiple choice 2 questions based on each credit (Compulsory)	8	1	8
2	Short answer (Knowledge level) 2 questions based on each credit (Compulsory)	8	3	24
3	Application level 1 out of 2 questions based on each credit (one out of each question set)	4	8	32
4	Long answer/essay type 1 question based on each credit (any one out of four)	1	16	16
<b>Total</b>				<b>80</b>

## B.P. Ed Syllabus Framework

### Semester I

Course Code	Title of the Papers	Hours per week	Credit	Internal Marks	External Marks	Total Marks
101	Foundations of Physical Education	4	4	20	80	100
102	Psychology of learner	4	4	20	80	100
103	Learning to Teach Physical Education & Sports	4	4	20	80	100
104	Methodology of Optional Subject	4	4	20	80	100
Teaching Skill Development Programme						
105	A. Micro lessons Optional Subject (6 Lessons)(2 Credits) B. Integration lessons (3 Lessons)(2 credit)	4	4	100		100

## Semester II

Course Code	Title of the Papers	Hours per week	Credit	Internal Marks	External Marks	Total Marks
201	Anatomy & Physiology	4	4	20	80	100
202	Management of Physical Education & Sports	4	4	20	80	100
203	Profession of Physical Education	4	4	20	80	100
204	Fitness and Wellness	4	4	20	80	100
205	Teaching Skill Development Programme					
	A. Micro lessons of Physical Education and Sports (6 Lessons)(2 Credit) B. Integration lessons (3 Lessons)(2 credit) C. Practice Lessons Optional Subject (2 Lessons)(1 credit)		5	125		125
206	Proficiency in Physical Education and Sports Activities					
	1. Track & Field (Run and Relay, Long Jump and Triple Jump, Discus Throw and Shot Put)(6 Credits) 2. Floor Gymnastics (2 Credits) 3. Mass Demonstrative Activity (Aerobics and Equipment Drills) (2 Credits) 4. Minor Games & Lead up activities (2 Credits) 5. Competencies (3 Credits) 6. Fitness (Exercise, Personal Physical Fitness)(3 Credits) 7. Drill March and Flag code (2 Credits)	5	28	700		700

	8. Introduction of Sport (Any four sport from given list)(2*4=8 Credits)					
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**Semester III**

Course Code	Title of the Papers	Hours per week	Credit	Internal Marks	External Marks	Total Marks
301	Evaluation in Physical Education and Sports	4	4	20	80	100
302	Biomechanics	4	4	20	80	100
303	Personality Development and Soft Skills	4	4	20	80	100
304	Health Education and Nutrition	4	4	20	80	100
305	Teaching Skill Development Programme					
	A. Practice Lessons Optional Subject (6) (3 credits) B. Practice Lesson of Physical Education and Sports (10) (5 credit)		8	200		200
Teachers Professional Development Programme						
306	1. TBT Practical	2	1	25		25

### Semester IV

Course Code	Title of the Papers	Hours per week	Credit	Internal Marks	External Marks	Total Marks
401	Research and Statistics	4	4	20	80	100
402	Athletic Care & Rehabilitation	4	4	20	80	100
403	Theory of Sports and Games	4	4	20	80	100
404	Elective (Guidance & Counseling, Adventure sport, Fitness and Conditioning, Yoga Education, Play, Leisure and Recreation)	4	4	20	80	100
<b>Teaching Skill Development Programme</b>						
405	School Internship A. Lessons of Optional Subject (6) (3 credit) B. Lessons of Physical Education and Sports (14)(7 credits)		10	250		250
<b>Proficiency in Physical Education and Sports Activities</b>						
406	1. Track & Field (Hurdles, Javelin Throw and Hammer throw, High Jump and Pole vault)(4 Credits) 2. Wrestling/Judo Taekwondo/Mallakhamb (2 Credits) 3. Yoga (2 Credits) 4. Lezium (2 Credits) 5. Measurement and Evaluation (2 Credits) 6. Introduction to sport & Games (Four sports form Given list)(2*4=8 Credits)	5	20	500		500
407	Specialization	5	4	20	80	100

## **Theory Courses Semester I**

### **Course 101**

#### **Foundations of Physical Education**

##### **Objectives**

1. To enable students to understand the concept of Philosophy and philosophy of physical education to acquaint student with the different Philosophies along with their implications in Physical education.
2. To enable students to understand the concept of Sociology and to acquaint student the implications of Physical education and sports in society.
3. To enable students to understand the concept of Education and Physical Education
4. To acquaint him with historical perspective as influence on physical education, Abroad and in India.
5. To acquaint the students with different Issues, challenges and opportunities in Physical education & sports

##### **Credit 1 Developing Philosophic and Sociological skills**

- 1.1 What is Philosophy? Developing personal Philosophic skills of profession.
- 1.2 Idealism, Realism, Pragmatism, Naturalism and Existentialism and its Importance, need in modern physical education programmes.
- 1.3 What is of sociology?
- 1.4 Sociological implications of Physical Education and Sports (Role, Importance).

##### **Credit 2 Education and Physical Education**

- 2.1 Meaning and Concept of General Education.
- 2.2 Meaning and definition, aim, objective and scope of Physical Education.
- 2.3 Physical Education and its relationship with General Education.
- 2.4 Values and Ethics in Physical Education and sports.

##### **Credit 3 Historical foundations of Physical Education & Sports**

- 3.1 History of Physical education in India from ancient to modern period – pre Vedic period, epic period, Hindu period, Muslim period, British period.
- 3.2 Trends in Physical education in Greece, China, U.S.A., Germany & U K.

3.3 Historical perspectives of the Olympics. Olympic movement-Ancient & Modern Olympic

3.4 Indian Legends: Khashaba Jadhav, Major Dhyanchand, Sachin Tendulkar, P.T .Usha, Milkha Singh. (What makes them different?)

#### **Credit 4 Issues, challenges and opportunities in Physical education & sports**

4.1 Careers in Physical Education and Sports.

4.2 Gender in Physical Education.

4.3 Role Conflict in Physical Education and Sports.

#### **Suggested readings:**

- 1) Bucher, C.A., (2010). Foundation of Physical education (16<sup>th</sup> ed.). New Delhi: Tata McGraw-Hill.
- 2) Barrow, H.M. (1983). Man and Movement: Principles and Physical Education. Phi: Lea and Febiger
- 3) Bucher & Wuest. (1987). Foundations of Phy.Edu & Sports. Missouri: C.V.Mosby co.
- 4) Ziegler, E.F. (2007). An introduction to Sports & Phy.Edu. Philosophy. Delhi: Sp. Educational Tehno.
- 5) William, J.E. (1964). Principles of Physical Education:, Com. Philadelphia: W.B. Saunders
- 6) Kretchmar, R.S. (1994). Practical Philosophy of Sport. IL: Human Kinetics.
- 7) Shekhar, K.C. (2004). Principles & History of P.E. Delhi:Khel Sahitya Kendra.
- 8) Young, D.C. (2004). A brief History of Olympic Games. UK: Blackwell Publishing.
- 9) Frank, A.M. (2003). Sports & education. CA: ABC-CLIO
- 10) Susan Capel, Susan Piotrowski. (2000). Issues in Physical Education. London: Routledge

## **Course 102**

### **Psychology of Learner**

#### **Objectives:**

1. To introduce psychology and sports Psychology.
2. To understand Human behavior and learning patterns of individuals.
3. To understand know learning process and different theories based on learning
4. To acquire theoretical perspectives and develop understanding of stages of human development with special reference to Motor Development for Skill Learning in Sport and PE.
5. To become aware about different attributes affecting learning and development process.
6. To understand range of cognitive capacities in learners.
7. To understand the Cognitive and higher mental processes involved in learning in sports and Physical Education.
8. To understand the differences of personality among various types of sports and its importance for character building.
9. To know different personalities and its effects on sports performances.
10. To understand the importance of motivation
11. To be able to identify the characteristics of sportsmen pre-during-post Competition.
12. To understand differences in group or team and techniques for cohesion
13. To understand importance of emotions for sports performance and development of sportsmen.
14. To understand problems faced by sportsmen and remedies to achieve better performances
15. To gain information about Anxiety, Arousal, Stress and understand techniques to overcome them.

#### **Credit I: Introduction of Sports Psychology**

- 1.1 Meaning, Scope of Psychology, Sports Psychology
- 1.2 Importance of Sports Psychology for Physical Education teacher and Coach
- 1.3 Human behavior: Needs, Urge and Instincts
- 1.4 Learning: Definitions, Meaning and Types (*Primary, Associate and Concomitant*), Theories (*Behaviorist, Cognitivist, Social-Constructivist*) and Laws of Learning, Transfer of Learning

#### **Credit 2: Development of Learner**

- 2.1 Meaning & Principles of Development
- 2.2 Growth & Development: Stages of Development: Infancy to Adolescence, Importance of Motor Development (*Psychological and Training Implications*) Learning in Sports.
- 2.3 Role of learner in various learning situations as seen in different perspectives
- 2.4 Role of teacher in teaching-learning situations: *a) Transmitter of Knowledge, b) Model, c) Facilitator, d) Negotiator, e) Co-learner.*

#### **Credit III: Cognitive Process, Personality and Motivation**

- 3.1 Cognitive Process: Perception, Attention, Memory, Language, Thinking, Problem Solving,
- 3.2 Personality: Concept of personality, Personality traits of sportsmen, Development of Personality through PE and sports, role of society for personality development



3.3 Motivation: Definition & Meaning of Motive, Need & Drive, Types and techniques of motivation (Rewards, Punishment, Prize, etc.)

3.4 Problem Students, Aggression, spectators, Leadership

**Credit IV: Competition and Anxiety**

4.1 Competition: Characteristics of sportsmen Pre-During-Post-competition.

4.2 Emotions: Definition, Importance to coach/ P. E. Teacher, Causes and remedies for emotional disturbances

4.3 Definition of Anxiety and Arousal, Types of Anxiety

4.4 Techniques for Relaxation and Activation.

**Suggested Readings:**

1. Kamlesh, M. L. (2006). Educational Sport Psychology. New Delhi: Friend's publication
2. Cox Richard (1998). Sports Psychology (W.C.B.)
3. Gill, Diance L. Psychological Dynamics of Sports (Illinois : Human Kinetics Publishers, 1986)
4. Silva, J.M. and Weinberg. (1984). Physiological Foundation of Sports. IL : Kinetics Publishers
5. Suinn, Richard M. (1982) Psychology in Sports: Methods and Applications. New Delhi: Sujeet Publication.
6. Martens, Rainer. (1987). Coaches Guide to Sports Psychology. IL: Human Kinetics.
7. Roberts Glyn C. and et al. (1986). Learning Experiences in Sports Psychology. IL: Human Kinetics
8. Karandikar. Krida Manasshastra.
9. Magill, R.A. (2001). Motor learning concepts & application. (6th Ed.). NY: McGraw Hill co.inc
10. Utley, A. & Astill, S. (2008). Motor control, learning- behavioral emphasis. UK: Taylor & Francis.

## **Course 103**

### **Learning to Teach Physical Education**

#### **Objectives**

After studying this course, the beginning teachers will

1. Continue to develop their teaching skills
2. Deliver a high quality Physical Education to a diverse group of young learners
3. Develop and create a positive and caring learning environment
4. Get acquainted with the fundamental content of Physical Education and be able to analyze & develop the content
5. Utilize the creative energy to link the school PE program to opportunities for children and youth outside of the school
6. Implement effective teaching practices & preventive class & behavior management strategies
7. Design & develop curriculum plan, unit plan and well-structured lesson plan that addresses contextual description
8. Optimize & facilitate learning by choosing and employing appropriate teaching styles, models, strategies

#### **Credit 1 Teaching Physical Education**

##### **1.1 Purpose of Physical Education**

- Objectives of Physical Education
- Defining a Physically educated person
- Teaching as goal oriented activity- types of goals
- Understanding the basics of instructional process
- Teaching skills, personal characteristics of teacher

##### **1.2 Learning motor skills & learning environment**

- Nature, stages & phases of learning – implications for Physical Education
- Skill analysis, Plateaus during performance-implications for Physical Education
- Learning environment - What is effective learning environment, types of effective learning environment, maintain effective learning environment
- Establishing effective learning environment- readying, handling equipments, rules & procedures, consequences, strategies for handling potential problems

### **1.3 Motor skills**

- Closed, closed in differing environment, open skills
- Movement concept & action words
- Movement qualities, principles & strategies
- Movement effects & affects

## **Credit 2 Content analysis & development, planning & designing**

### **2.1 Developmental analysis**

- Extension- practice of parts, modification of equipment, spatial arrangement, focus of intent, number of people & skills, conditions, sequencing
- Refinement
- Application
- Guidelines for developing different kinds of content - Developing closed skills & open skills, developing movement concept, developing games skills- four stages

### **2.2 Planning for instruction**

- Establishing goals & objectives for learning – Writing objectives- student objectives, teacher objectives
- Level of specificity in Educational objectives, objectives in three learning domains
- Planning Physical Education experience- curriculum, unit
- Planning for lesson – general information, learning objectives, learning activities, variations, challenges, class organization, cues, assessment, reflection

### **2.3 Designing movement experiences & tasks**

- Content dimension of movement tasks
- Goal setting dimensions of the task
- Environmental arrangements- people, time, space, equipment

### **2.4 Preventive classroom management**

- Nature & purpose of preventive management
- Managerial task system- the three Cs: compliance, cooperation & community
- Establishing management system- teacher-student expectation of self & others, developing rules & routines
- Managerial time & Academic learning time (ALT- PE)
- Skills & strategies to preventive class management- starting lesson, transitions, managing formations, momentum & pace of lesson, teacher interactive behavior, Safety guidelines

- Active supervision- back to wall, proximity control, with-it-ness, selective ignoring, using names, overlapping, positive pinpointing

### **Credit 3 Teaching skills**

#### **3.1 Presenting movement tasks**

- Getting attention of the learner
- Noisy, distracting environments & student preoccupation
- Choosing ways to communicate
- Selecting & organizing learning cues
- Improving clarity of communication – demonstration

