

University of Pune

**Revised Syllabus**  
**M.P.Ed Course**

**Revised June 2013**

**Board of Studies- Faculty of Physical Education**  
**June 2013**

**SAVITRIBAI PHULE PUNEUNIVERSITY**

**Faculty of Physical Education**

**M.P.Ed Credit& Semester System**

**(Revised June 2013)**

**Structure of the course**

**Objectives**

- 1. To develop highly skilled scholars in the field of Physical Education.**
- 2. To master the competencies and skills needed to become professional Physical Education and sport resource person.**
- 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. (4 years), H.D.Ed., D.P.Ed i.e. courses recognized by NCTE & UGC is considered eligible for admission to this course.

Examination of Pune University or any other statutory university recognized by this university will be eligible for admission to M.P.Ed provided candidate fulfills all the other conditions required in the admission procedure. Admission will be given on the basis of merit based on regulations of state government and University of Pune.

**Duration of the program:**

The duration of the master's degree program will be of two academic years divided in four semesters. However, in case of failures, the student can complete the program in the 5<sup>th</sup>/6<sup>th</sup> semester, whichever is applicable.

**Important Instructions:**

1. The M.P.Ed program consists of **four semesters** spread over **two academic years and 64 credits (16 credits/semester)**.
2. The entire program will be evaluated for a total of **1600 marks i.e. 64 credits**.
3. A student has to successfully complete 64 credits (4 x 4 = 16 credits per semester) in a minimum of two years.
4. A student may complete a minimum of 56 credits and a maximum of 64 credits in his/her institution/college. In case a student wishes to complete all the course credits from the institution/college/department of registration he/she will be allowed to do so.
5. One credit will be equivalent to 15 clock hours of student-teacher contact per semester.
6. Student who wishes to complete credits from outside the place of registration, he/she may do so in semester III and IV when student can choose optional course of study (open course).
7. The syllabus of the open course may be prepared by the teacher of the college/institute which will be approved by the college/institute committee before the open course is offered by college/institute for the respective semester.
8. Eligibility for registration/admission for courses other than the institutional/departmental registration will be determined by the college/institution.
9. Details of the theoretical and practical components of each semester are given in the structure of the program.
10. Internal evaluation will follow Continuous Comprehensive Evaluation procedures. Internal evaluation should be done on every credit of each course or minimum two per course as decided by the teacher concerned.
11. **Internal evaluation** of the program will be done by the respective institution/college. For the internal evaluation, the college teachers should select minimum two 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, open book test etc.**

### **Rules & Regulations regarding course, assessment and Grade Point Averages**

1. The M.P.Ed Degree will be awarded to a student who completes a total of 64 credits divided in 4 semesters.
2. The institution/college will be responsible for the completion of the internal assessment. The internal assessment will be in the form of marks.
3. Each course will be evaluated both internally (50%) and externally (50%).
4. A candidate must **record attendance** at the periods in college for all the semesters as prescribed in the **university norms** to be able to appear for university examination.
5. Candidate should **complete all the practical and internal assessment** work expected in all these semesters up to the satisfaction of the concerned teacher. Candidate should obtain such **certificate from the principal** of the college on the recommendation of concerned teacher. Unless and until the candidate obtains such a certificate, candidate will not be allowed to appear for semester end examinations.
6. 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. 30%)**.
7. If a candidate missed 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**.
8. 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.
9. **To pass** the internal examination, candidate must secure **minimum aggregate of 40% or 'E' grade in each course**.
10. **Candidate cannot repeat internal assessment**. In case she/he wants to repeat internal assessment she/he can do so only by registering for the said courses during the 5<sup>th</sup>/6<sup>th</sup> semester and onwards up to 8<sup>th</sup> semester.
11. 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.
12. Student who **fails or remains absent for the semester end examination** may **reappear** for these semester end examination **only twice** in the subsequent period. The student will be

finally declared as failed if she/he does not pass in all credits within a total of four years. After that, such student will have to **seek fresh admission** as per the admission rules prevailing at that time.

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

14. While marks will be given to all examinations, they will be converted into grades. The grades of separate assignments and the final examination will be added together and then converted into a grade and later a grade points average.

15. The semester end **grades sheets will have only grades** and final grade sheets and transcripts will have **grade points average**.

16. 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.

17. To pass, a candidate must obtain **minimum 30% in internal evaluation and minimum 30 % in external evaluation** and **aggregate of 40% marks** (E and above on grade point scale) in each course .

