UNIVERSITY OF PUNE

M. Ed. (PHYSICAL EDUCATION)

REVISED SYLLABUS from 2010

SEMESTER SYSTEM (TOTAL MARKS -1600)

Objectives

1. **To develop highly skilled scholars in the field of Physical Education.**
2. **To master the competencies and skills needed to become professional.**
3. **To be sensitive about emerging issues in Physical Education & sports.**
4. **To develop in the students an inquiring mind & ability to employ reasoning, rational thinking, critical thinking in the problems & issues relating to the field.**
5. **To provide opportunity for creativity, self expression & provide information on continued professional growth.**

Admission requirements:

A candidate, who has passed any one of B.Ed (Phy. Edu), B.P.Ed, B.P.E., H.D.Ed., D.P.Ed. Examination of Pune University or any other statutory university recognized by this university will be eligible for admission to the Master Degree program in Physical Education provided candidate fulfills all the other conditions required in the admission procedure. Admission will be given on the basis of merit.

Duration of the program:

The duration of the master's degree program will be of two academic years divided in four semesters.

Framework of M.Ed. (Physical Education) syllabus 2010

Semester	Courses	Course Title	Internal	External	Total
Semester 1	**Compulsory courses**				
	Course 101	Research in Physical Education	20	80	100
	Course 102	Measurement & Evaluation	20	80	100
	Course 103	Psychology of Sports	20	80	100
	Course 104	Science of Sports Training	20	80	100
	Course 204.1	Fitness & Conditioning (practical)	--	--	--
	Course 204.2	Measurement & Evaluation (practical)	--	--	--
		Total	**80**	**320**	**400**
Semester 2	**Compulsory courses**				
	Course 201	Research & Statistics	20	80	100
	Course 202	Exercise Physiology	20	80	100
	Course 203	Professional Preparation & Curriculum Design	20	80	100
	Course 204.1	Fitness & Conditioning (practical)	10	40	50
	Course 204.2	Measurement & Evaluation (practical)	10	40	50
		Total	**80**	**320**	**400**
Semester 3	**Compulsory courses**				
	Course 301	Biomechanics & Kinesiology	20	80	100
	Course 302	Management of PE & Sports	20	80	100
	Course 303	Athletic care & Rehabilitation	20	80	100
	Elective course (any 1)				
	Course 304	Philosophical & Sociological bases of PE	20	80	100
	Course 305	Pedagogy of Physical Education	20	80	100
	Course 401	Research Dissertation (coursework)	--	--	--
	Course 402	Sports & Games- Specialization (practical)	--	--	--
		Total	**80**	**320**	**400**
Semester 4	**Compulsory courses**				
	Course 401	Research Dissertation	50	50	100
	Course 402	Sports & Games-Specialization (practical)	50	50	100
	Elective Courses (any 2)				
	Course 403	Health Education	20	80	100
	Course 404	Adapted Physical Education	20	80	100
	Course 405	Exercise Prescription & Fitness Management	20	80	100
	Course 406	Foundation of Yoga & Yogic Science	20	80	100
		Total	**110**	**290**	**400**

Important Instructions:

1. The Master's degree program in Physical Education consists of **four semesters** spread over **two academic years.**
2. The entire program will be evaluated for a total of **1600 marks.**
3. The program will be divided in 4 semesters consisting of 400 marks each.
4. A student has to successfully complete 16 courses totally for the completion of this program.
5. **Semester 1** will comprise **four compulsory theory courses** and will be evaluated for 400 marks in total. Teaching of practical course 204.1 and 204.2 will start in semester 1 and it will be evaluated at the end of semester 2.
6. **Semester** 2 will comprise **three compulsory theory courses and one practical course (204.1 & 204.2)** and will be evaluated for 400 marks in total. The compulsory practical course will comprise of **Measurement and Evaluation practical (50 marks) and Fitness and Conditioning practical (50 marks).**
7. **Semester** 3 will comprise **three compulsory courses**. Student has to opt for any **one course** from the available **elective theory courses** and will be evaluated for 400 marks total. Teaching of course 401 and 402 will start in semester 3 and will be evaluated at the end of semester 4.
8. **Semester 4** will comprise **2 compulsory courses and any two elective courses** and will be evaluated for 400 marks in total. Compulsory courses will consist of a course in **Research Dissertation and specialization in sports and games**. Student has to choose any two theory courses from the elective courses offered in this semester.
9. **Internal evaluation** of the program will be done by the respective colleges. For the internal evaluation the college teachers should select various techniques of assessment as mentioned ahead: **oral examinations, written tests, mid-term test, journal/lecture/library notes, seminar presentations, poster presentations, quizzes, assignments, extension work, core practical, group practical** etc.

Rules & Regulations

1. The M.Ed (Physical Education) Degree will be awarded to a student who completes a total of 16 courses divided in 4 semesters.
2. The college will complete the internal assessment. The internal assessment will be in the form of marks.
3. **For the rationalization of internal marks, the university will appoint a moderation committee.** The Committee will take the review of the internal marks given by the college and advice 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.
4. Each course (Course No.1 to 16) will be evaluated both internally and externally. 80% of marks will be given through semester end examinations and 20% of marks (except course no. 401 & 402 which will have 50% weightage in internal & external evaluation) will be given on the basis of achievements in the internal examinations.
5. A candidate must **record attendance** at the periods in college for all the semesters as prescribed in the **university norms (min.80%)** to be able to appear for university examination.
6. Candidate should **complete all the practical and internal assessment** work expected in all the semesters up to the satisfaction of the principal. Candidate should obtain such a **certificate from the principal** of the college. Unless and until the candidate obtains such a certificate, candidate will not be allowed to appear for semester end examinations.
7. In case, **candidate fails the internal examination, candidate will not be allowed to appear for the external examination of the concerned course** and will have to complete the course in the subsequent semester.
8. Student who **fails or remains absent for the semester end examination** may **reappear** for the semester end examination in the **subsequent semesters**.
9. A candidate, who wants to improve his /her class, may reappear in the succeeding Semester end examinations of any course (except course no.204.1, 204.2, & 402), provided his or her internal assessment work is satisfactory.

Norms for passing

1. **Each course is a separate head of passing. To pass** the examination, the student must obtain at least **45% of marks in each head** of passing and an **aggregate of 50%** marks.
2. To pass the examination in **"Second class"** the student must obtain at least **50% of marks in each head** of passing and an **aggregate of 50%** marks.
3. To pass the examination in **"Second class with B+"** the student must obtain at least **50% of marks in each head** of passing and an **aggregate of 55%** marks.
4. To pass the examination in **"First class"** the student must obtain at least **55% of marks in each head** of passing and an **aggregate of 60%** marks.
5. To pass the examination in **"First class with Distinction"** the student must obtain at least **65% of marks in each head** of passing and an **aggregate of 70%** marks.

Specification of minimum marks to be obtained for securing various classes

Semester	Head of passing (Course)	Marks Out of	Pass class 45%	II class 50%	II class B+ 50%	I class 55%	I class with Dist. 65%
Semester 1	Course 101	100	45	50	50	55	65
	Course 102	100	45	50	50	55	65
	Course 103	100	45	50	50	55	65
	Course 104	100	45	50	50	55	65
Semester 2	Course 201	100	45	50	50	55	65
	Course 202	100	45	50	50	55	65
	Course 203	100	45	50	50	55	65
	Course 204.1	50	22.5	25	25	27.5	32.5
	Course 204.2	50	22.5	25	25	27.5	32.5
Semester 3	Course 301	100	45	50	50	55	65
	Course 302	100	45	50	50	55	65
	Course 303	100	45	50	50	55	65
	Course 304 or	100	45	50	50	55	65
	Course 305	100	45	50	50	55	65
Semester 4	Course 401	100	45	50	50	55	65
	Course 402	100	45	50	50	55	65
	Course 403 or	100	45	50	50	55	65
	Course 404 or	100	45	50	50	55	65
	Course 405 or	100	45	50	50	55	65
	Course 406	100	45	50	50	55	65
	Total	**1600**	**Min 800 marks 50% Aggregate**	**Min 800 marks 50% Aggregate**	**Min 880 marks 55% Aggregate**	**Min 960 marks 60% Aggregate**	**Min 1120 marks 70% Aggregate**