#### **3.2 Teacher functions during activity**

- Common functions
- Not-contributing behaviors
- Indirectly contributing behaviors- injured students, off-topic discussion, toilet & water breaks
- Directly contributing behaviors- safety, productivity, reinforcement, feedback
- Observing & analyzing student responses

#### **3.3 Teaching large classes**

- Amount of practice
- Acquiring equipments, dealing with limited equipment
- Well-organized class routines
- Substantive curriculum
- Using tasks
- Learning independently & self-regulation
- Teaching social responsibility
- Peer teaching & assessment
- Centers for providing maximum practice opportunities

#### **3.4 Managing behavior & misbehavior, discipline**

- Safe & welcoming climate- social & economic conditions, predictable rules, routines & social norms, teaching caring & social responsibility, discussing safety
- Bullying- increasing teacher's awareness, students' involvement
- Classroom ecology- negotiations, improving accountability, social task system
- Student- teacher relationships
- Preventing misbehaviors- rules & values, consequences, expectations, reinforcement, ignoring, desists, time-outs, behavior contracts, rewards, behavior games

## **Credit 4 Teaching styles**

### **4.1 Why multiple teaching styles**

- Personal choice
- Tradition
- Diversity
- Multiple objectives

### **4.2 Spectrum of teaching styles**

- Direct/reproduction styles- Command, practice, reciprocal self-check, inclusion,
- Indirect/production styles- guided discovery, convergent discovery, divergent discovery, individual program, learner initiated, self-teaching

### **4.3 How to choose teaching style?**

- Learner factors
- Environmental factors
- Task factors
- Teacher factors

### **4.4 Teaching styles for application**

- Objectives
- Anatomy of style
- Implementation
- Description
- Implications

### **Suggested readings:**

1. Siedentop Daryl. (1991). Developing teaching skills in Physical Education (3<sup>rd</sup> ed.). CA: Mayfield publishing company
2. Rink J.E. (1985). Teaching Physical Education for Learning. St. Louis, Toronto: Times Mirror/ Mosby College Publishing
3. Capel, S., & Whitehead, M. (2010). Learning to teach Physical Education in the secondary school (3<sup>rd</sup> ed). Ox: Routledge
4. Pangrazi, R., & Daur, V.P. (1995). Dynamic Physical Education for elementary school children (11<sup>th</sup> ed). MA: Allyn & Bacon
5. Gallahue, D.L. , & Donnelly, F. C. (2003). Developmental Physical Education for all children (4<sup>th</sup> ed). IL: Human Kinetics

6. Himberg, C., Hutchinson, G.E., & Rousell, J.M. (2003). Teaching secondary Physical Education. IL: Human Kinetics
7. Schempp, P.G (2003). Teaching sports & Physical activity- insight on the road to excellence. IL: Human Kinetics
8. Graham G., Hale S., & Parker M. (1998). Children moving 4th ed. California: Mayfield publishing company
9. Rovegno , I. , and Bandhauer, D. (2013). Elementary Physical Education: Curriculum and Instruction. MA: Jones & Bartlett Learning

**Course 104**

**Methodology of optional subject  
METHODOLOGY OF TEACHING OPTIONAL SUBJECT**

(Any one of the following)

1. Marathi education 2. Hindi education 3. English education 4. History education 5. Geography education 6. Mathematics education 7. General Science education 8. Information technology education

**मराठी अध्यापन पध्दती**

**उद्दिष्टे** १. विद्यार्थ्यांना मातृभाषा अध्ययन अध्यापनाची संकल्पना, सद्यस्थिती ची जाणीव करून देणे.

२. विद्यार्थ्यांना मातृभाषेची उद्दिष्टे, अध्यापन पध्दती व त्यांची निवड, मातृभाषेची मूलभूत कौशल्ये इ. आकलन करून देणे.

३. विद्यार्थ्यांना शाळेतील अभ्यासक्रमाचे (अध्ययनाचे) नियोजन व पाठयपुस्तकांविषयी माहिती देणे.

४. विद्यार्थ्यांना आशययुक्त अध्यापन पध्दती, स्वरूप, प्रकार व त्याची उपयुक्तता समजावून देणे.

**घटक** १. मातृभाषा अध्ययन अध्यापनाची संकल्पना

अ. मातृभाषा अध्ययन अध्यापनाची सर्वसामान्ये उद्दिष्टे व महत्व

ब. मातृभाषा अध्ययन अध्यापनाची तत्वे

क. मातृभाषेची सद्यस्थिती चांगली बाजू वाईट बाजू व समृद्धीसाठीचे उपक्रम

**घटक** २.

अ. मातृभाषेची विशेष उद्दिष्टे

ब. काव्य अध्यापन, व्याकरण अध्यापन पध्दती

क. मातृभाषेची मूलभूत कौशल्ये श्रवण, भाषण, वाचन व लेखन

ड. शैक्षणिक साधने अर्थ, प्रकार व महत्व

**घटक** ३.

अ. नियोजन प्रकार, वार्षिक घटक, पाठ नियोजन, घटक चाचणी

ब. मातृभाषेचा शिक्षक शैक्षणिक पात्रता, गुणवैशिष्ट्ये त्यांच्या अडचणी

क. मातृभाषेचे आदर्श पाठयपुस्तकाचे अंतरंग बहिरंग व निकष

**घटक ४.**

- अ. आशययुक्त अध्यापन पध्दती अर्थ, स्वरूप, संकल्पना
- ब. आशययुक्त अध्यापन पध्दतीचे गरज व महत्व
- क. आशययुक्त अध्यापन पध्दतीचे प्रकार व फायदे तोटे
- ड. आशययुक्त अध्यापन पध्दतीची उपयुक्तता.

- १. मराठीचे अध्ययन व अध्यापन— डॉ. दि.हे. पाटील, डॉ. श.रा. राणे
- २. मातृभाषेचे अध्यायन— अकलकर, पाटणकर, व्हीनस प्रकाशन, पुणे १९७०
- ३. मातृभाषेचे अध्यापन— चंद्रकेमार डांगे, चिरंजीव ग्रंथ प्रकाशन, पुणे १९६२
- ४. मराठी कवितेचे अध्यापन— फाटक म.वि. मॉडर्न बुक डेपो, पुणे १९६२



## हिंदी अध्यापन पध्दती

### उद्देश्य:—

- १). भारतीय जीवन में. एवं संस्कृति में भाषा का स्थान जानने में शिक्षक को समर्थ बनाना।
- २) प्राथमिक विद्यालयों में हिंदी भाषा सिखाने के उद्देश्यों को समझाना।
- ३) हिंदी भाषा सिखाने की विभिन्न पद्धतियों को जानना उसके उद्दिष्टों को समझना और पढ़ाने के लिए कौशल्य विकास करना।
- ४) एक सुशिक्षित हिंदी शिक्षक बनने के लिए ज्ञान, कौशल्य व रूची का विकास करना।
- ५) कक्षा ५ वी से बाखी तक के पाठयक्रम का परिचय।

### **घटक १**

- १) हिंदी भाषा का प्राथमिक विद्यालयों में स्थान— त्रिभाषा सुत्र—प्राथमिक विद्यालयों में हिंदी भाषा सिखाने का उद्देश।
- २) व्याकरण :- भाषा सिखाने में व्याकरण का स्थान, सामान्य व्याकरण, औपचारिक या सैध्दांतिक व्याकरण हिंदी और मराठी व्याकरण पारस्परिक संबंधि व्याकरण की विविध अध्यापन पद्धतियाँ।
- ३) रचना की अध्यापन प्रणाली— मौखिक और लिखित रचना का महत्व—लिखित और मौखिक का परस्पर संबंध—रचना कार्य में होने वाली गलतीया , मुश्कीले और समाधान रचना कार्य सिखाने की विभिन्न पद्धतियाँ। (चित्र, निबंध, कहानियाँ)

### **घटक . २**

- १) शिक्षण एवं अध्ययन पध्दती व व्याकरण का अध्ययन प्रत्यक्षप्रणाली, वेस्ट प्रणाली, संरचना प्रणाली, समन्वयात्मक प्रणाली, साहयक साधनोंका भेद और उनका वर्गीकरण— दृकश्राव्य साधनोंकी जानकारी ।
- २) गद्य शिक्षण : महत्त्व उद्देश्य — गद्य पाठ का स्वरूप और उसकी अध्यापन.
- ३) भाषा शिक्षा में काव्य का स्थान — काव्य कि शिक्षा का उद्देश्य एवं महत्त्व— काव्य के शिक्षा के लाभ — कविताओं का चुनाव — कविता की अध्यापन पध्दती— कविता की पाठ टिपणीओं के ढाँचे ।

**घटक . ३**

- १) पाठ नियोजन — गद्य नियोजन, पद्य नियोजन ।
- २) हिंदी के अध्यापन, नए प्रवाह और तंत्र रेडिओ, टि.व्ही. आदि ।
- ३) वाचन — वाचन के रूप व महत्त्व — सस्वर वाचन, मौनवाचन, वाचन शिक्षा की पध्दती ।
- ४) हिंदी अध्यापक के लिए आवश्यक गुण ।

**घटक . ४**

- १) हिंदी भाषा सिखने के लिए सुक्ष्म अध्यापन पध्दती ।
- २) सुक्ष्म अध्यापन पध्दती — स्वरूप एवं संकलन ।
- ३) हिंदी विषय सिखने और पढाने के लिए सुक्ष्म अध्यापन पध्दतीका महत्त्व एवं आवश्यकता
- ४) हिंदी विषय पढाते समय सुक्ष्म अध्यापन का ज्ञान देना ।

**Suggested readings:**

१. राष्ट्रभाषा शिक्षा— डॉ. श्री. ना. मुखर्जी, आचार्य बुक डेपो, बडोदा, १९६५
२. हिंदी अध्यापन पध्दती— केणी, कुलकर्णी, व्हीनस प्रकाशन, पुणे १९९२
३. राष्ट्रभाषा का अध्यापन— ग.न. साठे महाराष्ट्र राष्ट्रभाषा सभा, पुणे १९७१
४. राष्ट्रभाषा कैसे पढाओं— रा.लु. भगत

## Methodology of teaching English education

### Objectives

1. To enable the students - teacher to acquire knowledge of:
  - a) The present position of English in the Indian School Curriculum.
  - b) The objectives of teaching English in Secondary Schools.
  - c) The effective means and methods worked out to reach the goals.
2. To develop in the student-teacher the skills required for effective teaching of English in Secondary Schools.
3. To develop among the student - teacher a favorable attitude towards the subject.

- Credit 1**
- a) Place of the subject (English) in the School curriculum.
  - b) Objectives of teaching English  
Content cum methodology in teaching - learning of English method.
    - a) Content cum methodology - concept and nature
    - b) Importance and need of content cum methodology in teaching - learning of English method.
    - c) Implementation of content cum methodology in teaching of English method.

- Credit 2**
- Methods of Teaching
- a) The Grammar - Translation Method.
  - b) Dr. West's New Method
  - c) The Direct Method
  - d) Structural Approach
- Techniques of Teaching - Dramatization, Debates, Lectures, Story telling,  
Language - Games

- Credit 3**
- Teaching of Prose: Text-Books, the difference between Reader & Text Books, Oral and Silent Reading, Teaching of Poetry-place of Poetry, Objectives of teaching Poetry, selection of Poetry, Teaching of Compositions - Oral, Written Forms of Composition, Correction of Compositions.

- Credit 4**
- Teaching of grammar - Importance of teaching Grammar. Formal and functional grammar, Methods of teaching Grammar, Instructional Material - The need of language - Laboratory teaching of English, teaching material- visual, audio, audio-visual aids

Evaluation - Oral and written Tests, Diagnostic test & Remedial Teaching

**Suggested readings:**

1. The teaching of English in India \_ Thomson & Wyatt
2. The Teaching of English as Foreign language- Menon & Patel, Acharya Book Depot, 1974
3. The teaching of English Abroad - I, II, III, F.G. French, Oxford University Press, London, 1969
4. Teaching English - Frishy
5. Teaching of Language teaching - Billows F.L. Longmans, London 1969
6. English as a foreign language - Gatenby
7. Structural approach to the teaching to English - B.D.Sriwastava, Ramprasad & Sons, Agra, 1968
8. The Principles of language study - Palmer
9. The essentials of English Teaching - R.K.Jain
10. Teaching of English - G.L.Gadre, Unmesh prakashan, Pune 1989

## Methodology of teaching History education

### Objectives

1. To help the student teachers to acquire the basic understanding of the scope of History.
2. To develop in the student-teacher the ability to present the subject matter in the proper perspective.
3. To develop in the student-teacher the ability to have a realistic approach to the teaching History.
4. To inculcate in the student teachers the spirit of National integration and international understanding.
5. To help the student teachers to develop in their students a broader and progressive outlook.

### Credit 1 History - its nature, aims & Objectives

- a) Its meaning and scope with special reference to modern Concept of History.
- b) Kinds of History
- c) Importance of 'History' in School curriculum and in human life.
- d) Aims, Objectives & values of teaching History.

### Credit 2 History - curriculum, Textbook, Teacher, Planning, Organization, & correlation.

- a) Principles of curriculum construction and their application to History.
- b) Criteria of an ideal Text Book in 'History'
- c) Special qualities for History teacher
- d) History-teacher organization, its contribution to professional competencies.
- e) Planning: a) Year's plan b) Unit plan c) Lesson plan
- f) Correlation: a) History & Geography b) History & Civics c) History & Language

### Credit 3 Methods, Instructional material & teaching aids in the teaching of History

**Methods:** a) Story telling, b) Dramatization, c) Lecture, d) Discussion, e) Source Method f) Project, g) Problem, h) Text book method

#### Instructional materials:

- a) Text Books b) Supplementary (Reading material) c) Work books
- d) General reference material e) Advanced Books on History
- f) Instructional materials for teachers-such as teachers hand book- manuals

**Teaching aids:**

- i) Printed aids - a) Periodicals b) Books c) News papers
- ii) Visuals aids: a) Slides b) Filmstrips c) Models d) Graphs and Charts  
e) Pictorial Material f) Globes, Maps & outline maps
- iii) Audio aids - a) Tape Recorder, cassettes b) Phonograph discs, c) Radio
- iv) Audio visual aids: a) Motion Picture b) Television Needs & importance of well equipped - enriched - 'Historical -room' be stressed in this connection.