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

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

**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 64 credits.

SGPA=	$\frac{\sum \text{Grade points earned} \times \text{Credits for each course}}{\text{Total credits}}$
GPA=	$\frac{\sum \text{Total Grade points earned} \times \text{Credits for each course}}{\text{Total credits}}$

19. 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 4.492 may be awarded 'A').

20. 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**).

**The description for each of the grades will be as follows:**

**Grades Proposed Norms**

**O : Outstanding:** Excellent Analysis of the topic (75% and above)

Accurate knowledge of the primary material, wide range of reading, logical development of ideas, originality in approaching the subject, neat and systematic organization of content, elegant and lucid style.

**A :Very Good:** Excellent Analysis of the topic (65 to 74%)

Accurate knowledge of the primary material, acquaintance with seminal publication, logical development of ideas, neat and systematic organization of content, effective and clear expression.

**B :Good:** Good analysis and treatment of the topic (55 to 64%)

Basic knowledge of the primary material, logical development of ideas, neat and systematic organization of content, effective and clear expression.

**C :Average:** Some important points covered (50 to 54 %)

Basic knowledge of the primary material, logical development of ideas, neat and systematic organization of content, good language or expression.

**D :Satisfactory:** Some points discussed (45 to 49%)

Basic knowledge of the primary material, some organization, acceptable language or expression.

**E :Pass** Any two of the above (40 to 44%)

**F :Fail** None of the above (0 to 39%)

### Structure of M.P.Ed Program

Semester	Courses	Course Title	Internal	External	Total
<b>Semester 1</b>	<b>Compulsory courses ( 16 credits)</b>				
4 credits	Course 101	Research in Physical Education	50	50	100
4 credits	Course 102	Evaluation in Physical Education	50	50	100
4 credits	Course 103	Psychology of Sports	50	50	100
4 credits	Course 104	Science of Sports Training	50	50	100
<b>16 credits</b>		<b>Total</b>	<b>200</b>	<b>200</b>	<b>400</b>
<b>Semester 2</b>	<b>Compulsory courses</b>				
4 credits	Course 201	Research & Statistics	50	50	100
4 credits	Course 202	Exercise Physiology	50	50	100
4 credits	Course 203	Professional Preparation & Curriculum Design	50	50	100
2 credits	Course 204.1	Fitness & Conditioning (practical)	25	25	50
2 credits	Course 204.2	Measurement & Evaluation (practical)	25	25	50
<b>16 credits</b>		<b>Total</b>	<b>200</b>	<b>200</b>	<b>400</b>
<b>Semester 3</b>	<b>Compulsory courses</b>				
4 credits	Course 301	Biomechanics and Kinesiology	50	50	100
4 credits	Course 302	Management of Physical Education & Sports	50	50	100
4 credits	Course 303	Athletic care & Rehabilitation	50	50	100
	<b>Elective course (any 1)</b>				
4 credits	Course 304	Philosophical & Sociological bases of PE	50	50	100
4 credits	Course 305	Pedagogy of Physical Education	50	50	100
4 credits	Course 306	Open Course	50	50	100
<b>16 credits</b>		<b>Total</b>	<b>200</b>	<b>200</b>	<b>400</b>
<b>Semester 4</b>	<b>Compulsory courses</b>				
4 credits	Course 401	Research Dissertation	50	50	100
4 credits	Course 402	Specialization (practical)	50	50	100
	<b>Elective Courses (any 2)</b>				
4 credits	Course 403	Health Education	50	50	100
4 credits	Course 404	Adapted Physical Education	50	50	100
4 credits	Course 405	Exercise Prescription & Fitness Management	50	50	100
4 credits	Course 406	Foundation of Yoga & Yogic Science	50	50	100
4 credits	Course 407	Open Course	50	50	100
<b>16 credits</b>		<b>Total</b>	<b>200</b>	<b>200</b>	<b>400</b>



### External Examination Evaluation pattern

Q. No	Type of Questions	Number of questions	Marks
1	Multiple choice questions based on higher order thinking skills	2 questions on each Credit	1*8= 8
2	Questions based on Definitional/Specific short answer	1 out of 2 questions on each Credit	4*4= 16
3	Questions based critical thinking or ability to apply knowledge or Analytical/evaluative questions	1 question compulsory on each Credit	4*4= 16
4	Essay type question based on ability to expound a theme at length with discrimination & justification	Any 1 out of 4 questions given on each Credit	10*1= 10
		<b>Total</b>	<b>50</b>

## **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**

### **Credit 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- different techniques -Probable, Non-probable
- 1.7 Ethics of Research

### **Credit 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, Internal & external criticism

### **Credit 3 Descriptive Studies**

- 3.1 Classification 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, Observation sheet, Rating scale etc.