Suggested structure-format of question papers for the University Examination

Sr. No	Type of Question	Test of	Word limit	No. of Que.	Marks	Total Marks
1.	Critique	Critical ability & ability to apply knowledge	30	5	5	**25**
2.	Definitional/Specific answer question	Ability to make exact statement & precise understanding	30	3	5	**15**
3.	Analytical/evaluative questions	Ability to reason & hold argument	180	2	10	**20**
4.	Essay/Application level question	Ability to expound a theme at length with discrimination & justification	500	1	20	**20**
					Total marks	**80**

Course 101 Research in Physical Education

Objectives:

1. To enable the students to understand the concept and meaning of Research
2. To enable the students to understand the fundamentals of Research
3. To enable the students to understand the methods of research
4. To enable the students to understand the different tools of data collection for research

Unit 1 Basics of Research

1.1 Definitions, Importance and Need of Research in Physical Education

1.2 Areas of Research in Physical Education

1.3 Review of related literature and writing references- Reviews related to Method, Reviews related to Statistical Tools, Reviews related to Data collection tools, Reviews related Sampling techniques

1.4 Selecting Research Problem

1.5 Steps of Research Proposal

1.6 Fundamentals of Research- Objectives of the study, Hypothesis, Assumptions, Delimitations, Limitations, Operational Definitions, Populations, Sampling and different techniques, Probable, Non-probable

Unit 2 Types & Methods of research

2.1 Types of Research (Introduction)- Action Research, Fundamental Research, Applied Research

2.2 Qualitative & Quantitative Research

2.3 Methods of Research in Physical Education- Historical Research, Experimental Research, Descriptive Research

2.4 Historical Research Method- Historical generalizations in Physical Education, Sources of Data

Unit 3 Descriptive Studies

3.1 Types of descriptive research- Causal comparative study, Correlation study, Analytical study, Normative study, & Case study

3.2 Data collection tools- The Questionnaire, Opinionnaire, Inventories, Interview, Psychomotor Tests

Unit 4 Experimental Research

4.1 Experimental and Control Group

4.2 Variables- Independent & Dependent Variables, Confounding Variables, Controlling Extraneous Variables,

4.3 Experimental validity- Threats to internal & external validity

4.4 Experimental Designs- Pre experimental Design, True Experimental Design, Quasi experimental Design

Suggested Readings:

1. Best, J. W. & Kahn, J. V. (1995). *Research in Education.*(9th ed.). New Delhi: Prentice Hall
2. Clark, D. H. & Clark, H. H. (1979). *Research process in Physical Education, recreation & health*. Englewood Cliffs: prentice Hall
3. Johnson, B. & Christensen, L. (2008). *Education Research, Quantitative, Qualitative and Mixed Approaches*. (3rd ed.). Sage Publication: England
4. Thomas, J. R. & Nelson, J. K. (2001). *Research Methods in Physical Education*, (4th ed.). USA: Human Kinetics

Course102: Evaluation in Physical Education & Sports

Objectives:

1. To understand terminologies & methods of evaluation in sports & Physical Education.
2. To understand the evaluation process.
3. To gain experience & skill to evaluate the human performance.
4. To be better prepared to prepare & conduct measurement & evaluation.

Unit1: Basics of Measurement & Evaluation

1.1 Concept Test, measurement, evaluation and assessment & its importance
1.2 Classification of test in Physical Education
1.3 Different tools of evaluation in Physical Education
1.4 Trends in evaluation in Physical Education
1.5 Criteria of test selection

Unit2: Construction & Standardization of tools

2.1 Methods for testing Validity, Reliability & Objectivity
2.2 Construction of psychomotor test
2.3 Construction of Questionnaire and Opinionnaire
2.4 Administration of psychomotor test.
2.5 Concept, importance, construction & administrative concern of Rating scales

Unit3: Measuring fitness & sports skills

3.1 Measurement of HRPF, SRPF, GMA & Motor educability.
3.2 Measurement of skills of various sports & games: Soccer, Hand ball, Tennis, Basket ball, volley ball.
3.3 Testing of psychological variable.
3.4 Fitness assessment Tests for Special Population & older adults

Unit4: Test batteries & norms for evaluation

4.1 Meaning & characteristics of Test batteries: AAHPERD youth fitness test, JCR, FITNESS GRAM & ACSM Fitness test
4.2 Factors affecting measurement in Physical Education.
4.3 Anthropometric measurement & somatotype.
4.4 Norm referenced tests & criterion referenced tests

Suggested Reading:

1. Miller, David. K. (2002). Measurement by the Physical Educator. New York: McGraw Hill companies.
2. John & Nelson (1998). Practical Measurements for Evaluation in Physical Education. Delhi: Surjit Publication.
3. Barrow, H.M.(1979).Practical Approach to Measurement in Physical Education. Ed. (3rd Ed.). Philadelphia: Lee & Febigeer,
4. Clarke, H. (1987). Application of Measurement in Health & Physical Education. Ed. (6th Ed.). New Jersey Prentic Hall,Inc 1987.
5. Kansal, D.K. (1996). Test & Measurement in Sports & Physical Education. New Delhi:.D.V.S.Publications,

Course 103 Psychology of Sports

Objectives:

1. To get acquainted with the meaning, nature and scope of sports Psychology.
2. To be able to know & prepare psychological profiles of sportsmen.
3. To understand the role of sports psychology in the performance.
4. To know the various psychological problems and its coping techniques for better sports performance.
5. To introduce to the role of leaders, counselors, and social psyche in the performance enhancement.
6. To introduce the Psychological Tests and be able to conduct these tests on subjects.

Unit 1: Introduction

1.1 Meaning, scope & development of sport psychology

1.2 Relationship of sport psychology with other sport sciences

1.3 Need & importance of sport psychology

1.4 Psychological Profiling of Sportsmen/Athletes

Unit 2: Personality & Motivation

2.1 Meaning & Classification of Personality (Eysenck & Hippocrates, Big 5)

2.2 Personality Traits with relation to Sports & Games

2.3 Meaning, Types & Techniques of Motivation. Importance of motivation in Sports.

2.4 Personality Test: 16 PF, EPQ. Motivation: Athletic Motivation Scale

Unit 3: Sport performance

3.1 Anxiety, arousal and sport performance

3.2 Psychological Preparation in Pre-During-Post Competition. Coping & Relaxation Procedures

3.3 Emotions and Sport Performance.

3.4 Anxiety: Sports Competitive Anxiety Test, Competitive State Anxiety Inventory

Unit4: Ethics in sports

4.1 Ethics in Sports.

4.2 Leadership & Group Cohesion in sport

4.3 Aggression in Sport
4.4 Spectators and sports performance

Suggested Reading:

1. B. J. Cratty. Psychology of Contemporary sports Champaign: Human Kinetics Publishers,
2. John M. Silva & Roberts. Psychological Foundations of Sport. Champaign: Human Kinetics Publishers.
3. Diane Gills, Psychological Dynamics of sports. Champaign: Human Kinetics Publishers.
4. Cox, Sports Psychology. Champaign: Human Kinetics Publishers.
5. Richard M. Sumin, "Psychology in Sports, Methods & Application. New Delhi: Surjeet Publication.
6. But, Lusan Dorcas, Psychology lof Sports. Network: Van Nostrand Reinhold Company
7. Cratty, Bryant. J. (1973)., Movement Behavior and Motor Learning. Philadelphia: Lea and Febiger.
8. Kamlesh M. L. Psychology of Physical Education and sports (London, Boston Rutledge and Kegan Paul.
9. Linda K. Binket, Robert J. Ratella and Ann/, S. (1972). Really Sports, Psychology, Psychological Consideration Maximizing Sports Performance. Dubugne Jowa : C. Brown Publishers.
10. Robert S. Weinberg and Daniel Godd. (2003). Foundation of Sports and exercise Psychology. Champaign: Human Kinetics
11. Cronbach J. Lec (1990). Essentials of Psychological Testing. Hurper Colins Publishers.
12. Mohan J., Chadda K.N. and Akhtar Sultan .S. (2005). Psychology of Sports: The Indian Perspective.
13. Taylor, Jim. Wilson G. Applying Sport Psychology.