**Credit 4**

**Content cum methodology in teaching - learning of History.**

- a) Content cum methodology - concept and nature
- b) Importance and need of content cum methodology in teaching - learning of History.
- c) Implementation of content cum methodology in teaching of History.

**Suggested readings:**

- 1) The Teaching of History - V.D.Ghate ,Oxford
- 2) Teaching of History - S.V.Kochekar (Revised edition)
- ३) इतहासाचि अध्यानि - ेव.द.घाटि, दशिमुख प्रकाशन, णि १९५८
- ४) इेतहासाचि अध्यानि - न.रा.गिरसनीस, व य.ज.धारकर, व्हीनस प्रकाशन, णि १९७१
- ५) इेतहासाचि अध्यानि - धिदती व तंत्र - श्री.मा.त्की, मलिंद प्रकाशन, औरंगोंद १९८०
- ६) इेतहासाचि अध्यानि - धिदती - प्रा.सी.मे.तवारी. नूतन प्रकाशन, णि १९९९.
- ७) इेतहासाचि अध्यानि - दुनाखि अरविंद ,नूतन प्रकाशन, णि २०००

## **Methodology of teaching Geography education**

### Objective

1. To understand the aim & objectives of teaching Geography at the primary, secondary and higher secondary level.
2. To understand the geography control on human life.
3. To acquire proficiency in using various method of teaching Geography.
4. To develop adequate skill in preparation & use of educational aids in teaching Geography.
5. To correlate Geography with other school subject.
6. To acquire proficiency in planning for teaching & evaluation.
7. To understand the role of Geography to promote National, Integration & International understanding.
8. To acquaint with evaluation.

### **Credit 1 Geography meaning, concept & place.**

- 1.1 Geography meaning, concept & nature.
- 1.2 Aims & objective of teaching Geography.
- 1.3 Importance of local Geography.
- 1.4 Place of Geography in school curriculum.

### **Credit 2 Correlation with other subject, Planning, Qualities of teacher.**

- 2.1 Correlation of Geography with other school subject.
- 2.2 Planning :- i) Year plan. ii) Unit plan. iii) Lesson plan.
- 2.3 Construction of curriculum of Geography :- Regional, Unit method, Mixed method.
- 2.4 Special qualities of Geography teacher.

### **Credit 3 Methods & contented of Geography.**

- 3.1 Methods Of teaching Geography :- Regional, Comparative, Project, Questioning, Objective, Laboratory, Journey, Discussion, Story.
- 3.2 Use of maxims in teaching Geography.
- 3.3 Geography teacher & his qualities.
- 3.4 Contented cum methodology :- Concept, nature, need & importance.

#### **Credit 4 Structure, Learning Experiences & Instructional Materials.**

4.1 Structure of Geography.

4.2 Learning Experiences :- Direct, Indirect, Verbal, Non verbal learning experiences helpful in teaching of Geography, Use of various instructional materials and activates.

4.3 Instruction materials :- Text book, Handbook, Work-book atlases, Maps, Charts, Models, Specimens, Pictures, Films, Slides, Filmstrips, Different Types of Projectors, Epidiascope, Radio, T.V., Video, Magazines, Newspapers, Metrological instruments.

4.4 Evaluation :- Evaluation procedures used in teaching and learning of Geography, Types of examination, Types of questions, Unit test :- Construction & administration.

#### **Suggested readings :**

1. Geography in School for give (U.L.P.).
2. BaUgaaola iSaxaNa AaSAYAU@t AQYaapna pwtl. Da^ . ko.ko.jaaQava.
3. Hand – Book of suggestion on the Teaching Geography (UNESCO).



## Methodology of teaching Mathematics education

**Objectives:** To enable the student teacher:

1. To understand nature, scope and importance of Mathematics as a school subject.
2. To understand the objectives of teaching Mathematics
3. To apply various methods of teaching Mathematics effectively.
4. To organize various co-curricular activities properly.
5. To develop adequate skills in the preparation and use of teaching aids.
6. To use various tools of evaluation.
7. To correlate Mathematics with other school subjects
8. To develop Mathematical out look.

**Credit 1** Objectives, Methods & teaching aids of teaching Mathematics at secondary and higher

Secondary levels

a) Inductive and deductive

b) Experimental

c) Analytical and Synthetically

d) Heuristic

e) Discovery

f) Teaching aids: Graphic aids, Projectors, Blackboard, flannel board, magnetic board, and associated material. Models, T.V., Tape recorder, Calculator & Computer

**Credit 2** **Curricular and co- curricular activities**

a) Oral work, drill work and home work.

b) Mathematics club

c) Guidance for gifted students and learners.

d) Mathematics laboratory and practical work.

e) Place of Mathematics in school curriculum: Nature, scope, & Importance

**Evaluation in Mathematics**

a) Planning for learning experiences: Year's Plan, unit plan, and lesson plan

Unit test, Use of attainment tests, & diagnostic tests

- b) Correlation between branches of Mathematics and other school subjects
- c) Characteristics of a good text book of Mathematics
- d) Teacher of Mathematics - his qualities, training and out look
- e) Association of Mathematics teachers

**Credit 3 Teaching of basic terms of Algebra:**

- a) Algebraic expressions b) Fractions c) Expansion & factorization of expressions d) Equations: Simple, simultaneous and quadratic e) Sets f) Number line & its applications h) Percentage, profit & loss i) Indices j) Rules of logarithms

**Teaching of basic terms of Geometry:**

- a) A point, a ray, a line segment, an angle, a plane, a triangle, a quadrilateral, a polygon and circle
- b) Similarity, equivalence and congruence
- c) Trigonometry ratios and identities

**Credit 4 Content cum methodology in teaching - learning of Mathematics method**

- a) Content cum methodology - concept and nature
- b) Importance and need of content cum methodology in teaching - learning of Mathematics method.
- c) Implementation of content cum methodology in teaching of Mathematics method.

**Suggested readings:**

1. The teaching of Mathematics in New Education - Aiyangar, Univesal Publications, Delhi, 1973
2. Teaching of Modern Mathematics - Eletcher
3. Teaching of Mathematics - Siddhu S. Agarwal,
4. Teaching of Mathematics - Kulbi Singh Siddhu, Sterling publishers, New Delhi 1975

## **Methodology of teaching General science education**

### **Objectives**

1. To make the student teacher familiar with the objectives of teaching Science.
2. To enable him to analyze the Syllabus in Science.
3. To enable him to use various methods and techniques of teaching Science effectively.
4. To develop in him adequate skills in the preparation and use of a suitable teaching aids.
5. To help him to organize co-curricular activities in Science.
6. To enable him to prepare and use appropriate tools of evaluation
7. To enable him to interpret the result of various tools.

### **Credit 1**

- a) Place of Science in life. Science in the present set-ups in India.
- b) Place of Science in the school curriculum at various levels of education. Values of teaching the subject.
- c) Objectives of teaching Science and their specifications

### **Credit 2**

- a) Approaches to teaching and Science Historical, Biographical, Concentric, the topic and unit plan method. b) Methods of teaching Heuristic method, Demonstration method, Laboratory-method, Projective method
- c) Co-curricular activities such as Science club, Science fair, etc.
- d) Correlation of Science subjects with one another and with other school subjects.
- e) Laboratory - Equipment, maintenance and improvised apparatus.
- f) Museum, aquarium, botanical garden, audiovisual aids magazines & bulletins.
- g) Observation of the sky visits to workshops, factories and fields.
- h) Modern trends and techniques for teaching Science - use of film projectors, tape recorders, Overhead projectors, slide projectors etc.

### **Credit 3 Preparation of the year's plan, Unit plan and daily lesson plan**

- a) Study of the prescribed syllabus in secondary schools in Maharashtra
- b) Critical study for textbook, criteria for the preparation of the text books.

- c) Evaluation procedures, diagnostic testing, testing and remedial teaching in Science
- d) The Science teacher, his out look and training.

**Credit 4 Content cum methodology in teaching - learning of Science method.**

- a) Content cum methodology - concept and nature
- b) Importance and need of content cum methodology in teaching - learning of Science method.
- c) Implementation of content cum methodology in teaching of Science method.

**Suggested readings:**

- 1) Sourcebook of Science Teaching- by UNESCO Press Paris, 1973

## **Methodology of teaching Information technology education**

**Objectives:** To enable the student teacher:

1. To understand nature, scope and importance of IT as a school subject.
2. To understand the objectives of teaching IT
3. To apply various methods of teaching IT effectively.
4. To develop adequate skills in the preparation and use of teaching aids.
5. To use various tools of evaluation.
6. To correlate IT with other school subjects

### **Credit 1: IT and its nature, Aims and Objectives**

1. Meaning and scope of IT
2. Place of IT in school curriculum
3. Importance of IT in daily life
4. Aims, and Objectives of teaching IT
5. Core elements, and values of teaching IT

### **Credit 2: IT - curriculum, Textbook, Planning, correlation, Evaluation, & teacher**

- a) Methods of curriculum construction in IT
  - 1) Concentric method
  - 2) Linear method
- b) Characteristics of good IT textbook
- c) Planning: Year's plan, Unit plan, Lesson plan

### **Credit 3: Correlation, evaluation & teacher**

- a) IT and Education
- b) IT and Commerce
- c) IT and Media
- d) Evaluation: Evaluation of skills, content, & application abilities of IT  
IT teacher- roles & characteristics  
Special qualities & qualifications of IT teacher

### **Credit 4: Methods, instructional material and teaching aids in the teaching IT**

- a) Specific method
  1. Computer assisted teaching
  2. Demonstration method
  3. Project method
  4. Inductive & deductive method
- b) Self study method
  1. On line learning
  2. Off line learning

### **Suggested reading:**

1. Information Technology- Kishor Chavan, Insight Publication, Nasik

## **Theory Courses Semester II**

### **Course 201**

#### **Anatomy and Physiology**

##### **Objectives**

To enable the students to

1. Understand the basic structure and function of the human body
2. Understand the effect of exercise on the different systems
3. Understand the normal movements of the body
4. Understanding how body gets fuel for its working.

##### **Credit 1: Organization of the Human Body and its Regulation**

- 1.1 The Human Organism – Anatomy, Physiology, Structural and Functional Organization
- 1.2 The Chemical Basis of Life – Energy, Inorganic Molecules
- 1.3 Structure and Function of the Cell and Histology of Tissues – Epithelial, Connective, muscular, nervous
- 1.4 Metabolism, Metabolic Rate and Body Temperature Regulation

##### **Credit 2: Support and Movement**

- 2.1 Integumentary System – Skin
- 2.2 Skeletal System-Gross Anatomy, Axial Skeleton, Appendicle Skeleton Naming of bones Articulations, Naming of Joints, Classification of Joints, Types of Movements and Effect of Exercise
- 2.3 Muscular System – Histology, Functional Characteristics of Muscles, Gross Anatomy of Skeletal Muscles, Naming of Muscles, Types of Muscle Contraction and Effect of Exercise

##### **Credit 3: Integration and Control System**

- 3.1 Central Nervous System – Brain, Spinal Cord – Development Structure Reflexes
- 3.2 Autonomic Nervous System – Structure and Functions
- 3.3 Functional Organization of the Endocrine System- General Characteristics, Pituitary Hypothalamus, Thyroid, Adrenal, Pancreas

#### **Credit 4: Maintenance of Body**

- 4.1 Circulatory System- Blood, Functions, Plasma, Formed elements and Blood grouping
- 4.2 Cardio-Vascular System- Size ,Form and Location of Heart , Anatomy of the Heart, Cardiac Cycle, Blood Pressure, Circulation, Pulmonary Systemic and Systematic Circulation, Effect of Exercise
- 4.3 Respiratory System – Anatomy, Ventilation and Lung Volumes, Pulmonary Volumes and Capacity, Effect of Exercise
- 4.4 Energy Systems

#### **Suggested Readings:**

1. Pearce Evelyn. (1992). **Anatomy & Physiology for nurses**, Calcutta: Oxford University press.
2. Seeley, & Tate (1992). **Anatomy & Physiology**. St.louis: Mosby
3. Tortora G.J.(1996). **Introduction to Human Body**. (4th Ed.) California: Addison Wesley.
4. Marieb Elaine N. (1984). **Human Anatomy and Physiology** (3rd Ed.). Cal:The Benjamin Cumming
5. Fox Edward - **Sports Physiology**, W B Saunders Co. 1984

## Course 202

### MANAGEMENT OF PHYSICAL EDUCATION & SPORTS

#### Objectives

1. To acquaint the students with the basic concept of management of Physical Education and Sports in the school.
2. To acquaint the students with the basic methods and technique and its principles to manage the programme of competitions, intramurals the basic level of competitions.
3. To acquaint the students with the duties and responsibilities of manager
4. To acquaint the students with the budget management, school programme of Phy. Edu. and sports.