### **Credit 4 Experimental Research**

- 4.1 Experimental and Control Group
- 4.2 Variables- Independent & Dependent Variables, Confounding Variables, Controlling 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*. (9<sup>th</sup> 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*, (4<sup>th</sup> ed.). USA: Human Kinetics

**Course102: Evaluation in Physical Education**

**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.**

**Credit 1: Basics of Measurement & Evaluation**

- 1.1 Concept & importance of Test, measurement, evaluation and assessment
- 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

**Credit 2: Construction & Standardization of tools**

- 2.1 Methods for testing Validity, Reliability (Interclass & intra class) & 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 concerns of Rating scales

**Credit 3: Measurement of psychomotor & cognitive domain**

- 3.1 Measurement of HRPF, SRPF, GMA & Motor educability.
- 3.2 Measurement of skills of various sports & games: Soccer, Handball, Tennis, Basketball, Volleyball & Indian games
- 3.3 Testing of psychological variables

### 3.4 Fitness assessment Tests for Special Population & older adults

#### **Credit 4: Test batteries & anthropometric measurement**

4.1 Meaning & characteristics of Test batteries: AAHPERD youth fitness test, JCR, FITNESSGRAM & ACSM Fitness test, sports skill test batteries

4.2 Factors affecting measurement in Physical Education

4.3 Anthropometric measurement & somatotype

4.4 Posture assessment

#### **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. (3<sup>rd</sup> Ed.). Philadelphia: Lee &Febigeer,
4. Clarke, H. (1987). Application of Measurement in Health & Physical Education. Ed. (6<sup>th</sup> Ed.). New Jersey PrenticeHall,Inc 1987.
5. Kansal, D.K. (1996). Test & Measurement in Sports & Physical Education. New Delhi:.D.V.S.Publications
6. Waghchoure, M.T. (2006). Measurement & evaluation in Physical Education: Study of KhoKho game. Delhi: Friends 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.

#### **CREDIT 1: Sports Psychology, Psychological Profiling & Group Mechanics**

##### **1.1 Sports Psychology**

- Meaning, Scope & Development of Sport Psychology
- Relationship of Sport Psychology with other Sports Sciences
- Need & Importance of Sport Psychology

## **1.2 Psychological Profiling of Sportsmen/Athletes**

- Definition
- Technique of Profiling of Sportsmen / Athlete
- Importance of Psychological Profiling

## **1.3 Group Dynamics**

- Group Cohesion & Team Building: Definition & Techniques
- Leadership: Definition & Types
- Ethics in Sports

## **CREDIT 2: Personality, Motivation & Aggression**

### **2.1 Personality**

- Meaning & Classification of Personality
- Personality Traits with relation to Sports & Games

### **2.2 Motivation**

- Definition, Meaning, Types & Techniques of Motivation
- Importance of Motivation in Sports.

### **2.3 Aggression**

- Definition, Meaning & Theories of Aggression

## **CREDIT 3: Effect on Sport Performance**

### **3.1 Emotions**

- Definition & Types
- Effect of Emotions on Sports Performance
- Spectators and sports performance

### **3.2 Anxiety & Stress**

- Definition & Types of Anxiety & Stress
- Effect of Anxiety & Stress on Sport Performance
- Psychological Preparation: Pre-During-Post Competition.
- Coping & Relaxation Procedures

## **CREDIT 4: Assessment in Sports Psychology**

- Psychological Profiling Questionnaire
- Sixteen Personality Factor Test, Eysenck Personality Questionnaire.
- Athletic Motivation Scale
- Sports Competitive Anxiety Test & Competitive State Anxiety Inventory
- Emotional Intelligence Questionnaire
- Aggression Questionnaire

### **Suggested Readings**

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, LusanDorcas, 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. DubugneJowa: 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. HurperColins 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 enable student 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.

### Credit 1: Sports training

- 1.1 Definition, meaning and importance of sports training
- 1.2 Characteristics of sports training
- 1.3 General Principles of sports training- reference to various sports & games

### Credit 2: Training Means & methods

- 2.1 Development of health related fitness parameters
- 2.2 Development of skill related fitness parameters
- 2.3 Training methods for developing fitness (Weight training, Plyometric training, interval, repetition, continues, circuit training)
- 2.4 Psychological/mental training

### Credit 3: Training load & recovery

- 3.1 Training load its variables & adaptation
- 3.2 Overload & its symptoms
- 3.3 Training cycles (Micro, Meso& Macro cycles)
- 3.4 Short-term & long-term training plans
- 3.5 Designing Sports Training program
- 3.6 Periodization and peak performance -Types of Periodization