Course 104: Science of Sports Training

Objectives:

1. To understand the scientific sports training process & principles.
2. To develop attitudes and skills in designing sports training programs.
3. To be better prepared to be a good sports trainer.

Unit1: Sports training

1.1 Definition, meaning and importance of sports training
1.2 Characteristics of sports training
1.3 Principles of sports training

Unit2: Training means & methods

2.1 Development of health related fitness parameters
2.2 Development of skill related fitness parameters
2.3 Psychological/mental training

Unit3: Training load & recovery

3.1 Training load & adaptation

3.2 Periodization

3.3 Short-term & long-term training plans

3.4 Training program

Unit4: Preparing for competition

4.1 Sports talent identification procedures

4.2 Technical & tactical preparation for sports

4.3 Preparing for competition

Suggested Reading:

1. Singh, H. (1991). Science of sports training. New Delhi: DVS publication
2. Uppal. A. K. (2001). Principles of sports training. New Delhi: Friends publication
3. Rainer Martens (2005). Successful coaching
4. Beachel & Taylor (2006). Essentials of strength training & conditioning

Course 201 Research & Statistics

Objectives:

1. To enable the students to know the basics of computer, data entry in computer and mining of data
2. To enable the students to know the format of Research Report
3. To enable the students to understand the concept, need and importance of statistics
4. To enable the students to understand the use of statistical software and MS Excel for statistical operations
5. To enable the students to interpret and make inferences based on the statistical operations

Unit 1 Data & Report writing

1.1 Computer Data Entry- The computer & data organization and mining, the outliers

1.2 Writing Research Report- Chapterization, Writing and citation of references, Interpretation of Data, Writing Conclusion and Recommendations, Rules of Typography

Unit 2 Basic of Statistics

2.1 Concept of Statistics, its need and importance

2.2 Concept and Interpretation of Descriptive Statistical Measures- Mean, Median, Mode, SD, SEM,

2.3 Normal Probability Curve & its Interpretation- Normal distribution, Non normal distribution, Interpretation of Normal Distribution, Applications of NPC, NPC, Normality, Kurtosis, Skewness

2.4 Statistics Software- MS Excel and its applications, Introduction to SPSS, Its use in analyzing data, (Availability of student version or trial version)

Unit 3 Relationship & interpretation

3.1 Measures of Relationship & its Interpretation

Scattergram, Spearman's rank order correlation Coefficient, Person's Product movement Correlation Coefficient,

3.2 Interpretation of Correlation coefficient

Significance of the Correlation Coefficient, Coefficient of Determination, Prediction

Unit 4 Inferential Statistics

4.1 Concept and Interpretation of Inferential Statistical Measures

The Null Hypothesis, Degrees of freedom, Level of significance, Type I & Type II error, Standard Error of the Mean, Standard Error of the difference between Means

4.2 Parametric tools- t-test (Dependent, independent), ANOVA, MANOVA and ANACOVA, Post-hoc test

4.3 Non-Parametric tools- Chi-square, Mann Whitney test

Suggested Readings

1. Miller, D. K. (2002). *Measurement by Physical Educator*. New York: Mc Graw Hill Companies
2. Vincent, W. J. (). *Statistics in Kinesiology.* Campaign: Human Kinetics
3. Barrow, H. M. (1979). Practical Approach to Measurement in Health & Physical Education. (3rd ed.). Philadelphia: Lee & Febigeer
4. Sprinthall, R. C. (1997). *Basic statistical Analysis*. (5th ed.). USA: Allyn & Bacon
5. Best, J. W. & Kahn, J. V. (2006). *Research in Education.*(10th ed.). New Delhi: PHI

Course 202 Exercise Physiology

Objectives:

1. To enable the student to understand the physiological effect of Exercise on different system or/and on the body as a whole.
2. To enable the students to understand bioenergetics & role of energy systems in sports activities.
3. To enable the students to understand the role of nutrition & its relevance in energy production.

Unit1: Introduction

1.1 Definition, importance and role of exercise physiology

1.2 Structure, type of function of muscle

1.3 Theories of muscle contraction, Neuro muscular junction

1.4 Effect of exercise on skeletal and muscle system

Unit2: Work Performance & Environment

2.1 Exercise at medium and high Altitude.

2.2. Mechanism of thermoregulation (Cold stress, Heat stress)

2.3. Oxygen debt, force expiratory volume, breathing capacity recovery rate

Unit3: Physiological Effects

3.1 Cardiovascular system, Respiratory, Endocrine

3.2 Nervous system, Digestive system, Execratory system.

3.3 Energy systems and Metabolism and Energy transfer.

3.4 Physiological aspects of development of various physical fitness components

Unit4: Sport Nutrition

4.1. Balanced diet and appropriate diet before, during and after athletic performance

4.2. Effect of drugs, alcohol and smoking on athletic performance

4.3. Obesity and weight control

Suggested Readings:

1. Mathew, D.K. and Fox, E.L.(1976). Physiology basis of Physical Education and athletics. Philadelphia: UBS company
2. Pearce Evelyn. (1992). Anatomy and physiology for nurces, calcutta: Oxford university press.
3. Sedey , Rod R.(1992). Anatomy and physiology. St. louis: Mosby.
4. Tortora G.J.(1996). Introduction to Human Body. (4th Ed.)California: Addison Weslay.
5. Marief Eclaine N. (1984). Human Anatomy and physiology (3rd Ed.). Cal: The Benjamin Cumming.
6. Clarke, H. David exercise physiology.
7. William D. Mcardle, Frank I. Katch, and Victor L. Katch Exercise physiology.
8. Koley, Shyamal Exercise Physiology.
9. Frank J. Corny and Harold .W. Burlon. Exercise physiology for health.

Course 203 Professional Preparation & Curriculum Design

Objectives:

1. To provide foundation of profession, its criteria.
2. To understand the various perspectives of profession.
3. To understand the principles & process of professional development.

Unit 1: The profession

1.1 Meaning, criteria & evaluation of profession

1.2 A professional & professionalism in Physical Education & sports

1.3 Physical Education as a profession

1.4 Legal regulation of profession

Unit 2: Professional Preparation

2.1 Historical perspectives

2.2 Policy perspectives

2.3 Theoretical perspectives

2.4 Nature & content of professional preparation programs

Unit 3: Professional Development

3.1 Meaning & process

3.2 Growth on the job- in service concept

3.3 Self appraisal & parameter influencing self appraisal

3.4 Guiding principles & professional relations

3.5 Qualifications & duties, responsibilities & job profiles of school Physical Education teachers, directors of Physical Education in colleges & university

Unit 4: Curriculum

4.1 Meaning, importance & fundamental principles of curriculum planning

4.2 Writing the curriculum guide

4.3 Physical Education curriculum models

4.4 Implementing the Physical Education curriculum

Suggested Reading:

1. Kiran Sandhu (2004**).** Professional preparation and career development in Physical Education and sports**.** New Delhi: Friends publication.
2. Kiran Sandhu (2004). Trends and developments in Professional preparation in Physical Education and sports**.** New Delhi: Friends publication.
3. Barrow, H. M. (1983). Man & movement (3rd Ed.). Philadelphia: Lea & Febiger.
4. Buchor, C. A. & Wuest, D. A. (1987). Foundations of Physical Education and sports**.** St. Louis: Times mirror / Mosby college publication.
5. Kelly, L. E. & Melograno, V. J. (2004). Developing the Physical Education curriculum**.** Champaign: Human Kinetics.
6. Pangrazi, R.P. & Dauer, V. P. (1995). Dynamic Physical Education for elementary school children (11th Ed.). Boston: Allyn and Bacon.
7. Pangrazi, R.P. & Dauer, V. P. (1985**).** Dynamic Physical Education curriculum & instruction for secondary school student**.** Minnesoty: Burgess publishing company.
8. Lombardo, B. & Wuest, D. (1994). Curriculum & instruction the secondary school Physical Education experience**.** St. Louis: Mosby
9. Kasat, G. & Karmarkar, A. K. (1996). Professional preparation in Physical Education and sports**.** Amravati: Kasat

Course 204.1 Fitness & Conditioning Practical

Objectives:

1. To introduce students to various training methods in sports.
2. To enable students improve overall & specific fitness.
3. To help them create database of exercises & training protocols.
4. To enable them to assess fitness using different techniques.