#### Credit I - Concept of sports management

- 1.1 Definition, Meaning, Importance & scope of sports management
- 1.2 Types, Functions & Principles of sports management
- 1.3 Sports Industry and Careers in sports management
- 1.4 Manager – skills, qualities, duties & responsibilities

#### Credit II – Functional Areas of Sports Management

- 2.1 Sports Event Management – Competition organizations.
  - Pre competition, during competition, Post competition,
- 2.2 Types of competitions - Knock out, League & Combination methods
  - Merits & demerits
- 2.3 Principles, Importance of Budget
- 2.4 Class management, time management & Importance

#### Credit III – Facilities, Equipments and Supplies

- 3.1 Play field, Indoor & outdoor facilities.
  - Classification/ types & maintenance
- 3.2 Criteria of standard track & various staggers relay zone markings
  - 200 M. 400 M. track marking & diameter of the track
- 3.3 Sport Equipments- Types, Indoor and Outdoor equipments,
  - Procedure purchase and supplies for Physical Education and sports



3.4 Maintenance, Repairs and storage plans.

3.5 Records & Registers – Types & Importance

- Office, Staff & student and related to department of physical education

#### **Credit IV- Management of school Programme**

4.1 Intramural and extramural competitions

- Objectives, types, importance

4.2 Sports management system in school & colleges

- State, district & taluka level

4.3 Mass Athletics & Athletic meet

- Objectives, types, importance and various methods

4.4 Objectives & Organization

- Camps Importance, Camps scheduled

4.4 Organization National days

- Importance, sequence & planning

#### **Suggested readings:**

1. Bucher & Krotee. (2002). *Management of physical education & Sports*. NY:McGrawHill Co.
2. Park, Zanger, Quarterman. (1998). *Contemporary sports management*. IL: Human Kinetics
3. Lussier & Kimball. (2004). *Sports management- Principles, application & skill development*. Ohio:Thomson South Western.
4. Jerry Solomon. (2002). *An insider's guide to managing sporting events*. IL:Human Kinetics.
5. Ammon & Southall. (2004). *Sports facility management: Organizing events & mitigating risks*. USA:Fitness information technology.
6. Lavay, French & Anderson. (1997). *Positive behavior management strategies for physical educators*. IL: Human Kinetics
7. Kamlesh.M.L. *Management concepts in physical education and sports*
8. Edward F. Voltmer. *The organization and administration of Phy.Edn.*
9. Roy. S.S. *Sports management*
- 10.Kangne S.E. *Sports competition & organization*

## Course 203

### Profession of Physical Education

#### Objectives

After studying this course, the beginning teachers will

1. Develop understanding of the profession of Physical Education.
2. Be able to deal with issues experienced by Physical Education teachers.
3. Recognize that learning to teach is a lifelong process.
4. Develop a comprehensive view of Physical Education from a global perspective.
5. Understand the domains & hidden dimensions of Physical Education.
6. Demonstrate basic knowledge & awareness about inclusion, differently-abled students & describe steps to inclusion.
7. Articulate the role of Physical educators and understand various associated & non-instructional roles & responsibilities.
8. Recognize the importance of continued professional growth & advocacy of the profession.

#### Credit 1 Pedagogy in Physical Education

##### 1.1 Pedagogy basics

- What is pedagogy? What is teaching? What is learning?
- Content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners & their characteristics
- Three areas of pedagogy- curriculum, teacher Education & actual teaching transaction

##### 1.2 Learning theory for effective learning in practice

- Overview of learning
- Behaviorism- general overview, how is learning theorized? , implications for teachers & coaches
- Cognitivism – general overview, how is learning theorized? , implications for teachers & coaches
- Constructivism- general overview, how is learning theorized? , implications for teachers & coaches
- Social theories of learning- general overview, how is learning theorized? , implications for teachers & coaches

##### 1.3 Learning & learning styles

- Overview of learning styles
- Multiple intelligences
- Learning styles- visual, aural, verbal, Physical , social, logical, solitary

- Learning & meta-cognition
- Learning motor skill

## **Credit 2 Inclusion in Physical Education**

### **2.1 Physical Education for the differently abled learners**

- Adapted Physical Education program
- Remedial Physical Education program
- Developmental Physical Education program

### **2.2 Catering to diverse need of students**

- Categories of developmental disabilities- Physical , mental, emotional, learning disabilities, other- health restrictions
- Special needs of children with disabilities- social adjustment, body image enhancement

### **2.3 Instructional procedures & modifications of Physical activities for children with special needs**

- Modifications for underachievers in fitness, children with weight problems
- Instructional procedures for children with mental retardation, epilepsy
- Instructional procedures for children with visual impairment
- Instructional procedures for children with auditory impairment
- Instructional procedures for children with orthopedic disabilities
- Instructional procedures for children with emotional disabilities
- Instructional procedures for children with learning disabilities

## **Credit 3 Becoming a professional teacher**

### **3.1 Learning about schools**

- Transitions from student to teacher- the new teacher, the beginning of a new teacher
- Characteristics of effective school
- Surviving the organization, school law principles
- Legal liabilities for teachers- liability, negligence, duty, being professional, risk

### **3.2 Maintaining & improving effectiveness**

- Surviving & growing in school
- Obstacles in struggle for excellence
- Staying alive in teaching
- Role conflict

### **3.3 Appropriate practices in school Physical Education**

- Learning environment practices
- Instructional strategies
- Curriculum
- Assessment
- Professionalism

### **3.4 Technology in Physical Education**

- Adopting technology in Educational settings
- Misconceptions about instructional technology
- Advantages & disadvantages of using technology
- Using technology to help establish an effective learning environment
- Using technology for assessment

## **Credit 4 Domains & hidden dimensions of Physical Education**

### **4.1 Domains of Physical Education**

- Psychomotor domain
- Cognitive domain
- Affective domain
- Related taxonomy

### **4.2 Hidden dimensions of Physical Education**

- Contributing to broader mission
- Managing resources
- Collaborating with others
- Counselling students
- Representing & advocating yourself, school & profession

### **4.3 Curriculum in Physical Education**

- Introduction to various school PE curricula
- Models of curriculum

### **4.4 Extended curriculum in Physical Education**

- Recess & noon hour program
- Daily Physical activity/fitness program
- Intramural program
- Club program
- Interscholastic program

- Special program- special days, gym shows, public demonstrations,

### **Suggested readings**

1. Tinning, R. (2010). Pedagogy and human movement- Theory, practice, research. OX: Routledge
2. Kirk, D., Macdonald, D., & O'Sullivan, M. (Eds). The handbook of Physical Education. London: Sage publishing house
3. Siedentop Daryl. (1991). Developing teaching skills in Physical Education (3<sup>rd</sup> ed.). CA: Mayfield publishing company
4. Armour K. (2011). Sport Pedagogy. UK: Pearson
5. Tannehill D., Van Der Mars, H. & Macphill, A.(2015). Building Effective Physical Education Programs. US: Jones & Bartlett Learning
6. Rink J.E.(1985). Teaching Physical Education for Learning. St. Louis, Toronto: Times Mirror/ Mosby College Publishing
7. Davis, Bull, Roscoe. (2000). Physical Education & study of sports. UK: Harcourt Publishing
8. Mortimore P.(1999). Understanding Pedagogy and its Impact on Learning. UK: Paul Chapman Publishing Ltd.
9. Ciccomascolo L. & Sullivan E.(2013). The Dimensions of Physical Education. US: Jones & Bartlett Learning

**Course 204**  
**Fitness and Wellness**

**Objectives**

**At the end of the course, students will:**

1. Understand the concept of physical activity, exercise, fitness, and wellness and will be able to recognize the long term benefits of maintaining a high level of wellness for living in today's world.
2. Define the dimensions of wellness and strategies to improve them
3. Demonstrate an understanding of the physiological benefits of exercise, physical activity, physical fitness and wellness
4. Understand the concept of overweight, obesity & their management.
5. Develop a scientifically sound individualized program of exercise which will improve and/or maintain the health-related components of fitness: cardiovascular endurance, body composition, muscle strength/endurance, and flexibility.
6. Obtain the ability to apply principles of physical fitness, to positively modify own personal lifestyle.
7. Define principles involved in increasing and maintaining physical fitness
8. To motivate students to adopt physically active lifestyles.

**Credit 1: Introduction to Physical Fitness & Wellness**

- 1.1: Physical Activity, Exercise & their benefits
- 1.2: Physical Fitness, Health Related Physical Fitness & Skill Related Physical Fitness
- 1.3: Wellness & Components of Wellness
- 1.4: Benefits of Fitness & Wellness

**Credit 2: Weight Management**

- 2.1: Concept of Overweight & Obesity
- 2.2: Causes of Overweight & Obesity
- 2.3: Common Health Consequences of Overweight & Obesity
- 2.4: Management of Over Weight & Obesity

**Credit 3: Exercise Prescription**

- 3.1: Principles & Methods of Training
- 3.2: Cardiorespiratory Endurance
- 3.3: Muscular Strength & Endurance
- 3.4: Flexibility

**Credit 4: Training Program**

- 4.1: Training Unit, Session & Schedule
- 4.2: Steps to Design Program

4.3: Weight Loss & Gain Program

4.4: Personal Exercise & Physical Fitness Program

**Suggested Reading**

1. Werner Hoeger & Sharon Hoeger (2007). Fitness & Wellness (7<sup>th</sup> Edition). USA: Thomson Wadsworth.
2. Greenberg, Dintiman, Oakes. (2004). Physical Fitness & wellness. (3rd ed.) IL: Human kinetics.
3. NASPE. (2005). Physical Education for lifelong fitness. The physical Best teacher's guide. IL: Human Kinetics
4. Davis, Bull, Roscoe. (2000). Physical Education & study of sports. UK: Harcourt Publishing.
5. Jackson, A.L., Morrow, J.R. (2004). Physical activity for health & fitness. IL: Human kinetics.
6. Dr. Ajmer Singh (2003). Essentials of physical Education. Ludhiana: Kalyani publishers.
7. Daryl Siedentop (1994). Introduction to physical education, fitness and sports (2nd ed.). London: Mayfield publishing company.
8. Dr. A.K. Uppal & Dr. G. P. Gautam (2004). Physical education and Health. Delhi: Friends publisher.
9. <http://www.brianmac.co.uk/plan.htm>
10. <http://www.sport-fitness-advisor.com/resistance-training.html>
11. <http://www.heartfoundation.org.au/SiteCollectionDocuments/GP-besity-fact-sheet.pdf>
12. <http://www.who.int/mediacentre/factsheets/fs311/en/>
13. <http://www.guideline.gov/content.aspx?id=15597>
14. <http://www.who.int/features/factfiles/obesity/facts/en/index5.html>
15. <http://www.livestrong.com>

## Theory Courses Semester III

### Course 301

#### Evaluation in Physical Education and Sports

##### Objectives

##### After Studying this Paper students will be able to

1. To understand the concept of Test, Measurement, Evaluation and Assessment Procedure in Physical Education and give examples of each
2. Differentiate formative and summative evaluation, Process and Product evaluation
3. Identify the purposes of measurement and Evaluation
4. Describe the features of Technical and administrative feasibility that should be considered when selecting test
5. Locate and select physical fitness and sports skill tests
6. Properly administer psychomotor tests.

##### Credit: 1 Concept of Evaluation

- 1.1 Meaning of Test, Measurement, Evaluation & Assessment in Physical Education
- 1.2 Need and importance of Test, Measurement, Evaluation & Assessment in Physical Education
- 1.3 Approach/Type of evaluation: Formative-Summative, Norms-Criterion, Process, and Product evaluation, Continuous and Comprehensive evaluation
- 1.4 Classification of test –Written Test, Psychomotor test.

##### Credit: 2 Understanding Evaluation Process

- 2.1 Criteria of Test Selection
- 2.2 Factors affecting measurement
- 2.3 Principles of Evaluation
- 2.4 Administration of psychomotor Test.
- 2.5 Construction of achievement test with special reference to Content area, objectives and design

##### Credit: 3 Tools and Techniques of Evaluation

- 3.1 Qualitative and Quantitative Tool's Standardized tests, Observation, Rating scale, check list, Self evaluation, Peer assessment
- 3.2 Grading: Factors used in Grading, Method of Grading, Reporting of Final Grades
- 3.3 Authentic Assessment (Individual or group project, Exhibitions, Event task)
- 3.4 Current evaluation procedure in school curriculum

##### Credit: 4 Different tests and Test Batteries

- 4.1 Test batteries: - AAHPERD Youth fitness Test, JCR Test.
- 4.2 Tests for Health Related Physical fitness: Sit ups, Push ups, Run/walk test, Sit & reach test, Step test, BMI, WHR



4.3 Tests for Skill Related Fitness: - 50 m. Dash, Shuttle Run, Standing broad , Jump, 1 Min. skipping.

4.4 Sports Skill Test: Volley ball, Basket ball & Foot ball

**Practical (Any one)**

- Conduct Physical Fitness tests on 20 students in school
- Develop a tool for Skill assessment
- Develop an blue print of Achievement test

**Suggested Readings:**

- Dandekar , W.N.. Educational Evaluation -
- Garrett -Measurement in Educational Psychology -
- Hand Book of Dr. Bloom's Taxonomy
- John & Nelson, (1988). Practical Measurements for Evaluation in Phy.Edu. Ed.3rd Surjit Publication, Delhi
- Barrow H.M. (1979) Practical Approach to Measurement in Phy.Edu. Ed.3rd Lee & Febigeer, Philadelphia
- Clarke H. (1987). Application of Measurement in Health & Phy.Edu. Ed.6th Prentice Hall, Inc New Jersey
- Kansal D.K., (1996). Test & Measurement in Sports & Phy.Edu. D.V.S.Publications, New Delhi, 1996.
- Miller, D.K.(2002). Measurement by the Physical Educator. 4th ed. (p. 117) NY: the McGraw-Hill co.
- Aher, S.S. (2009). Sharirik Shikshan mapan, mulyamapan. Pune: Diamond Publications.

## Course 302

### Biomechanics

#### Objectives

1. To understand the basics concepts underlining Biomechanics
2. To develop insight into the application of biomechanics in various sports
3. Describe how biomechanical factors influence motion in sport and exercise
4. Demonstrate an understanding of kinematics and kinetics in human movement
5. Evaluate movement and estimate force on human structures during exercise and sports
6. To develop understanding to analyze basic human movements

#### **Credit 1: Fundamental Biomechanical Concepts**

- 1.1 Definition, Meaning and application of knowledge of Biomechanics
- 1.2 Spatial and directional terminology, Planes and Axes of motion
- 1.3 Concepts of Work, power, energy, torque, impulse, centre of gravity
- 1.4 Understanding basic concepts of Scalar and Vector quantities

#### **Credit 2: Linear kinematics and kinetics**

- 2.1 Understanding motion and forms of motion.
- 2.2 Newton's laws of motion and its application in sports movement
- 2.3 Projectile and principles of projection
- 2.4 Understanding Force and its application in sports movement

#### **Credit 3: Equilibrium, Angular Kinematics and kinetics**

- 3.1 Stability, Equilibrium, principles of equilibrium and application in sports movement.
- 3.2 Lever- Types and principles applied in sports movements
- 3.3 Concepts of angular position, angular displacement, angular velocity and angular Acceleration.
- 3.4 Concepts of angular inertia, angular momentum, angular impulse and angular momentum.

#### **Credit 4: Applying biomechanical principles**

- 4.1 Types of biomechanical analysis and steps involved
- 4.2 Tools for measuring biomechanical variables
- 4.3 Biomechanical analysis of walking, running and jumping
- 4.4 Biomechanical analysis of pulling, pushing and throwing

### **Suggested Reading**

1. McGinnis, P., M. (2005) **Biomechanics of Sport and Exercise**, 2nd edn. Human Kinetics, United States of America.
2. Hay, J. G. (1978) **The Biomechanics of Sports Techniques**, 2nd edn. Prentice-Hall, Inc. New Jersey, United States of America.
3. Bunn, J. W. (1972) **Scientific Principles of Coaching**, 2nd edn. Prentice-Hall, Inc. New Jersey, United States of America.
4. Carr, G. (2004) **Sport Mechanics for Coaches**, 2nd edn. Human Kinetics, United States of America.
5. Chapman, A., E. (2008) **Biomechanical Analysis of Fundamental Human Movements**. Human Kinetics, United States of America.
6. Hall, S., J. (2003) **Basic Biomechanics**, 4<sup>th</sup> Edition. Mc Graw Hill, New York.

## Course 303

### Personality development and soft skills

#### Objectives

1. To make students understand the concept and components of personality, thereby to apply the acquired knowledge to themselves and to March towards excellence in their respective academic careers.
2. To bring out creativity and other talents with proper goal setting so that self esteem gets enhanced.
3. To enable students to communicate effectively in different situation.
4. To enhanced and inculcate leadership qualities.

#### Credit 1. Introduction and Foundation of personality

- 1.1. Meaning, definition & importance of personality.
- 1.2. Meaning & definition of habit, behaviour & their roles in personality development.
- 1.3. Types of Personality.
- 1.4. Freudian analysis of personality Development & Swami Vivekanand's concept of personality.

#### Credit 2. Communication skills

- 2.1 Introduction, meaning, importance of communication skills.
- 2.2 Process of Communication
- 2.3 Improving communication skills (Non verbal communication, value of time & importance of listening)
- 2.4 Body language exhibited during different professional interaction.

#### Credit 3. Spoken English, writing skills & presentation

- 3.1 Self introduction, speaking skills & guidelines of effective speaking.
- 3.2 Phonetics & Pronunciation etiquettes.
- 3.3 Interview & Group discussion.
- 3.4 Writing Resume/ CV, covering letter, application letter etc.

#### **Credit 4. Leadership and Soft skills**

- 4.1. Introduction and classification of soft skills
- 4.2. Social etiquettes
- 4.3. Introduction to leadership and qualities of good leader
- 4.4. Leadership training activities.

#### **Suggested Reading**

1. Mitra, B.K. (2011). Personality development and soft skills. Oxford university press. New Delhi, India.
2. Vivekananda, S. (2007). Personality Development. Advaita Ashrama Publications. Kolkata, India.
3. Andrews, Sudhir. (1988). How to succeed at interviews 21<sup>st</sup> Reprint. Tata McGraw-Hill. New Delhi.
4. Lucas, S. (2001). Art of public speaking. McGraw-hill.
5. Pillai, R. (2006). Spoken English for you. Emerald publishers, Chennai.
6. Hurlock, E.B. (2006). Personality Development, 28<sup>th</sup> Reprint. McGraw-hill, New Delhi.

## Course 304

### Health and Nutrition

#### Objectives:

1. To provide information about health and health education
2. To help children know their health status, identify health problems and be informed for taking appropriate remedial measures.
3. To make students aware about objectives of health education & School health program
4. To enable students to understand the concept, importance & determinants of health
5. To help them understand need of a comprehensive health education program and approaches to health education.
6. To help children know and accept individual and collective responsibility for healthy living at home, school and in the community.
7. To make them aware about healthy habits and hygiene (food, personal and group).
8. To help children know correct postural habits of basic movements so as to avoid postural defects and physical deformities.
9. To introduce communicable and non-communicable diseases
10. To enable them to understand reasons, effects & preventive ways of substance use & abuse.
11. To provide information regarding nutrition and its importance to human body.
12. To introduce nutrition for selective diseases and illness
13. To make students aware about supplements and Ergogenic aids and its effects on human body
14. To introduce different energy loading procedures and competition related diet

#### Credit 1: Health & Health Education

- 1.1 Meaning, Definition, Dimensions of Health
- 1.2 Determinants of Health (*biological, behavioral & socio-cultural conditions, environment, socio-economic conditions, health services, aging of population, gender, other factors*)
- 1.3 Meaning, Definition and objectives of Health Education
- 1.4 Scope, Importance and Principles of Health Education
- 1.5 School Health Program: *Food Services, PE Program, Healthy Environment, Health Services*

#### Credit 2: Hygiene & Diseases

- 2.1 Hygiene and its maintenance (*Personal, school, food*)
- 2.2 Classification of Diseases and Illness
- 2.3 Posture, Postural Deformities and general corrective measures
- 2.4 Diseases and Illness due to Drugs, Alcohol and Tobacco
- 2.5 Preventions, Identification & remedial measures related to Diseases & Illness

#### Credit 3: Nutrition, Energy Sources

- 3.1 Introduction of Nutrition, Functions of Diet and factors affecting Diet
- 3.2 Basal Metabolic Rate, Daily Energy Requirement, Elements of Balanced Diet (*Nutrient Balance, Pyramid*)
- 3.3 Energy Sources (*Carbs, Proteins and Fat*)
- 3.4 Other nutrients (*Vitamins, Minerals, Water*)

#### **Credit 4: Planning and Preparation of Diet and Competition Diet**

4.1 Myths, Fad & Facts of Diet

4.2 Nutrition for Illness and Diseases: (*Dehydration, Cramps, Fever, Diabetes, Surgery, Weight Loss and Weight Gain, Malnutrition*)

4.3 Supplements & Ergogenic Aids: *Use and ill effects*

4.4 Training Diet: *Protein, Carbs and Fat Loading*

4.5 Fuels for Competition- *Pre-during-Post competition diet*

#### **Suggested Readings**

- Clark, N. (2003). *Sports nutrition Guidebook*. Human Kinetics: USA
- Skolnik, H & Chernus, A. (2010). *Nutrient Timing for Peak Performance*. Human Kinetics: USA
- Stanfield, P. (1992) *Nutrition & diet therapy*. Jones & Bartlett: USA
- Williams J. (1990) *Personal hygiene*.
- Jeukendrup, A. & Gleeson, M. (2004). *Sports Nutrition*. Human Kinetics: USA
- Nemir Alma. (1990) *School Health Program*.
- Benardot, D. (1996). *Sports Nutrition*. American Dietetic Association:USA
- Anspaugh, D. J. & Ezell (2000). *Teaching Today's Health*. Allyn & Bacon: USA
- Insel, P & etall. (2009). *Nutrition*. Jones & Bartlett:USA

## Theory courses semester IV

### Course 401

#### Research & Statistics in Physical Education, Fitness & Sports

##### Objectives:

1. To impart basic knowledge of Research in Physical Education, Fitness & Sports to Student
2. To acquaint student with fundamentals of research
3. To educate student to select research problem & steps of developing it
4. To make student understand methodology & research procedure
5. To introduce student with different sampling techniques & data collection tools
6. To acquaint student with basic statistics & statistical techniques
7. To help student to apply & interpret descriptive statistics
8. To make student recognize appropriate inferential statistical tool as per research method
9. To make student understand data processing

##### Credit 1: Introduction to the concept of Research

- 1.1 Importance & Nature of research of research in Physical Education & Sports
- 1.2 Research definition & Introduction to types of research
  - Fundamental research
  - Applied research
  - Action research
- 1.3 Research problem & steps of formulating it
- 1.4 Introduction to Methods of research
  - Descriptive research
    - ✓ The case study
    - ✓ Analytical Research (eg. The job analysis)
    - ✓ Observational studies
    - ✓ Normative studies
    - ✓ Comparative & correlation studies
  - Experimental research
  - Quantitative & Qualitative

##### Credit 2: Fundamentals of Research

- 2.1 Statement of the problem, significance, objectives of the study, assumptions, limitations, delimitations & operational definition
- 2.2 Introduction to Hypothesis
  - Research hypothesis
  - Null hypothesis
- 2.3 Importance of reviews
- 2.4 Introduction to Methodology



- Sampling
- Data collection tools
  - ✓ Questionnaire, opinionnaire, interviews, observation, tally, psychomotor test

**Credit 3: Statistical basis-** Descriptive statistics

3.1 What is Statistics? Definitions & Concept

Data type

- Nominal data scale
- Ordinal data scale
- Interval data scale
- Characteristics of data

3.2 Data collection, mining & processing

Use of computer in research

- Application of Excel
- Introduction to SPSS

3.3 Measures of central tendency (Mean, Median & Mode)

Characteristics of central tendency its applications & interpretation

3.4 Measures of variability (Range, Average deviation, Quartile deviation & Standard deviation)

Characteristics of variability its applications & interpretation

**Credit 4: Inferential statistics**

4.1 Measures of relativity (z-scores, T-scores & Percentile scores)

4.2 Measures of relationship (scatter gram, Spearman's rank order correlation)

Interpretation of coefficient of correlation

4.3 Normal Probability Curve (NPC)

- Its characteristics & application in interpretation of data

4.4 Concept of inferential statistics & Need of inference

Introduction to Different inferential statistical tools

- For comparison:
- For correlation:

**Suggested Readings:**

- Dandekar, W.N. Educational Statistics & Evaluation
- Best, J. W. & Kahn, J. V. (1995). *Research in Education*. (9<sup>th</sup> ed.). New Delhi: Prentice Hall
- Thomas, J. R. & Nelson, J. K. (2001). *Research Methods in Physical Education*, (4<sup>th</sup> ed.). USA: Human Kinetics
- Vincent, W. J. (). *Statistics in Kinesiology*. Campaign: Human Kinetics
- Sprinthall, R. C. (1997). *Basic statistical Analysis*. (5<sup>th</sup> ed.). USA: Allyn & Bacon

## **Course 402**

### **Sports Medicine, Athletic Care and Rehabilitation**

#### **Objectives**

1. To understand the basics concepts underlining Sports Medicine.
2. To acquaint the students with scope and branches of Sports medicine.
3. To enable students understand doping and its bad effects.
4. To help them understand classification of sports injuries and its first aid and immediate management
5. To acquaint students to the basics of therapeutic modalities and its physiological effects
6. To help them understand process of rehabilitation
7. To enable students understand good and bad posture, postural deformities, its causes and management.
8. To help students understand nutrition and diet plan pre, during and post competition.
9. To acquaint the students with basics of general first aid.

#### **Credit 1: Sports Medicine**

- 1.1 Sports Medicine: Definition, meaning and objectives
- 1.2 Sports Medicine; Scope and branches
- 1.3 Team medical care: Role of PE teacher and coach
- 1.4 Doping Education

#### **Credit 2: Sports Injuries**

- 2.1 Causes and prevention of Sports injuries
- 2.2 Soft tissue injuries; Types, first aid and immediate management
- 2.3 Hard tissue injuries: Types, first aid and immediate management
- 2.4 Joint, Acute and Chronic injuries: Types, first aid and immediate management

#### **Credit 3: Therapeutic modalities**

- 3.1 Cryotherapy: Physiological effect and types
- 3.2 Thermotherapy: Physiological effect and types
- 3.3 Manipulative procedures: Physiological effect and types
- 3.4 Introduction to rehabilitation process for sports injuries

#### **Credit 4: General First Aids**

- 4.1 Introduction to general first aid, its aims and principles.
- 4.2 Resuscitation: ABC of CPR, CPR for adult and children, CPR steps
- 4.3 First aid for Bites, stings, burns, poisoning.
- 4.4 Transportation, Dressing and Bandaging

#### **Suggested Reading**

1. Roy, S. & Irvin, R. (1983). **Sports Medicine**, Prentice hall. USA
2. Pande P.K. (2010). **Outline of Sports Medicine**, New Delhi Jaypee Bros
3. Michael Hutson, (2001). **Sports injuries recognition & management** , Oxford University Press
4. Govindarajulu, N. (2006). **Sports Medicine**, Friends Publication. New Delhi
5. Ronald P. Pfeiffer & Brant Mangus , **Concepts of Athletic Training**, Jones & Bartlett Pub. 2nd Ed. 1993
6. Meltzer, S., & Fuller, C. (2005). **The Complete Book of Sports Nutrition: A Practical Guide to Eating for Sport**. New Holland Publishers. London
7. Thygerson A. L. (2004). **First Aid Handbook**. Jones and Bartlett publishers. Boston. USA
8. Singh A. (2007). **First Aid and Emergency Care**. N R Brothers publishers. Indore. India

## **Course 403**

### **Theory of Sports and Games**

#### **Objectives**

1. To understand the different types and classification of sports & games
2. To understand the Values and Ethics of sports and sportsmanship
3. To understand the basic rules, equipment and terminologies in sports and Games
4. To know different State and National level Awards
5. To understand different technologies used in Sports and Games

#### **Credit 1 Basics of Sports and Games**

- 1.1 Concept of Play, Games & Sports
- 1.2 Structure of Sports & Games, Classification Systems (Contact Sports, Limited Contact Sports, Non Contact Sports, Invasion Games, Target Games, Striking Games, Net/Wall Games, other systems of classification)
- 1.3 Basis of developing Offensive and Defensive strategies in Sports and Games (Invasion Games, Target Games, Striking Games, Net/Wall Games)
- 1.4 Terminologies: Umpire, Referees, Judge, Officials, Match Referee, Marshal
- 1.5 Integrity, Values and Ethics of sports and sportsmanship

#### **Credit 2 Theory of Sports and Games**

General Introduction of specialized games and sports (Athletics, Kabaddi, Kho-Kho, Badminton, Tennis)

Each game or sports to be dealt under the following heads

- 2.1 History and development of the Game and Sports
- 2.2 Basic rules of games and sports
- 2.3 Introduction of Standard equipment
- 2.4 Terminologies of related Sports and Games

### **Credit 3 Theory of Sports and Games**

General Introduction of specialized games and sports (Basketball, Handball, Football, Volleyball, Hockey)

Each game or sports to be dealt under the following heads

- 3.1 History and development of the Game and Sports
- 3.2 Basic rules of games and sports
- 3.3 Introduction of Standard equipment
- 3.4 Terminologies of related Sports and Games

### **Credit 4 Awards and Technologies in Sports and Games**

- 4.1 Awards in Sports & Games (State & National Level)
  - a. Nature
  - b. Eligibility
- 4.2 Technologies used in Sports and Games ( Football, Cricket, Athletics etc)
  - a. Hawk Eye
  - b. Goal ref System
  - c. Decision Review System
  - d. Hot Spot
  - e. RFID
- 4.3 Various International Sports & Games

#### **Suggested Readings:**

- AmericanFootballCoachesAssociation. (2006). Football offenses & Plays. United States: Human Kinetics.
- Bloomsbury. (1992). Illustrator's Reference manual Sport. London: Quarto Publishing .
- Clanton, R. (1997). Team Handball. United States: Human Kinetics.
- D, B. (1994). Teaching Children Games. Canada: Human Kinetics.
- Halon, T. (2004). The Sports Rules Book (2nd ed.). United States: Human Kineitics.
- Halon, T. (2009). The Sports Rules Book. United States: Human kinetics.