Teaching of this course will start in semester 1 and be evaluated at the end of semester 2.

Activity 1

Warm up Routines
Cooling down routines

Activity 2

Weight training exercises- dumbbell exercises, barbell exercises, machine exercises

Activity 3

Resistance band exercises for strength & flexibility development

Activity 4

Strength/Swiss ball exercises for stability, strength, flexibility & rehabilitation
Core training

Activity 5

CPR Certification – cardio pulmonary resuscitation- certification training course

Activity 6

Circuit training for strength, endurance, strength endurance improvement, & calorie burning

Activity 7

Interval training- strength, endurance

Activity 8

Flexibility training- static training, PNF training

Activity 9

Endurance training- continuous method, repetition method, Fartlek training

Activity 10

Speed, power, agility- plyometrics, complex training etc

Evaluation

Teaching of this course will start in first semester but evaluation will be done at the end of second semester. Student has to maintain record of the information collected & present it at the time of examination. Evaluation of this course will be done at both internal & external examinations. Examination will comprise fitness tests, oral examination, & database records.

Course 204.2 Measurement & Evaluation Practical

Objectives:

1. To be able to understand the conduct of various measurement techniques.
2. To assess an individual, athlete, special person etc using appropriate tests.
3. To develop ability to measure accurately.

Teaching of this course will start in semester 1 and be evaluated at the end of semester 2.

Details of the course

Sr. No.	Classification	Components &Tests
1	**Anthropometric measurement**	1.**General Body Measurement:** Body weight, Stature Height, Sitting Height 2. **Skeletal Diameters:** Biacromial Diameter, Humerus Bicondylar Diameter, Wrist Diameter, Femur Bicondylar Diameter 3. **Circumference:** Chest Circumference, Upper Arm Circumference, Thigh Circumference 4. **Length:** Arm length, Leg length 5. **Skinfold Measurement:** Biceps, Tricep, Subcapular, Suprailiac
2	**Health Related Physical Fitness**	**C. V. Endurance :** Beep test, Run/walk test, Step test, Ergometer test
		Muscular strength & Endurance:1 RM, Pull Ups, Modified pull Ups, Flexed Arm Hang, Push Ups, Modified Push Ups Bent Knee Sit Ups, Curl-Up Test , Handgrip Strength Test
		Flexibility: Sit & Reach, Trunk & Neck Extention, Shoulder Flexibility, Shoulder lift, Shoulder & Wrist Elevation, Trunk rotation, Goniometer
		Body Composition: WHR, BMI, Digital body fat Monitor
3	**Skill Related Physical Fitness**	**Speed:** 10 stride test, 40m multiple sprint test, 400m Drop off test, 50m. Dash, 30m. Flying test
		Agility: Shuttle run, SEMO Agility run, Dodging run test, 505 Agility test, Zig Zag run test, Side step test, Illinois Agility Run test
		Balance: Stork stand, Bass stick test, Bass test of dynamic balance
		Reaction time: Ruler drop test, Hand reaction time, Foot reaction time test
		Power: SBJ, Vertical Jump, Medicine ball throw
		Co-ordination: Wall Catch test, Wall Volley
4	**Sports Skill Test**	1. **Basket Ball**: Nelson-Johnson, AAHPERD, SAI 2. **Foot Ball:** AAHPERD, McDonald & SAI Soccer test 3. **Volley Ball**: Brady, Russell-Lange & AAHPERD Volley ball skill test 4. **Badminton:** Miller wall volley badminton test, Service test
5	**Psychological test**	Paper pencil test- 16 PF test etc
6	**Physiological test**	Heart rate, respiratory rate, VO_2 max

Evaluation (Total marks= 50, Internal= 10 marks, external=40 marks)

Details of External Evaluation

1. Submission of report- (15 marks)

Every student will take up a project based on tests taught in the practical course. Candidate should prepare a detailed report on the project undertaken.

The report should consist of details on objective of the project, tests selected, justification for selection of the tests, details of testing procedure, method of reliability & validity testing, analysis of data and measures suggested for improvement on the basis of analysis.

2. Presentation of report- (10 marks)

Every student should prepare a PowerPoint presentation on the project undertaken and present the details at the time of evaluation.

3. Viva-voce- (15 marks)

The viva-voce examination will be based on the contents taught in the practical course and the project undertaken by the student.

Every student has to appear for the viva-voce examination to be held immediately after the presentation of the project.

Course 301 Biomechanics and Kinesiology

Objectives:

1. To understand the science of Biomechanics and kinesiology in relation to human performance.
2. To analyze various fundamental movements and understanding the relevance of analysis.
3. To understand the body structure and apply the knowledge in analysis of movements.

Unit 1: Introduction to Biomechanics

1.1 Definition and meaning of sports biomechanics- What are goals of exercise and sports biomechanics?, Future of sports biomechanics, Application of biomechanics in sports.

1.2 Basic dimensions and units of measurement used in mechanics- Scalar and vector quantities, Work, power and energy, Forms of motion, planes and axes, Basic concepts related to Kinetics. (Inertia, mass, force, Pressure, Torque, Impulse, Centre of gravity, volume, density.)

1.3 Principal of application of biomechanics- Force-motion principle, Force-time principle, Inertia, Range of motion, Balance, Co ordination Continuum, Segmental Interactions, Optimal projection, Spin.

Unit 2: Human Movement

2.1 Qualitative and quantitative biomechanical analysis to improve technique and training - Description, Observation, Evaluation, Instruction, Body Structure , Physical training, Technical training and Joint movements.
2.2 Video film analysis and tools of biomechanical analysis- Cinematography and videography, Electromyography, Dynamography, Use of LED's and electromagnetic markers, Electro Goniometer, Photo cells-light beams and timer system, Accelerometer, Force Transducers, Pressure sensors.
2.3 Analysis of fundamental skills and sports skills- Major Ball games, Swimming, Track and Field- Running, Throwing and Jumping
2.4 Latest research related to sports biomechanics- Research on technique and skill development, Research on analyzing method, Research on equipment to enhance performance development, Research based on injury prevention using sports biomechanics.

Unit 3: Introduction to Kinesiology

3.1 Definition, objectives and role of kinesiology.
3.2 Fundamental concepts of axes and planes.
3.3 Anatomical and physiological fundamentals.
3.4 Kinesiology of daily life.

UNIT 4 Kinesiology of Joints

4.1 Upper Extremity -Shoulder, Elbow, Wrist- structure, movements, loads
4.2 Lower Extremity- Hip, Knee, Ankle, Foot- structure, movements, loads
4.3 Application of Kinesiology- Basic skills- Walking, Jumping, Running, Swimming.

Suggested Readings

1. Hay ,J (1981). The Biomechanics of sports techniques. New Jersy: Prentice Hall.
2. Bunn, J. W. (1981). Scientific principles of coaching. Englewood: Cliffs. Prentice Hall.
3. McGinnis, P. M.(2005).Biomechanics of sports exercises. USA: Human Kinetics.
4. Sunderrajan, G.S. Biomechanics of sports and games. Ludhiyana: Tondon Publication.
5. Susan, J. H (2003). Basic Biomechanics.(4th Edn.) Mc.Graw Hill Publication.
6. Dr. Rajlakshmi, D. (2007). Biomechanics for sports and games. Sports Educational Technologies.
7. Hoffman, S.J. (2005). Introduction to Kinesiology. Human Kinesiology Publication.
8. Uppal. A. K. and Lawrence, M. P. Kinesiology. New Delhi. Friends Publication: India.
9. Knudson, D. (2007). Fundamentals of Biomechanics. Chico, USA: Springer Publication.
10. Scott, M. G. (). Analysis of Human Motion. Newyork.