- kamalesh, L. M. (2009). Field Manual of Sports & Games. Meerut, India: Nageen Prakashan.
- PressEbury. (1997). The Book of Rules. London: Ebury Press.
- Women'sbasketballCoachesAssociation. (2011). Offensive plays & Strategies. United States: Human Kinetics.

## **Elective Course 404**

### **Play, Leisure and Recreation**

#### **Objectives**

1. To enable students to understand the concept of Play, Leisure and Recreation and their interrelationship.
2. To enable students to understand the Key Characteristics and challenges of Individual, children, adolescents and adults.
3. To enable students to understand the factors affecting individual's choice of leisure pursuit and Student can able to design the objectives, activities and programs for Individual, children, adolescents and adults.
4. To enable students to understand the influence of social systems on play, leisure and recreation.
5. To enable students to understand the Profession and career opportunities in Leisure and recreation.
6. To enable students to understand to the planning and management of Recreation facility centers.

#### **Nature of Play, Leisure and Recreation**

##### **Credit 1 Define Play**

1.1.1 Definitions and Different Interpretations of Play

1.1.2 Play Theories

##### **1.1. Leisure**

1.2.1 Definitions and Meaning

1.2.2 Essential elements of the Leisure

##### **1.2. Recreation.**

1.3.1 Definitions and Meaning

1.3.2 Characteristics/essential elements.

**1.3. Relationship of Play, Leisure and Recreation.**

**1.4. Factors to Motivate individuals to engage in Play, Leisure and Recreation.**

**Credit 2 Leisure, Recreation and society**

**2.1 Leisure, Recreation and Individual**

2.1.1 Four Aspects: physical, emotional, psychological and social.

2.1.2 Factors affecting individual's choice of leisure pursuit: age, gender, occupation, residence and lifestyle.

**2.2 Leisure, Recreation and Children**

2.2.1 Key Characteristics and challenges of children.

2.2.2 Play objects, activities and programs for children at each stage of development.

**2.3 Leisure, Recreation and Adolescents**

2.3.1 Key Characteristics and challenges of younger and older adolescents.

2.3.2 Objects, activities and programs for adolescents.

**2.4 Leisure, Recreation and Adults**

2.4.1 Key Characteristics and challenges of Adults.

2.4.2 Objects, activities and programs for adults.

**2.5 How leisure and recreation are influenced by the social systems. (Family, religion, government, economics and technology)**

**Credit 3 The Profession and career opportunities**

3.1 History of recreation and leisure service profession.

3.2 Organizations in recreation and leisure service profession in India and abroad.

3.3 Various career opportunities in the field recreation and leisure service profession.

3.4 Leadership skills, ethical standard required for recreation and leisure service profession.

**Credit 4 Planning and Management of recreation and leisure facility center**

4.1 Planning Process

4.2 Designing and managing the recreation facility centers.



4.3 Standards for Indoor recreational Sports facilities.

4.4 Standards for Outdoor recreational Sports facilities.

**Suggested readings:**

- Bucher, C.A., (2010). Foundation of Physical education (16<sup>th</sup> ed.). New Delhi: Tata McGraw-Hill.
- Krause Richard (1998) Recreation and Leisure in Modern Society (5<sup>th</sup> ed) London: John and Bartlett Publishers.
- Cordes, Ibrahim (1996) Applications in Recreation and Leisure for Today and the Future Missouri: Mosby-Year Book, Inc.
- National Intramural Recreational Sports Association (2009) Campus Recreational Sports Facilities USA: Human Kinetics.
- Human Kinetics (2010) Inclusive Recreation: Programs and Services for Diverse Populations USA: Human Kinetics.
- W.C.Gartner and D,W.Lime Trends in Outdoor Recreation, Leisure and Tourism London CABI.
- Kauffman Career Development in Recreation, Parks and Tourism A Positioning Approach USA: Human Kinetics.
- O' Connell Tim, Cuthberrtson Brent (2009) Group Dynamics in Recreation and Leisure USA: Human Kinetics.

## Yoga Education

### Objectives

#### Students will

1. Acquire knowledge of classical and theoretical foundations of the field of Yoga
2. Acquire knowledge of biomedical systems from an integrative and holistic perspective
3. Acquire knowledge and ability to use professional conduct during the practice of Yoga Therapy
4. Develop an ability to use relationship-based approaches to catalyze positive change or transformation with students
5. Develop an ability to apply knowledge learned in this curriculum to assess the needs of students, and to evaluate their performance
6. Acquire knowledge of models of human development, with the influence of familial, social, religious and cultural conditioning on health and healing
7. Acquire knowledge of the interconnections between the body, the breath, the mind, and the emotions in the context of maintaining resilience and well-being
8. Develop an ability to communicate effectively, to implement effective teaching methods by adapting to unique styles of learning, providing supportive and effective feedback while evaluating and acknowledging the progress of the student
9. Develop an ability to teach or deliver the appropriate practices for individuals and/or groups, using multimodal strategies of education such as auditory, visual, and kinesthetic learning tools, and tools that foster student engagement
10. Develop a knowledge of generally accepted ethical principles of health care and yoga codes of conduct

#### Credit I : Foundations of Yoga

##### A. Introduction to yoga,

- Introduction to Yoga. Meaning, Definition and Characteristics
- History of Yoga

- The relevance of Yoga today
- Need and Importance of Yoga in Physical Education and Sports
- Benefits of yoga, Misconceptions of yoga, Difference between yogic practices and physical exercises

#### **B. Yoga Philosophy**

- **Four Steps of Life** : Brahmacharya (Renunciation), Garhastha (Family Life) Vanaprastha (Non-attachment), Sanyas (Asceticism)
- **Human concepts** : Body, Mind, Soul

**C. The Astanga Yoga:** Yama - Don'ts, Niyama - Do's, Asana, Pranayama - Breath Control - Life Force Control, Pratyahara - Internalization, Dharana - Meditation, Dhyana – Realization and Samadhi - Absorption

#### **D. Yoga in the Bhagavadgita/Schools of yoga - / Eight kinds of Yoga:**

1. Karma Yoga - Work or Action, 2. Hatha Yoga – Physical 3. Raja Yoga- Mental, 4. Vedanta Yoga – Philosophical 5. Bhakti Yoga – Devotional, 6. Mantra Yoga - Mantra Chanting 7. Laya Yoga – Esoteric, 8. Jnana Yoga – Wisdom

### **Credit II : Introduction to Asanas , Pranayama ,Meditation, Mudra, Shatkarma /kriya,bhandha**

#### **A. Introduction to Asana , Pranayama ,Meditation,**

- **Introduction to Asanas** : Yoga and the Spine, Understanding the following asanas , Standing poses, Sitting Poses, Kneeling Poses, Supine Poses, Prone Poses and Arm Support Poses
- Surya Namaskar & Chandra Namaskar (Sun sequence )
- **Pranayama: Breathing techniques:** Aspects of Pranayama, The Pranik koshas (anamaya, manomaya, Pranamaya, Vijnanamaya, anandmaya Koshas), Breath health and Pranayama, general Considerations ( Contraindications, time, diet, Place, Breathing sequence, Side effects ) Nadi Shodhana - Anuloma Viloma (alternate nostril breathing), Ujjayi, Sheetal, Sheetkari , Bhramari, Bhastrika, Kapalabhati (lung cleansing exercise), Moorchha, Surya Bheda,

- **Major Nadis:** Ida, Pingala and sushumna
- **Meditation:** Pratyahar, dharna, dhyana, Samadhi & Relaxation techniques

#### **B. Introduction to Mudra, Shatkarma /kriya, bhandha**

- **Five Groups of Yoga Mudra :** **Hasta** :(hand ) Jnana & Chin, Yoni, Bhairava, Haridya, **Mana:** (head) hambhavi, Naskagra drushti, khechari, kaki, Bhujangini, Akashi, Shanukhi, Unmani, **Kaya:** (postural) Vipareeta karni, Pashinee, prana, yoga, Manduki, Tadagi, **Adhara** :(perineal) Ashwini, Vajroli/sahajoli
- **Shatkarma /Kriya:** Neti, dhauti, Nauli, basti, Kapalbhathi, Trataka
- **Bandha:** Jalandhara (throat lock), Moola (perineum contraction), Uddiyana (abdominal contraction)

#### **Credit III : Anatomy of Yoga and Yoga Therapy**

- Movement and Posture** , Nervous system , Reflexes, Vestibular system, Sight and touch, Types of Stretching, Types of Muscle Contraction
- Dynamics of Breathing** : Prana and Apana, , Breathing, Gravity and yoga, Definition of breathing, movement in two cavities, Muscles of respiration . Natural Breathing, Abdominal Breathing ( Diaphragmatic Breathing), Thoracic Breathing, yogic Breathing, breathing and Posture. The Bandhas.
- Relaxation and Meditation** : Muscular relaxation, Breathing and relaxation, Autonomic nervous System
- Yogic Physical systems :**
  - The Chakras Systems –Center of Unity : Mooladhara, Swadhisthana, Manipura, Anahata, Vishuddhi, Ajna, Sahasrara
  - **The five pranas** : Udana, Prana, Samana, Apana, Vyana
  - **The Gunas:** Meaning Types of Gunas: Sattwa , Rajas, Tamas
- Nutrition : Yogic / Satwik Food**
  - Vegetarianism – for ethical, spiritual and health reasons

- How diet affects the mind
- Proper balance of the main nutrients
- Ayurvedic principles of nutrition
- Healing effects of fasting

**F. Yoga Therapy :**

- Need and Principles of Therapeutic yoga. Preventive yoga Practice principles , Alignment, Contraction versus Stretching of Muscles, Yoga Therapy of asana for chronic and acute diseases and disorders
- **Yogic concept of Lifestyle diseases:** The Five Kosha / Dimensions : Annamay, Manomaya, Pranamaya, Vigyanmaya, Anandmaya kosha
- **Mind Management :** Power of mind, Self discipline, Hatha Yoga and physical harmony, Raja Yoga and mental harmony
- **Mantra :**Mantra sadhana, Vibrations and personality, Tuning the total personality with mantras

**Credit IV: Teaching Practices & Appropriate Practices:**

- A. Movement and posture (Practical)
  - Correct Alignment of Asana , Correcting Postures
- B. Teaching Practices ,Developmentally Appropriate practices
- C. Yoga for children's & differently abled population
- D. Yoga education centers in India and abroad
- E. Competitions in Yogasanas

**TEACHING METHODOLOGY:**

Power point presentation, Learning and applying eight steps method to teach , Demonstration, Group discussion, Group Practice, Library facility to all, Report & Worksheet writing and presentation of it, One to one discussion, Lectures, Review classes.

**References:**

- Bell R. (1998) *Simple Yoga Techniques*, Time Life Custom Publishing, U.S.A
- Brown, F. Y. (2000). *How to use yoga* . Delhi: Sports Publication.
- Chanchani S., Chanchani R., (1995) *Yoga for Children*, USB Art Studio Publication, Delhi India
- Dr. Karmananda S. (1983) *Yogic Management of Common Diseases*, Yoga Publication Trust New Bihar, India
- Freedman F. B., Hall D., Kelly E. Monks J., Smith J. (2005) *Yoga & Pilates for Everyone*, Anness Publication, London
- Kappmeier L. K., Ambrosini D. M., (1964) *Instrumenting Hatha Yoga*, Publication Library of Congress Cataloging, U.S.A
- Kaminoff L.(2007) *Yoga Anatomy* .Human Kinetics, United States.
- Niranjananda S. S. (1997) *Yoga Sadhana Panorama*, Bihar School of Yoga, Bihar India
- Niranjananda S. S. (2005) *Yoga Sadhana Panorama*, Yoga Publication Trust New Bihar, India
- Gharote, M. L. &Ganguly, H. (1988). *Teaching methods for yogic practices*.Lonawala: Kaixydahmoe.
- Rajjan, S. M. (1985). *Yoga strenthening of frelexation for sports man*. New Delhi:Allied Publishers.
- Satyananda S. S (1969) *Asana Pranayama Mudra Bandha*, Bihar School of Yoga, (fourth Edition) by Yoga Publication Trust, Bihar, India
- Satyananda S. S (1984) *Yoga and Cardiovascular Management*, Bihar School of Yoga (second edition) by Yoga Publication Trust, Bihar India
- Shankar,G.(1998). *Holistic approach of yoga*. New Delhi:Aditya Publishers.
- Shekar,K. C. (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra.
- Vivekananda R. (2005) *Practical Yoga Psychology*, by Yoga Publication Trust, Bihar, India

## **Fitness Conditioning**

### **Objectives:**

1. To get introduced to basic concept of fitness & its assessment.
2. To understand the principles of exercise prescription.
3. To understand the guidelines & be able to conduct the exercise plans for healthy population.
4. To understand the duties, responsibility, legal aspect of fitness conditioner.

### ***Credit1. Training Essentials***

#### **1.1 Core Concept: Physical Activity, Exercise, Physical Fitness.**

- 1.1.1 Concept of physical activity
- 1.1.2 Moderate & vigorous physical activity
- 1.1.3 Fitness & its components
- 1.1.4 Exercise terminology.
  
- 1.2 Assessment of Health Related Physical Fitness.
  - 1.2.1 Health appraisal
  - 1.2.2 Maximal & Sub-maximal fitness test
  - 1.2.3 Girth circumference, BP monitor ,
  - 1.2.4 Goal setting
  
- 1.3 Guideline for qualitative and quantity of exercise
  - 1.3.1 Activity pyramid
  - 1.3.2 recommended physical activity guideline for healthy adult
  - 1.3.3 recommended physical activity guideline for kids
  - 1.3.4 DOMS , benefits of fitness exercise
  
- 1.4 Training principles.
  - 1.4.1 Individual difference
  - 1.4.2 SPORT principle
  - 1.4.3 5R principle
  - 1.4.4 Intensity measures

### ***Credit 2. Training Programme***

#### **2 Training programme**

- 2.1 Tactical for strength conditioning & training cycle
  - 2.1.1 Programme for muscular endurance
  - 2.1.2 Programme for muscular hypertrophy
  - 2.1.3 Programme for muscular strength
  - 2.1.4 Training cycle.
  
- 2.2 Tactical training for endurance ,training modes & training cycle
  - 2.2.1 Programme for aerobic endurance
  - 2.2.2 Programme for anaerobic endurance
  - 2.2.3 Programme for sports specific endurance

2.2.4 Training cycle for endurance

2.3 Tactical training for power ,agility, quickness ,coordination

2.3.1 Programme for agility

2.3.2 Programme for quickness

2.3.3 Programme for power (plyometric)

2.3.4 Programme for coordination

2.4 Tactical training for flexibility ,core & balance ,relaxation techniques

2.4.1 Dynamic stretching , static stretching, PNF stretching method

2.4.2 TAG (thighs,glute,abs) programme

2.4.3 Static & dynamic balance programme

2.4.4 Relaxation techniques

### **Credit 3 introduction to training modes & latest equipment**

3 introduction to training modes & latest equipment

3.4 modes of resistance training

3.4.3 Static vs dynamic

3.4.4 Variable vs constant resistance machine

3.4.5 Free weights vs machine vs bodyweight vs resistance band vs TRX

3.4.6 Compound vs isolation resistance training

3.5 Modes of endurance training

3.5.3 Rhythmic activities for endurance

3.5.4 Treadmill & other Cardio machine programme

3.5.5 heart rate monitor for endurance activity

3.5.6 Pedometer for 10K steps

3.6 Latest equipment in fitness conditioning

3.6.3 Bosu ball

3.6.4 Swiss ball

3.6.5 Trx band

3.6.6 Balance board

3.7 Trends in training

3.7.3 One to one personal training

3.7.4 Group class training (bollywood dance –aerobics , Zumba, tae-bo),

3.7.5 Spinning

3.7.6 Boot camp



#### ***Credit4. Professionalism in fitness industry***

- 4 professionalism in fitness industry
  - 4.4 Qualities of fitness conditioning trainer
    - 4.4.3 Grooming
    - 4.4.4 Verbal & nonverbal communication with client
    - 4.4.5 Energy level
    - 4.4.6 Update knowledge
  - 4.5 Ethical & legal issues
    - 4.5.3 Contact with opposite sex
    - 4.5.4 Confidentiality
    - 4.5.5 CPR & first aid Certification
    - 4.5.6 Gym etiquettes
  - 4.6 Strategies for enhancing exercise adherence
    - 4.6.3 SMART goal setting
    - 4.6.4 Contract
    - 4.6.5 Award-reward
    - 4.6.6 Feedback & cues
  - 4.7 professional development
    - 4.7.3 certification
    - 4.7.4 workshop
    - 4.7.5 branding
    - 4.7.6 working atmosphere

#### **Suggested Readings:**

1. Fahey, Insel, Roth (2004). Fit & well (6th Ed.). Boston: McGraw Hill co.
2. Greenberg, Dintiman, Oakes. (2004). Physical fitness & wellness (3rd Ed.). IL:Human Kinetics
3. Howley & Franks (1997). Health fitness instructor's Handbook (3rd Ed.) IL:Human kinetics
4. ACSM (1998) ACSM's resource manual for guidelines for exercise testing & Prescription (3rd Ed.) Lippincott, Williams & Wilkins.
5. Frederic Delavier, strength training anatomy

## Teaching Skill Development Programme

### Important guidelines to be followed for conduct of practice teaching lessons

#### A. Regarding optional subject lessons:

1. Every candidate must undergo the micro-teaching program in method of optional subject and complete 6 micro lessons, 1 integration lesson and 2 simulation lessons.
2. Total number of theory lessons to be conducted during the three semesters, in optional subject is 14. Out of which 12 will be based on the content matter of the selected method and 2 lessons will be based theory of physical education.
3. Lessons using different methods- Each student teacher will conduct at least two lessons using different methods. (2 lessons)
4. Lesson on value education- Each student teacher will conduct one lesson focusing on value education. The candidate may integrate the content matter of the chosen method with value education. (1 lesson)
5. Lesson on theory of physical education- Each student teacher will conduct two lessons based on relevant theoretical aspects of physical education. (2 lessons)

#### B. Regarding Physical Education lessons:

1. Every candidate must undergo the micro-teaching program in method of physical education and complete 6 micro lessons, 1 integration lesson and 2 simulation lessons.
2. Total number of practical lessons in physical education during the last two semesters is 24.
3. Lessons in physical education practical- Student teacher is required to conduct 4 practice teaching lessons in Physical education on the primary classes i.e. grade I to grade V. The lessons should be based on the content of fundamental motor skill development and movement concept development.
4. Each student teacher will conduct the remaining practice lessons based on the current school curriculum in real school settings. These lessons are to be given in the secondary school i.e. Std VI to X.
5. Each student teacher is required to conduct at least 1 practice teaching lesson in Physical Education on a large class size or 1 practice teaching lesson in Physical Education on differently-abled students/special children.
6. Student teacher must design and develop at least two progressive lesson plans based on a same unit. All such lessons from this unit plan should be preferably conducted on the same group of students.
7. For one of the lessons student teacher should employ team teaching technique. Conducting a mass activity or setting up a mass demonstration will be considered as a lesson.

8. The candidate may select any activity from the given list or area of expertise if any for the unit plan development.
9. Practice teaching lessons in Physical Education should be based on various activities given in the groups below. From the total lessons, the student teacher is required to take minimum one lesson each from each of the groups given below:
  - i. Athletics, gymnastics, combative
  - ii. Games & sports- Skill teaching/modified game
  - iii. Demonstrative activities- Light apparatus, lezim, marching, dance, aerobics, yoga
  - iv. Competencies- Fundamental movements, movement concept
  - v. Fitness- HRPF, SRPF

### **Semester I Course 105**

#### **Teaching Skill Development Programme**

- A. Micro lessons Optional Subject: (3 skills-6 Lessons) (2 Credits)

Student teachers will give 6 micro-lessons. For these lessons, they will select any three teaching skills from the list given below. They will complete the cycle of two lessons i.e. 'teach – reteach' for each skill. These lessons should be graded.

#### **List of Teaching Skills**

- Set Induction
  - Stimulus Variation
  - Narration
  - Questioning
  - Illustration
  - Explanation
  - Reinforcement
  - Black Board Work
  - Closure
  - Reading
- B. Integration & simulation lessons (1+2 Lessons)(2 credits)
- Micro-teaching will be followed by one integration lesson of 10 minutes and 2 simulation lessons of 20 minutes each. Integration lesson will comprise integration of any 2 or 3 relevant skills already learnt in microteaching. Simulation lesson will be a mini lesson to be conducted in simulated condition as that of school.

## Semester II Course 205

### Teaching Skill Development Programme

D. Micro lessons of Physical Education and Sports (6 Lessons)(2 Credits)

Student teachers will give 6 micro-lessons. For these lessons, they will conduct teaching skills from the list given below. They will complete the cycle of two lessons i.e. 'teach – reteach' for each skill. These lessons should be graded.

List of Teaching Skills

- Warm-up
- Demonstration
- Practice management
- Class Management
- Assessment & checking for understanding
- Feedback & reinforcement

E. Integration & simulation lessons (1+2 Lessons)(2 credits)

Micro-teaching will be followed by one integration lesson of 10 minutes and 2 simulation lessons of 20 minutes each. Integration lesson will comprise integration of any 2 or 3 relevant skills already learnt in microteaching. Simulation lesson will be a mini lesson to be conducted in simulated condition as that of school.

F. Practice Lessons Optional Subject (2 Lessons)(1 credit)

Each student teacher will conduct a total of 2 practice lessons based on the current school curriculum in real school settings. Student teacher will conduct practice teaching lessons in optional methods of teaching. These lessons are to be given in the secondary school i.e. Std VI to X.

### **Semester III Course 305**

#### **Teaching Skill Development Programme**

C. Practice Lessons Optional Subject (6) (3 credits)

Each student teacher will conduct a total of 6 practice lessons based on the current school curriculum in real school settings. Student teacher will conduct practice teaching lessons in optional methods of teaching. These lessons are to be given in the secondary school i.e. Std VI to X.

D. Practice Lesson of Physical Education and Sports (10) (5 credit)

Each student teacher will conduct a total of 10 practice lessons based on the various physical activity groups mentioned before. Student teacher may conduct lessons on primary and/or secondary school level. The unit must be chosen based on the grade level of the school syllabus.

## Semester IV Course 405

### Teaching Skill Development Programme

#### School Internship

Objectives of the internship program are to enable the student teacher:

- To get an opportunity to observe the teaching of experienced teachers.
- To work under the guidance of experienced school teachers.
- To know which types of records are maintained in the school and how they are prepared?
- To participate in co-curricular and extracurricular activities organized in the schools.
- To participate in assessment work done in the school
- To have feel of total experience of teaching in the school.

The Internship program of 4 weeks will be conducted in school settings. In the School Subject Internship Programme the student teacher will complete the following activities:

A. Lessons of optional subject (6 lessons) ( 3 credits)

The candidate must complete all the 6 practice teaching lessons during the internship program. In this program the student teacher will select one unit from the optional subject in consultation with the school teacher. He will prepare the unit plan for that unit. He will teach that unit for at least four periods under the guidance and observation of the school teacher /teacher educator. At the end of the teaching he will prepare and conduct a unit test. In addition to teaching lessons, the candidate has to complete other activities during the internship program. They are given below.

• Activities to be completed in the school Subject Internship program:

1. Observation of lessons of peers & or/ teachers
2. Collection of information about Catalogue,
3. Progress Card, Result Sheet,
4. General Register, School Time Table, class time-table, teacher time-table
5. Drawing up a question paper & creating instructional aid
6. Take off period class

B. Lessons of Physical Education and Sports (14 Lessons)(7 credits)

The candidate must complete all the 14 practice teaching lessons during the internship program. In this program the student teacher may complete the teaching of unit i.e. consecutive lessons based on same unit on same group of students. One of the lessons shall be conducted on a large class size or special

children. The student teacher may also conduct the required four PE lessons on primary school level if available and teach them as a unit plan ending up with assessment. In addition to teaching lessons, the candidate has to complete other activities during the internship program. They are given below.

- Activities to be completed in the physical Education Internship program:
  1. General Register, School Time Table, sports **equipment records**
  2. Sports Competition **eligibility form**, parent teacher Association
  3. Conducting physical **fitness test** of one class.
  4. Conduct of **Mass Sports activities** in school.
  5. Drawing up a **question paper** & creating instructional aid
  6. Conduct activities for off lectures

**Practical Courses**  
**Proficiency in Physical Education and Sports Activities**  
**Semester II**  
**Course 206 (28 credit)**

Sr. No.	Activity	Credit
1	Track & Field (Run and Relay, Long Jump and Triple Jump, Discus Throw and Shot Put)	6
2	Floor Gymnastics	2
3	Mass Demonstrative Activity (Aerobics and Equipment Drills)	2
4	Minor Games & Lead up activities	2
5	Competencies	3
6	Fitness (Exercise, Personal Physical Fitness)	3
7	Drill March and Flag Code	2
8	Introduction of Sport (Select any four sport list given below)	2*4=8

1. Track & Field
- (a) Runs: Sprints and Relays (2 Credit)
- (b) Jumps: Long Jump & High Jump (2 Credit)
- (c) Throws: Shot put and Discus (Any two) (2 Credit)

Detailed syllabus and the evaluation scheme are given in the following table.

Sr.No.	Event	Content	Evaluation
1	<b>Sprint</b>		
	<b>100 m, 200 m, 400m</b>	<b>a) Starts-</b> Medium, bullet and elongated starts. <b>b) Running on curve.</b> <b>c) Starts on Curve.</b> <b>d) Finish-</b> Chest, Run through, Lunge finish. <b>d) Officiating at Start and finish.</b>	50% marks For 100 m <b>performance</b> as per norms. 50% marks for Skill.
2	<b>Relays</b>		



	<b>Relay -4X100 and 4X400 m</b>	<b>Baton Exchange</b> a) Down and Up Sweep b) Visual and Non Visual Exchange c) <b>Officiating</b>	<b>Marks for baton exchange skill-</b> incoming and outgoing both.
	<b>100 m–Boys and girls</b>	a) <b>Lead</b> leg action. b) <b>Trail</b> leg action. c) <b>3 stride</b> pattern between the hurdles. d) <b>Start</b> and <b>striding</b> to 1 <sup>st</sup> Hurdle.	<b>Skill Performance</b> Combined lead leg and trail leg action. Striding pattern between the hurdles. Striding pattern from start to 1 <sup>st</sup> hurdle.
<b>5</b>	<b>Jumps</b>		
	<b>Long jump</b>	a) <b>Sail style and Hang style.</b> - Approach run, Take off, action in the air, landing. b) <b>Rules and Officiating</b>	50% marks For long jump <b>performance</b> as per norms. 50% marks for over all jumping skill.
	<b>Triple jump</b>	-Approach run Last stride before the take off, Take off, Hop-Step-Jump, Landing b) <b>Rules and Officiating</b>	
<b>6</b>	<b>Throws</b>		
	<b>Discus Throw</b>	a) <b>Standing Throw-</b> Basic Stance, Preliminary swings, Pre delivery action, delivery and reverse. b) <b>Officiating</b>	50% marks For throwing <b>performance</b> as per norms. 50% marks for over all throwing skill.
	<b>Shot Put</b>	<b>Gliding Technique</b> -Hold and stance, T-balance, crouch, Kick and glide, support of toe board, power position, delivery and reverse. d) <b>Officiating</b> e) <b>Analysis and correction</b>	50% marks For throwing <b>performance</b> as per norms. 50% marks for over all throwing skill.