Course 302 Management of Physical Education & Sports

Objectives:

1. To acquaint the students with duties & responsibilities of managers.
2. To acquaint the students understand the importance if management in Physical Education
3. To acquaint the students with basic concept & principles of management in Physical Education.

Unit 1 The management process

1.1 Definition, meaning, need & Importance of management in Physical Education & sports
1.2 Management framework, function & task, Functional effective & efficient management
1.3 Philosophical & theoretical dimensions of management, Principles of management
1.4 Management structure for Physical Education & sports programs

Unit 2 Management of Physical Education

2.1 Management guidelines for school & college Physical Education program, Management matters related to Physical Education Instructional program
2.2 Criteria for evaluating Physical Education instructional program, Recreational sports program (Intramural, fitness, sports, club program)
2.3 Management concern for college & Universities
2.4 Competitive sports program

Unit 3 Management of Physical Education & sports Programs in public & private sector

3.1 Corporate, workplace, health, fitness programs
3.2 Commercial health & fitness industry
3.3 Professional qualifications & responsibilities of Physical Education & sports personal
3.4 Physical Education Institutes with management perspective- A case study

Unit 4 Management function

4.1 H.R. Management & supervision
4.2 Program development, Facility Management
4.3 Finance & Management, Purchase, care of equipment
4.4 Management & the Athletic training program, Legal liability, Risk & Insurance Management
4.5 Sport marketing, Office Management

Suggested Readings:

1.Bucher, C. A.& Krotee, M. L. (2002). Management of Physical Education of Sports, (12th Edn.). New Yark: McGraw Hill.

2. Voltmer, E.F. (1979).The organization and administration of Physical Education (5th Edn). New Jersy: Prentice Hall.

3. Parkhouse, B. L. (1991). The Management of Sports Foundation & Application St. Loup: Mosby Year Book.

4. Kamlesh, M. L. (2000). Management Concepts in Physical Education & Sports, New Delhi : Metropolitan Book Co. Pvt. Ltd.

Course 303 Athletic Care & Rehabilitation

Objectives:

1. To understand the historical background & development of sports medicine
2. To introduce to common injuries and healing process
3. To get acquainted with injury management of common injuries
4. To understand various modalities & its uses

Unit1: Introduction

1.1 History, concept, aim, objectives, need & importance
1.2 Role of physician, athlete trainer & coaches
1.3 Team medical care- concept & approaches

Unit2: Injury & tissue response

2.1 Micro & macro trauma, over use trauma
2.2 tissue response to stress
2.3 Inflammation & different steps of wound healing
2.4 Common regional injuries & their management (head, neck, face, thorax, abdomen, pelvis, upper & lower limbs).

Unit3: Therapeutic modalities & rehabilitation

3.1 Hydrotherapy, Cryotherapy, thermotherapy
3.2 Diathermy, infra-red, ultra sound
3.3 Contrast & paraffin bath
3.4 Approach to rehabilitation

Unit4: Performance enhancement

4.1 Performance enhancing drugs, substances

4.2 Athletic nutrition- Balanced diet & appropriate diet before, during & after athletic performance

Suggested Reading:

1. Ray, S. & Irwin (1983). Sports medicine. Prentice hall
2. Pande, P. K. (1987). Outline of sports medicine. New Delhi: Jaypee Bros.
3. Michael, H. (2001). Sports injuries recognition & management. (3rd Ed.). Oxford University press.
4. Armstrong & Tucker. Injuries in sports. London: Staples press.

Course 304 Philosophical & Sociological bases of Physical Education

Objectives:

1. To introduce students to the philosophic bases of Physical Education.
2. To help them develop personal philosophic skills.
3. To enable them to relate moral development and issues and crises in sports.
4. To understand relationship of sports and society and impact of globalization.
5. To understand the relation between sports & women, sports & religion, sports & politics.

Unit 1 Developing Philosophic skills

1.1 What is Philosophy?

1.2 Idealism, Realism, Pragmatism, Naturalism and Existentialism

1.3 Objectives of Physical Education and Sports.

1.4 Developing personal Philosophic skills.

1.5 Improving life through our profession (Practical Applications)

Unit 2 Values and Ethical issues in Sports

2.1 Concepts of moral development and stages of development.

2.2 Ethics in Sports

2.3 Growing Ethical crises in sports.

2.4 Making sound Ethical decisions.

Unit 3 What is Sociology?

3.1 Introduction to Sports Sociology (Nature, Scope Def, Meaning, Importance and Historical perspective)

3.2 Relationship between Sports and Socializing Institutions (Family, Schools and educational systems)

3.3 National and International Integration through Sports (Sports and Nationalism; Sport's role in the making of Nation)

3.4 Sports and Women(Pre Independence, After Independence, Current Status, Social Barriers, Schemes for improving the Participation of Women by Govt)

3.5 Sports and Religion, Culture

Unit 4 Sports, Globalization and its Social Impacts

4.1 What is a Globalization and Characteristics of Global sport

4.2 Sports and Politics, Sponsorship, Media, Economy

4.3 Sport and Violence

4.4 Social Impacts of International Sports events

Suggested readings:

1. Kretchemar R, (1994) Practical Philosophy of Sport. U.S.A: Human Kinetics.
2. Bucher, (1992) Foundations of Physical Education. (1st Indian Edition) New Delhi: B. I. Publication
3. Lumpkin, (1998) Physical Education and Sports: A Contemporary Introduction. U.S.A: McGraw Hill Companies.
4. Hardman K, Green K, (2005) Physical Education Essential Issues London. SAGA.
5. Shields D, Bredemeir B, (1995) Character Development and Physical Activity. U.S.A; Human Kinetics.
6. Dawn P, (2002) Gender and Physical Education. U.S.A, Routledge.
7. Ziegler, E.F. (2007) An Introduction to Sports and Physical Education Philosophy. Delhi: Sp Educational Techno.
8. Williams, J. E. (1964) Principals of Physical Education. Philadelphia: W.B. Sounders.
9. Jain R, (2002) Sports Sociology New Delhi: Jain Media Graphics.
10. Bhupindar S, (2004) Sports Sociology – An Indian Perspective. New Delhi: Friends Publication.
11. Sharma S, (2004) Sociological foundations in Physical Education and Sports. New Delhi: Friends Publication.
12. Jarvie G, (2006) Sports, Culture and Society An Introduction. New York: Routledge.
13. Cashmore E (2000) Sports Culture An A – Z Guide. New York: Routledge.

Course 305 Pedagogy in Physical Education

Objectives:

1. To enable students to distinguish among teaching, learning, & pedagogy.
2. To be able to explain difference between effectiveness and expertise in teaching.
3. To acquire teaching skills & effectiveness & develop positive attitudes about process of learning & teaching.
4. To enable them to sensitively apply teaching skills in different educational settings.

Unit 1: Systematic improvement in teaching skills

1.1 Science & Art of teaching – Teaching, Learning, & Pedagogy, appropriate practices- goals & feedback

1.2 Stages of skill development in teaching, sources of help, expert PE teacher

1.3 Effective teacher- how are they identified? Active teachers, contextual variations of active teaching

1.4 What teachers do in PE? What students do in PE? Effective PE teaching

Unit 2: Assessing and improving teaching

2.1 Assessment model, on-site assessment of teaching, steps in assessment process

2.2 Task system- ecology of PE, important concepts in ecological framework

2.3 Interpersonal skills in PE teaching – teacher-student interaction skills, effective communication skills

2.4 Legal, ethical & moral issues in teaching, promoting self growth in PE

2.5 Strategies for content development- factors affecting program level planning, differing visions of good in PE

Unit 3: Developing effective units of instructions

3.1 Determining entry & exit levels, end of unit objectives, practical factors related to unit planning, constructing unit plan, writing instructional objectives

3.2 Generic instructional strategies- guided practice, independent practice, monitoring student performance

3.3 Instructional format- active teaching, task teaching, teaching through questioning, peer teaching, cooperative learning

3.4 Self-instructional formats- contracts, PSI, providing effective instruction for mainstream students

Unit 4: Measuring teaching & its outcomes

4.1 Traditional methods for assessing teaching- intuitive judgment, eyeballing, anecdotal records, checklists, rating scale

4.2 Systematic observation records- event recording, duration recording, interval recording, group time sampling, self recording

4.3 Combining observation techniques, important decisions in developing observation strategies, building observation system

4.4 What to observe, training observers, calculating reliability of observation data, examples of observation system

Suggested Readings:

1. Siedentop, D. (1991). Developing teaching skills in Physical Education. Ca:Mayfield Publishing company
2. Mosston, M., Ashworth, S. (1994). Teaching Physical Education (4th Ed). NY: Macmillan College Publishing Company
3. Kelly, L.E., Nelograno, V.J. (2004). Developing the Physical Education curriculum. Champaign, IL: Human Kinetics
4. Hopple, C.J. (2005). Elementary Physical Education teaching & assessment- A practical guide. Champaign IL: Human Kinetics

Course 401 Research Dissertation

Objectives:

1. To develop the Research attitude among the students
2. To help the student to formulate the Research problem and carry out the Research
3. To enable the students to develop and administer the tools for data collection
4. To enable the students to organize and present the research work

Marks 100 (50 Marks each for Internal and External)

This course has to be conducted by organizing workshops and seminars during semester II, III and IV. Details of the same are given in the following table

Details of Dissertation course work

Sr No	Workshop / Seminar	When to be organized	Internal Marks	External Marks	Total
1	Review of related literature and identifying research problem/question	Semester II	20	-	20
2	Proposal presentation and Methodology	Semester III	10	-	10
3	Data Collection Tools & its Reliability	Semester III	10	-	10
4	Analysis of Data and Writing Report	Semester IV	10	-	10
5	Dissertation and Viva-voce	Semester IV	-	50	50
		Total	**50**	**50**	**100**

- Workshop/ seminars will be organized by college during specified semester with adequate time interval in between.

Proposal Presentation

College will appoint guide to each student for his/her research work to be supervised. Every student has to select research problem and prepare a proposal on it and present it in front of two experts including guide

Review of related literature and Methodology

A workshop will be organized to explain the method of finding reviews, writing reviews and references, Procedure, Population and sampling processes and techniques.

Data Collection Tools & its Reliability

Selection or Preparation appropriate data collection tool, finding its reliability, administration of tool and scheduling.

Analysis of Data and Writing Report

Applying appropriate descriptive and inferential statistical tool, Interpretation, discussion and conclusions.

Guidelines for writing research report and application of computer for typing.

Dissertation and Viva-voce

Every candidate has to submit two bound copies of the Dissertation and its electronic format on CD/DVD in given time and dissertation will be sent by college to external examiner for evaluation.

Viva Voce will be conducted by External and Internal examiner on the date declared by University of Pune.

Research Report Format

Every candidate must follow all the guidelines given in the research report format given in the appendix of this document.

Course 402 Sports & Games- Specialization

The candidate has to opt for one of the games & sports listed below.

1. Athletics	12. Table Tennis
2. Yoga	13. Badminton
3. Kabaddi	14. Tennis
4. Kho-Kho	15. Wrestling
5. Volley ball	16. Boxing
6. Basket ball	17. Judo
7. Hockey	18. Taekwondo
8. Foot ball	19. Mallakhamb
9. Hand ball	20. Gymnastics
10. Soft ball	21. Netball
11. Cricket	22. Korfball
	23. Swimming

Teaching of this course will start in semester 3 and will be evaluated at the end of semester 4. Each student will undergo advanced training in the game/ sport of his/her choice. The selected game will be taught for the advanced level with reference to the following details:

1. Warming- up

1.1 General Warming-up

1.2 Specific Warming-up

2. Training for Motor Abilities

2.1 Free hand exercises for general development

2.2 Strength training (Isometric, Isotonic and Isokinetic Exercises and other strength training methods and means.

2.3 Endurance Training (Continuous method, Interval method & Fartlek)

2.4 Speed Training (Methods and means for developing sprinting speed, speed of movement and reaction time).

2.5 Flexibility Training

3. Technical/Skill Training

3.1 The skills of the sport/game will be taught with the help of following exercises

- 3.1.1 Preparatory Exercises
- 3.1.2 Basic Exercises
- 3.1.3 Supplementary Exercises

3.2 Progressive Teaching Stages of skills

3.3 Lead-up activities/Modified games

3.4 Coaching of skills in relation to the game situation.

4. Tactics and Strategy

4.1 Individual Tactics (Attack, Defense and High Performance)

4.2 Team Tactics (Attack, Defense and High Performance)

5. Officiating and Organization

5.1 Organization of competition

5.2 Rules and their interpretations

5.3 Laying out of play field/arena for competitions

5.4 Maintenance of play fields and equipment

6. Evaluation

6.1 General Tests

6.2 Specific Tests

6.3 Evaluation of performance

6.4 Final lesson in coaching

7. Game participation

Evaluation

Internal evaluation (50 marks) - For internal evaluation, each candidate has to conduct 5 advanced coaching lessons to be evaluated for 50 marks each.

External evaluation (50 marks) – This will comprise evaluation based on the performance in skill tests, and other evaluation parameters based on the fitness, conditioning, technical and tactical training, game performance, officiating & coaching strategies.

Suggested Reading:

1. Pennycook, L. and Sykes, R. (1980). Olympic handball. London: Stanley Paul.
2. Carr, G.A. (1995). Fundamentals of track & fields. Mumbai: The marine sports.
3. Bosen, Ken O. (1993). Teaching Athletics skills & technique. Patiala: SAI, NSNIS.
4. Wissel, Hal. (1994). Basketball- Steps to success. IL: Human Kinetics.
5. Brittenham Greg. (1996). Complete conditioning for basketball. IL: Human kinetics
6. Lennox, J., Rayfield, J., Steffen, B. (2006). Soccer skills & drills. IL: Human Kinetics.
7. Ditchfield, M., Walter, B. (1998). Coaching soccer. NJ: Prentice Hall.
8. Werner, P.(2004). Teaching children gymnastics. (2nd Ed.). IL: Human Kinetics.
9. Debby, M., Barbara, D., Raim, L. (2002). Teaching fundamental gymnastics skills. IL: Human Kinetics.
10. Cox,R. (1994). Teaching Volleyball. Delhi: Surjeet Publications
11. Gonzansky, S.(1983). Championship Volley ball Techniques & skills. NY: Parkar Publishing.
12. Graham, G. et al. (1998). Children moving. (4th Ed.).Toronto: Mayfield Publishing Company.
13. Siendentop, D.et al. (2004). Complete guide to Physical Education. IL: Human Kinetics.
14. Our Physical Activity.(OPA)
15. Tiwari, O.P. (1991). Asanas why & how? (2nd Ed.). India: Kaivalyadham.
16. Chanchani, S., Rajiv, C. (2002). Yoga for children. Delhi,India.
17. Kangane, S. (2007). Handball. Pune: Diamond publication.
18. Lohar, A. (1998). Handball BasicTechnique. Mumbai: The marine sports.
19. Hopple, C.J. (1995). Teaching for outcomes in elementary Physical Education. IL: Human Kinetics.
20. Kamlesh, M.L. (2007). Field manual of sports & games. (2nd). Meerut: Nageen Prakashan.

Course 403 Health Education

Objectives:

1. To enable students to understand concept & importance and determinants of health.
2. To help them understand the changing concept of health education, need of a comprehensive health education program and approaches to health education.
3. To enable them to understand reasons, effects & preventive ways of substance use & abuse.
4. To enable student to understand typical stages of diseases, and help them understand certain communicable and non-communicable diseases.