## 2. Floor Gymnastics: (2 credits)

- (a) Rolls: Forward, Backward, Side, Dive (Variations)
- (b) Balances: 'V', 'T', 'Y', 'L', Frog, Headstand, and Handstand
- (c) Turnover movements: Cartwheel, Handspring & Headspring
- (d) Pyramids: Pair, Trio, Quadrates, Penthats

Evaluation of this should be done on the basis of performance in the above skills.

## 3. Demonstrative Activity

### 3.1 Introduction to Light apparatus drill

Details as under

Apparatus	Exercises
1. Dumbbells Drill 2. Wand Drill 3. Indian club or Jodi 4. Pole Drill 5. Hoop Drill 6. Flag Drill 7. Introduction to Pom pom drill, Ballloon, Jump rope, Ball.	1. Standing Exercise 2. Jumping Exercise 3. Moving Exercise 4. Combination of these exercise

### 3.2 Aerobics - (2 credits)

Details are as under

Low impact core moves - 1. March, 2. Side to side, 3. Double side to side,

4. grapevine, 5. Knee up, 6. Leg curl, 7. Toe touch, 8. Side lunge, 9. Back lunge

10. Kick front, 11. Kick side, 12. Heel to reft, 13. 'E' shape, 14. 'v' shape 15. Introduction of Bench Exercise

## 4. Minor Game and Lead up Activity (2 Credits)

S.No.	Game	Description
1	Minor Games	Circle Games, Team & Relay games, Partner contests, Simple ball games, Simple stunts
2	Lead up activities	Designing of skill specific games of major sports

### 5. Competencies: (3 Credits)

S.No.	Skills	Movement
1	Movement Concept	Body awareness, Space awareness, Effort awareness, Relationship awareness
2	Locomotor skills	Walking, running, skipping, sliding, galloping
3	Nonlocomotor skills	Bending, stretching, pushing, pulling, twisting, and turning, rocking, swaying, balancing.
4	Manipulative skills	Striking, Hitting, Throwing, Catching, and Dribbling

### 6. Fitness (3 Credits)

#### 6.1 Exercise and Conditioning (1.5 Credits)

Details are as under

Name of the activity	Description
Warm up & Cool down	Mobility Exercise
Stretching Exercise	Active, Ballistics & partner stretch
Animal walks	Variety of animal walks to built strength, flexibility etc.
Partner Exercise	Variety of exercise to built strength & flexibility
Jump rope exercises	Variation in jump rope exercises
Training methods	Weight training, plyometric, circuit training, obstacle courses

#### 6.2 Fitness score of Individual (1.5 Credits)

Tests	Components
12 min run/walk or 600 yard run/walk Cardiovascular endurance	C. V. Endurance
50 yard dash Speed	Speed
4*10m shuttle run Agility	Agility
Bent-knee sit ups Abdominal muscular endurance	Abdominal Muscular Endurance

Pull-ups (boys) / Flexed arm hang (girls)/Push-ups/ modified push ups	Upper body Muscular Endurance
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- Fitness of the candidates will be evaluated twice in a year.
- Marks for fitness will be given as per the norms prepared by the university.

## 7 Drill Marching and Flag Code(2 Credits):

Details as under

<p><b>Fundamental commands:</b></p> <p>1.Fallin 2.Attention (Savdhan) 3.Standat ease (Vishram)</p> <p>4. Standing easy (Aramse) 5. Quick march (Tej chal)</p> <p>6. Mark time (Qadam tal) 7. Right turn (Dahine mur)</p> <p>8. Left turn (Baen mur) 9. Back turn (Pichhe mur)</p> <p>10. Right dress 11. Eyes front 12. From the right-number 13. Stepping forward, sideward, &amp; backward</p> <p>14. Left or right or about turn 15. Half left or right turn</p> <p><b>Movements:</b></p> <p>1. Marking time 2. Halting from marking time</p> <p>3. Marching forward (From marking time)</p> <p>4. Quick marching 5. Halting from marching forward</p> <p>6. Marching backward 7.Marching sideward</p> <p>8. Double time marching 9. Halting from double time</p> <p>10.Changing to Quick time from Double time marching</p>	<p>12. Turning about while Marching or Marking time 13.Inclining to the left while Marching or Marking time 14. Saluting left while Marching 15. Marching to the rear 16.Changing step 17. Changing direction left or right while Marching 18. Changing direction to left or right about while Marching 19. Forming twos / fours on the left or right 20. Reforming files from column of fours 21. In company front numbered in fours or in a column of fours, to execute, 'fours right' of 'fours left' march etc.</p> <p>22. Fours left or right wheel march 23. Forming fours / twos by a left or right turn 24. Forming file from fours by a left or right turn</p> <p>25. Marching the front by rear fours with left or right wheel 26. Changing a single file into columns of four, eight, etc.</p>
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11.Turning to the left, or right while Marking time or Marching	
<b>Flag Code</b>	Different methods of tying the flag knot, Protocols of Flag hoisting

**8 Introduction of Sport: Introduce any four sport from below list of sports and Games**

<p><b>List of the Sports &amp; Games:</b></p> <p>1.Kabaddi 2.Kho-Kho 3.Volley ball  4.Basket ball 5.Hockey 6.Foot ball  7.Hand ball 8.Swimming  9.Soft ball</p>	<p>10.Cricket 11.Table Tennis  12. Badminton 13. Tennis 14.Boxing</p>
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- Marking of the play area
- Fundamental skills: The skills (min.5 offensive and 5 defensive) of the game/sport are to be taught
- Drills for the skills taught (for varied situations no. of students, equipments)
- Positional play
- Lead-up/& modified games
- Game performance
- General rules & Duties of officials

## Proficiency in Physical Education and Sports Activities

### Semester IV

#### Course 406 (20 credits)

Sr. No.	Activities	Credits
1	Track & Field (Hurdles, Javelin Throw and Hammer throw, High Jump and Pole vault)	4
2	Taekwondo/Mallakhamb/ Wrestling/Judo (Any one)	2
3	Yoga	2
4	Lezium	2
5	Measurement and Evaluation	2
6	Introduction to sport & Games (Any four sports given in the list below)	2*4=8

#### 1. Track and Field

- a) Javelin Throw and Hammer Throw: 2 credit
- b) High Jump and Pole Vault: 2 credit
- c) Hurdles: Introduction

<b>Javelin</b>	<b>Hold and approach run, 5 stride patterns before the throw-</b> the withdrawal, the impulse and the power reach stride, <b>Delivery and reverse.</b> <b>d) Officiating</b>	50% marks For throwing <b>performance</b> as per norms. 50% marks for over all throwing skill.
<b>Hammer Throw</b>	Introduction to Grip, Stance, Rotation technique (Foot work) and Release	
<b>High jump</b>	<b>a) Straddle Roll technique</b> -Approach run Last stride before the take off, Take off, Bar clearance, Landing <b>b) Officiating</b>	50% marks For long jump <b>performance</b> as per norms. 50% marks for over all jumping skill.
<b>Pole vault</b>	Introduction to Approach run, Planting, Action in air and landing	
<b>Hurdles</b>	100/110 mtrs hurdle- Start to 1 <sup>st</sup> hurdle, Steps between hurdle, Hurdle clearance; lead and trail leg action. 400 mtrs hurdle- Start to 1 <sup>st</sup> hurdle, Steps between hurdles, Hurdle clearance; lead and trail leg action.	

**2. Taekwondo/Mallakhamb/ Wrestling/Judo (Any one of these activities): 2 credits**

Taekwondo	<ul style="list-style-type: none"> <li>• Player Stances – walking, extending walking, L stance, cat stance.</li> <li>• Fundamental Skills – Sitting stance punch, single punch, double punch, triple punch.</li> <li>• Punching Skill from sparring position – front-fist punch, rear fist punch, double punch, and four combination punch.</li> <li>• 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),</li> <li>• 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)</li> <li>• Sparring (Kyorugi) – One Step Sparring (hand techniques, foot techniques, self defense techniques, combination kicks), Free Sparring.</li> <li>• Board Breaking (Kyokpa) – eye control, balance, power control, speed, point of attack.</li> <li>• Rules and their interpretations and duties of officials</li> </ul>
Mallakhamb	<ul style="list-style-type: none"> <li>• Salaami, Hold, Saadiudi, Bagaludi, Dashrang udi, Bagli udi, Vel udi, Suidora, Phirki, Padmasana, T.Balance, Pataka, Landing.</li> <li>• 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.</li> </ul>
Wrestling	<ul style="list-style-type: none"> <li>• Take downs, Leg tackles, Arm drag.</li> <li>• Counters for take downs, Cross face, Whizzer series.</li> <li>• Escapes from under-sit-out turn in tripped.</li> <li>• Counters for escapes from under-Basic control back drop, Counters for stand up.</li> <li>• Pinning combination-Nelson series(Half Nelson, Half Nelson and Bar arm), Leg lift series, Leg cradle series, Reverse double bar</li> </ul>

	<p>arm, chicken wing and half Nelson.</p> <ul style="list-style-type: none"> <li>• Escapes from pinning: Wing lock series, Double arm lock roll, Cridge.</li> <li>• Standing Wrestling-Head under arm series, whizzer series</li> <li>• Referees positions.</li> </ul>
Judo	<ul style="list-style-type: none"> <li>• Rei (Salutation)-Ritsurei(Salutation in standing position), Zarai (Salutation in the sitting position)</li> <li>• Kumi kata (Methods of holding judo costume)</li> <li>• Shisei (Posture in Judo)</li> <li>• Kuzushi (Act of disturbing the opponent posture)</li> <li>• Tsukuri and kake (Preparatory action for attack)</li> <li>• Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), Mae Ukemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)</li> <li>• Shin Tai (Advance or retreat foot movement)-Suri-ashi (Gliding foot), Twugi-ashi (Following footsteps), Ayumi-ashi (Waling steps).</li> <li>• Tai Sabaki (Management of the body)</li> <li>• NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi (Drawing ankle throw), De ashihari (Advance foot sweep), O Goshi (Major loim), SeoiNage (Shoulder throw).</li> <li>• Katamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulder hold), Kami shihogatama (Locking of upper four quarters), Method of escaping from each hold.</li> </ul>

### 3. Yoga\_ (2 Credits)

The syllabus under this activity will be that as prescribed upto std.XII.

Evaluation should be done for.

- (a) Asanas
- (b) Suryanamaskar
- (c) Pranayam techniques



**(a) Asanas : Details as under**

1. Sarvangasana 2. Tolanggulasana 3. Hansasana 4. Badh Padmasana 5. Halasana 6. vipareet Karni 7. Shavasana 8. Ardha Matsyendrasana 9. Paschimotanasana 10. Bhadrasana	11. Ushtransana 12. Akarna Dhanurasana 13. Vipareet Karni 14. uutan Mandukasana 15. Kukkutasana 16. Simhasana 17. Shirshasana 18. Shabhasana 19. Parvatasana with Padmasana 20. Trikonasana
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**4. Lezium (2 Credits): Details as under**

<b>a. Preliminary position:</b> 1. Lazim Skandh and Aram 2. Husshyar <b>b.Exercises:</b> 1. Ath Thoke 2. Talse Kadam 3. Pavitra 4. Pao Chakra (Quarter Circle)	5. Ardha Chakra or Firki (Half Circle) 6. Poora Chakra or Firki (Full Circle) 7. Age Chal (Going Forward) 8. Pair Formation 9. Hool o Dodging 10. Change the partner 11. Baithak 12. Palat
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**5. Measurement & Evaluation: (2 Credits)**

1. 9/12 min. run & walk 2. 1 min. bent knee sit up 3. Push up/ modified push up 4. Sit & reach 5. 4X10m. shuttle run 6. 50m dash & 30m Flying 7. Wall volley	8. Sitting ball throw 9. Stand broad jump 10. Vertical jump 11. 1 min. Skipping 12. Step test 13. Calculate Target Heart Rate 14. Calculate Body Mass Index (BMI) 15. Waist Hip Ratio (WHR)
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Each candidate should complete a practical course in test and measurement practical. Adequate training should be given to the candidates in conducting the tests mentioned above in laboratory & school settings. He/she must keep a record of the activities completed in a

practical journal. Each student should be able to conduct the tests and analyze and evaluate the scores of the test items. The candidate will be evaluated with the help of an objective test/viva-voce examination & the conduction & analysis of the test scores.

6. **Introduction of Sport:** Introduce any four sport form the given below those who are not thought in semester I and II(8 Credits)

<b>List of the Sports &amp; Games:</b>	10.Cricket 11.Table Tennis
1.Kabaddi 2.Kho-Kho 3.Volley ball	12. Badminton 13. Tennis 14.Boxing
4.Basket ball 5.Hockey 6.Foot ball	
7.Hand ball 8.Swimming	
9.Soft ball	

- Marking of the play area
- Fundamental skills: The skills (min.5 offensive and 5 defensive) of the game/sport are to be taught
- Drills for the skills taught (for varied situations no. of students, equipments)
- Positional play
- Lead-up & modified games
- Game performance
- General rules & Duties of officials

**Course 407 Specialization (4 Credits)**

The candidate has to opt for one of the specialization events listed below.

<b>List of the Sports &amp; Games:</b>	10.Cricket 11.Table Tennis
1.Kabaddi 2.Kho-Kho 3.Volley ball	12. Badminton 13. Tennis
4.Basket ball 5.Hockey 6.Foot ball	14.Wrestling
7.Hand ball 8.Swimming	
9.Soft ball	

- 6.1 Warming- up
- 6.2 Training for Motor Abilities
- 6.3 Technical/Skill Training
- 6.4 Tactics and Strategy
- 6.5 Officiating and Organization

---The End---