Unit 1: Basics of Health

1.1 Concept of Health – definition, new philosophy of health, 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 Responsibility for health- individual, community, state & international responsibility

1.4 Indicators of Health- twelve indicators, levels of health care

Unit 2: Concept of Health Education

2.1 Health Education- Definition, changing concept of HE, aims & Objectives: of HE, role of health care providers

2.2 Approaches to Health Education

2.3 Contents of Health Education

2.4 Principles of HE and need & importance of HE

Unit 3: Substance use & abuse

3.1 Substance use, abuse, reasons for abuse, effects of drugs on body- route of administration, distribution, dosage, expectation of user, frequency

3.2 Alcohol- reasons, consequences, alcoholism and related problems

3.3 Tobacco- effects of smoking, reasons for smoking, second hand smoking, preventing tobacco use

3.4 Inhalants, designer drugs, marijuana, cocaine, prevention of drug abuse, legal approach, educational approach, community approach, treatment & rehabilitation

Unit 4: Communicable & non-communicable diseases

4.1 Pahtogens- virus, bacteria, rickettsiae, fungi, protozoa, helminthes, stages of disease, protection against disease

4.2 Communicable diseases- chickenpox, influenza, Tuberculosis, Typhoid, Cholera, Hepatitis

4.3 Malaria, Chikungunya, Dengue syndrome, STDs, AIDS

4.4. Non-communicable diseases- hypertension, stroke, rheumatic heart diseases, diabetes

Suggested Readings:

1. Greene, W.H., Simon-Morton, B.G.(1984). Introduction to Health Education. NY: Macmillan Publishing Company

2. Anspaugh, D.J., Ezell, G. (1995). Teaching today's health (4th Ed). Boston: Allyn & Bacon

3. Park, K. (2007). Park's textbook of Preventive & social medicine (19th Ed). India: Banarasidas Bhanot Publishers

Course 404 Adapted Physical Education

Objectives:

1. To enable the students to understand the meaning, need and importance of Adapted Physical Education
2. To enable the students to know the purpose, aims and objectives of Adapted Physical Education
3. To enable the students to understand the Test, Measurement and Evaluation in Adapted Physical Education
4. To enable the students to develop the Individual Education Program of Adapted Physical Education
5. To enable the students to understand the Motor & HRPF development of individual with disability
6. To enable the students to understand the role of games and sports in Adapted Physical Education

Unit 1: An Introduction to Adapted Physical Education

1.1 Meaning, Need and Importance of Adapted Physical Education and Sports
1.2 Purpose, Aims and Objectives of Adapted Physical Education and Sports
1.3 Program organization of Adapted Physical Education and Sports
1.4 Adapted Sports- Para Olympics
1.5 Test, Measurement and Evaluation in Adapted Physical Education

Unit 2: Development of Individual Education Program (IEP)

2.1 The student with a disability
2.2 Components and Development of IEP
2.3 Principles of Adapted Physical Education and Sports
2.4 Role of Physical Education teacher
2.5 Teaching style, method and approach in teaching Adapted Physical Education

Unit 3: Developmental Considerations of an Individual

3.1 Motor development
3.2 Perceptual Motor development
3.3 Early childhood and Adapted Physical Education

Unit 4: Individual with unique need and activities

4.1 Behavioral and Special learning disability
4.2 Visual Impaired and Deafness
4.3 Health Impaired students and Physical Education
4.4 HRPF and its development for Individual with unique need
4.5 Role of games and sports in Adapted Physical Education

Suggested readings:

1. Beverly, N. (1986). Moving and Learning. Times Mirror/Mosby College Publishing.
2. Cratty, B.J. Adapted Physical Education in the Mainstream. (4th Edition) Love Publishing Company.
3. Houner, L.D. Integrated Physical Education- A guide for the elementary classroom teacher.
4. Winnick, J. P. (2005). Adapted Physical Education and Sports. Human Kinetics (4th Edition).
5. Pangrazi, R.P. and Dauer, V. P. Dynamics Physical Education for Elementary School Children. (11th Edition). Allyn and Bacon Publishing.

Course 405 Exercise Prescription & Fitness Management

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 design the exercise plans for variety of Population

Unit 1: Basic Principles of Physical Fitness

1.1 How much physical activity is enough? Benefits of physical activity

1.2 Health related components of physical fitness, skill related components of fitness

1.3 Principles of physical training: Specificity, progressive overload (FITT), Reversibility, individual difference

1.4 Designing your exercise program- guidelines for training, choosing activities for a balanced program

Unit 2: Developing fitness, improving quality of life

2.1 Benefits of aerobic exercises, monitoring heart rate

2.2 Developing aerobic exercise program- setting goals, applying FITT, building & maintaining aerobic fitness

2.3 Benefits of muscular strength & endurance, assessing muscular strength & endurance, creating a successful strength training program

2.4 Applying FITT principle, weight machines versus free weights, weight training safety

2.5 Determinants of flexibility, benefits & additional potential benefits of flexibility & stretching exercises, Flexibility improvement- FITT principle

Unit 3: Developing a personal fitness plan

3.1 Guidelines for personal fitness plan- set goals, select activity, set target, system of mini goals & rewards, lifestyle activity, monitoring, commitment

3.2 Putting plan into action, maintaining fitness program for life

3.3 Exercise guidelines for people with special concerns- arthritis, asthma, diabetes, heart disease, hypertension, obesity, and osteoporosis

3.4 Exercise guidelines for life stages- children & adolescents, pregnant women, older adults

Unit 4: Behavior change & fitness management

4.1 Psychosocial factors to consider, Behavioral change theories & exercise

4.2 Strategies to achieve fitness goals & maintaining fitness programs

4.3 Trends in weight loss, weight gain

4.4 Causes of obesity, implications of overweight & obesity

4.5 Underweight conditions & eating disorders

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. Durstine & Moore (2003) ACSM's exercise management for person's with chronic diseases & disabilities (2nd Ed.) IL: Human Kinetics

Course 406 Foundation of Yoga & Yogic Science

Objectives:

1. To understand the foundation & background of Yoga.
2. To introduce to stages of yoga & importance of practicing yoga.
3. To understand the benefits & effects of Kriyas, Bandhas, Pranayama.
4. To enable them to understand relation of yoga, health & mental health.
5. To introduce them to the research in yoga and its contributions.

Unit1: Basics in Yoga

1.1 Meaning, definition, need & importance of yoga

1.2 Historical background of yoga, types of yoga

1.3 Ashtanga Yoga (Eight stages of yoga), Chitta Vrtti (Causes for the modification of the mind), Chitta Viksepa (Directions & obstacles)

1.4 Sisya & Guru (A pupil & a master), Sadhana (A key to freedom)

Unit2: Asanas, Pranayam, Bandha, & Kriya

2.1 Meaning & definition of Asanas, Pranayam, Bandha, & Kriya

2.2 Types of Asanas, Pranayam, Bandha, & Kriya

2.3 Need & importance of Asanas, Pranayam, Bandha, & Kriya

2.4 Benefits & effects of Asanas, Pranayam, Bandha, & Kriya

Unit3: Yoga & mental health

3.1 Mental health & hygiene – yogic & medical perspectives

3.2 Yoga & modern psychology

3.3 Emotional disorders, conflicts & frustration

Unit4: Research in Yoga

4.1Meaning & yoga dimensions of health related fitness
4.2 Role of nostril dominance & brain functioning
4.3 Scientific reasoning behind asana
4.4 Researches done in yoga- an overview

Suggested Reading:

1. Iyengar, B. K. S. (1989). Light on yoga, Yoga Dipika. London: UNWIN paperbacks.
2. Kappmeir, K. L. & Ambrosihi, D. M. (2006). Instructing hata yoga. Champaign: Human kinetics.
3. Alice, C. (2000). Yoga for sports. Chicago: CB.
4. Sawmi Kuvalayanand (19930). Asanas. Lonavla: Kaivalayadham.
5. Tiwari, O. P. (2002). Asanas why & how?. Lonavla: Kaivalayadham.
6. Shivananda yoga Vedanta centre (1998). Yoga mind & body. London: D. K. paperbacks.

Appendix A

University of Pune

Research Report Format Guidelines
for
M.Ed. (Phy. Edn.) Dissertation Organization

The draft of the thesis/dissertation should be organized into four main sections with subsections. Use the following list to organize the draft and final electronic copy of the thesis/dissertation.

The following guidelines apply to both thesis and dissertation formats.

a) **Language:** English and Marathi are acceptable. If candidate is writing in English then Quotations in languages other than English must require a translation and if Marathi then quotations in language other than Marathi must require a translation. Thesis written in Marathi Language must have two abstracts, one in Marathi and other one in English and for Dissertation/thesis written in English Language must have abstract in English only.

b) **Paper:** The thesis must be printed on good quality, A4 Size (8.27" x 11.69"), white paper (Executive bond) on one side of the paper only. Photographs and other special figures or tables may be printed on photographic quality paper. Oversize or undersize pages (e.g., maps/Drawings) can be included but will not be bound into the thesis—they will be placed in a pocket at the back of the thesis.

d) **Margins:** Left-hand margins should be 38 mm (1.5") wide, to facilitate binding. All other margins should be well defined at approximately 25 mm (1"). Text alignment should be justified.

e) **Font:** For the main body of the text, a standard, easily legible, 12-point font is preferred (e.g., Times New Roman) although for some font styles (e.g., Arial or Helvetica) 11-point may be acceptable. For Marathi a 16-point font is preferred (eg. Shree lipi). Condensed type is not acceptable. Chapter titles and section (sub) headings may be in a different style and should stand out clearly from the text. Text styles and title/(sub)heading styles should be consistent throughout the thesis, except that 11- or 12-point font consistent with the thesis text may be used in the table of contents. The thesis must be printed in black ink; printing should be laser or better quality.

Title	Marathi	English
Chapter Heading	16/18 Bold	14 Bold
Headings	16 Bold	14 Bold
Sub Headings	14 Bold	12 Bold
Body Text	14	12

f) **Page Numbers:** All pages must be numbered in sequence. There must be no missing, blank, or duplicate pages.
   1. The page numbers in the preliminary material are to be in lower case Roman numerals, centered at the bottom of the page, except for the title page, which is not numbered. Minimum font size is 12-point and must be consistent throughout the text.

2. The page numbers in the main part (all text pages) are to be numbered consecutively with Arabic numerals. Placement of page numbers is as follows:

- Assign page numbers for the first page of each chapter, bibliography, and title page but do not print the number. Number should be placed ½ inch from top of page and aligned with right margin.

g) **Line Spacing:** 1.5 for text; exceptions are noted below.

h) **Table of Contents:** The thesis must contain a complete table of contents. Individual entries (titles, headings, etc.) that extend onto more than one line should be single-spaced; line spacing of 1.5 should be maintained between entries. For clarity, chapter titles and (sub) headings should be in 12-point font regardless of their font size in the main body of the text. Page numbers listed in the table of content should be aligned at the right-hand side of the page.

i) **List of Illustrations/Figures and/or Tables** (if applicable): Individual entries (titles, captions, etc.) that extend onto more than one line should be single-spaced, but line spacing of 1.5 should be maintained between entries. The lists should include any material inserted in a back pocket.

j) **Abstract:** The thesis must contain an abstract. This should occupy a single page, and may be single-spaced, if necessary. There should be no illustrations or footnotes. Students are advised that, due to space limitations shorten abstract to minimum 350 words.

Order of Items: The following order of items is common to PhD and MPhil & M.Ed(Phy.Edn.).

Preliminaries

- Title Page
- Certificate of the Guide
- Statement/Declaration by the Candidate
- Acknowledgement (Not more than TWO pages)
- Abstract
- Table of Contents
- List of Tables(if applicable)
- List of Figures(if applicable)
- Body of Thesis
- Bibliography
- Appendix (If Applicable)
- Vita(optional)

Appendices and other Supplementary Material

a) **General:** Appendices may include survey forms, or any other supplementary material excluding data. Content and format should be in accordance with discipline practice.

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Include your vita, or biographical sketch, with the document. List all educational institutions attended after graduation from high school and the date you received the undergraduate or graduate degree (or both). Include the list of professional organizations and other personal information of a scholarly nature. Do not include a list of publications. Do not number the vita page. Margins are identical to the preliminary pages. The Vita is limited to one page only.

Effects of Traditional Teaching and Cooperative Learning Methods on Jumping Performance in Athletics

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word except adjectives
should be Bold
Inverted Pyramid

Submission Statement
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A Thesis submitted to the

University of Pune for the Degree of

Doctor of Philosophy in

Physical Education

Researcher Name
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Researcher

Deepak Tanaji Shendkar

Guide Name
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Research Guide

T. K. Bera, Ph.D.

Name of Research
Centre and University
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Research Centre

Department of Physical Education

University of Pune, Pune-7,

Maharashtra, India

Month and Year of
Submission

January, 2007

Ph.D. Thesis

Effects of Traditional Teaching and Cooperative Learning Methods on Jumping Performance in Athletics

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March 2007

Certificate

This is to certify that **Mr. Deepak Shendkar** has written this thesis entitled **'Effect of Traditional Teaching and Co-operative Learning Methods on Jumping Performance in Athletics'** for the degree of Ph.D. (Physical Education) of the University of Pune. The research work done by him is his original work.

Mr. Deepak Shendkar has worked under my supervision for the required period as per the ordinances. The thesis is satisfactory from the language point of view and presentation of subject matter is logical and sequential. As per rule I am forwarding the same to the University of Pune for evaluation.

April 2009

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Signature of Research Guide

(Name & Address of the Guide must be mentioned here)

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Declaration by the Candidate

As required by the university ordinances, I wish to state that the work embodied in this thesis entitled, **‘Effect of Traditional Teaching and Co-operative Learning Methods on Jumping Performance in Athletics’** forms my own contribution to the research work carried out under the guidance of **Dr. T. K. Bera** at the Physical Education Department, University of Pune. This work has not been submitted for any other degree of this or any other University. Whenever references have been made to previous works of others, it has been clearly indicated as such and included in the bibliography.

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March, 2007 **(Deepak T. Shendkar)**

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List of Tables

Table **Page**

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Chapter I

Introduction

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Table 4.1

Tests of Between-Subjects Effects

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Source	Sum of Squares	df	Mean Square	F	Sig.
Gender	3.942	1	3.942	10.428	0.002
Teaching Method	29.206	1	29.206	77.259	0.000
Gender*Teaching Method	0.431	1	0.431	1.141	0.287
Error	52.546	139	0.378		

Note: df=Degrees of Freedom

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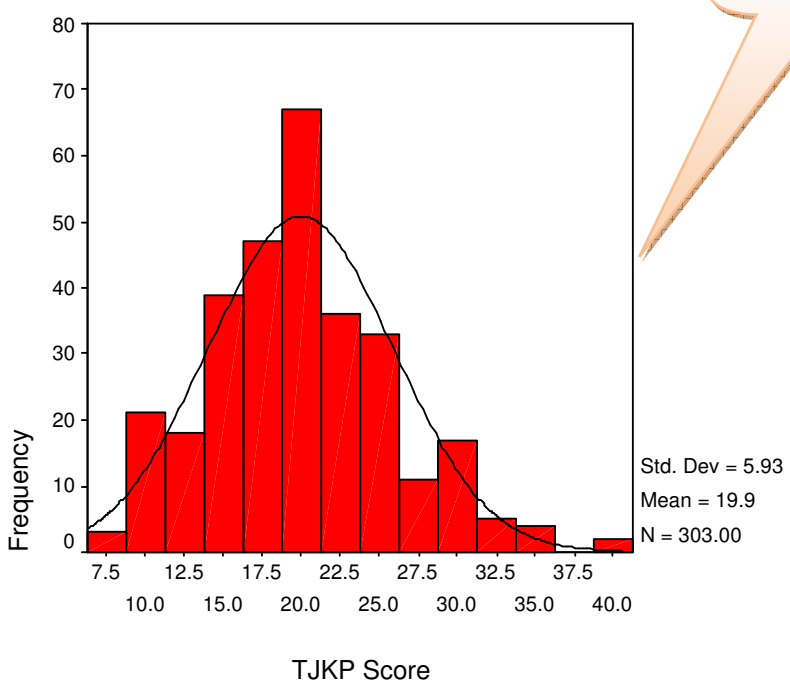

Figure 4.1 Triple Jump Knowledge Performance Test Score Distribution

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Bibliography

APA STYLE
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