### Credit 4: Preparing for competition

- 4.1 Talent identification, its need & importance
- 4.2 Sports talent identification procedures in India
- 4.3 Sports skill, style & technique
- 4.4 Technical & tactical preparation for sports
- 4.5 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. Bompa, T. O., Haff, G. G. (2009). *Periodization: Theory and Methodology of Training (5<sup>th</sup> Ed.)*. Champaign Il: Human Kinetics
5. Foran, Bill, ed. *High-Performance Sports Conditioning*. Champaign Il: Human Kinetics, 2001.
6. Baechle, T. R., Erale, R. W. ed. *Essentials of Strength Training and Conditioning*. (3<sup>d</sup> Ed.). Champaign Il: Human Kinetics, 2008.
7. Dick, F. W. (2006). *Sports Training Principles (4<sup>th</sup> Ed.)*. New Delhi: Friends Publication.

### **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 facilitate the students to know the format of Research Report**
3. **To assist 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**

#### **Credit 1 Basic of Statistics**

- 1.1 Concept of Statistics, its need and importance
- 1.2 Concept and Interpretation of Descriptive Statistical Measures- Mean, Median, Mode, SD, SEM,
- 1.3 Normal Probability Curve & its Interpretation- NPC, Normal distribution, Non normal distribution, Interpretation of Normal Distribution, Applications of NPC, Normality, Kurtosis, Skewness
- 1.4 Statistics Software- MS Excel and its applications, Introduction to statistical soft ware, Its use in analyzing data, (Availability of student version or trial version)

#### **Credit 2 Relationship & interpretation**

- 2.1 Measures of Relationship & its Interpretation- Scattergram, Spearman's rank order correlation Coefficient, Person's Product movement Correlation Coefficient,
- 2.2 Interpretation of Correlation coefficient Significance of the Correlation Coefficient, Coefficient of Determination, Prediction

#### **Credit 3 Inferential Statistics**

- 3.1 Concept and Interpretation of Inferential Statistical Measures



3.2 Testing 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

3.3 Parametric tools- t-test (one sample, paired, & independent) Introduction to ANOVA, MANOVA and ANACOVA, MANCOVA, Post-hoc test & its Interpretation

3.4 Non-Parametric tools-Introduction to Chi-square, Cross tab technique, Mann Whitney test etc. & its Interpretation

#### **Credit 4 Data analysis & Report writing**

4.1 Computer Data Entry- The computer & data organization and mining

4.2 The outliers & managing it

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

#### **Suggested Readings**

1. Miller, D. K. (2002). *Measurement by Physical Educator*. New York: McGraw 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*. (3<sup>rd</sup>ed.). Philadelphia: Lee &Febigeer
4. Sprinthall, R. C. (1997). *Basic statistical Analysis*. (5<sup>th</sup>ed.). USA: Allyn& Bacon
5. Best, J. W. & Kahn, J. V. (2006). *Research in Education*.(10<sup>th</sup> 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.**

#### **Credit1:**

1.1 Introduction to exercise & sport physiology, its importance and role

1.2 Structure & function of exercising muscle

1.3 Neural control for exercising muscle

1.4 Neuromuscular adaptations to exercise and training

**Credit2:**

- 2.1 Fuel for exercising muscle
- 2.2 Energy expenditure and fatigue
- 2.3 The cardiovascular system & its control
- 2.4 The Respiratory system & its regulation

**Credit3:**

- 3.1 Cardio-respiratory responses to acute exercise
- 3.2 Adaptations to Resistance Training
- 3.3 Adaptations to aerobic & anaerobic Training
- 3.4 Endocrine system and adaptation to exercise

**Credit4:**

- 4.1 Exercise in hot and cold environments
- 4.2 Exercise & training at Altitude
- 4.3 Body Composition & Nutrition for Sport
- 4.4 Physiological assessment & evaluation of performance determining factors

**Suggested Readings:**

1. Wilmore, J H and Costill, D L (2004) Physiology of Sport and Exercise. Champaign, Illinois: Human Kinetics
2. McArdle, W.D., Katch, F.I. and Katch, V.L. (2007). Exercise Physiology, Energy, Nutrition and Human Performance. Baltimore: Lippincott, Williams & Wilkins
3. Mathew, D.K. and Fox, E.L.(1976). Physiology basis of Physical Education and athletics. Philadelphia: UBS company
4. Powers, S K and Howley, E T (2004) Exercise Physiology: Theory and Application to Fitness and Performance. New York: McGraw-Hill.

## 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.

### Credit 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

### Credit 2: Professional Preparation

- 2.1 Historical perspectives
- 2.2 Policy perspectives
- 2.3 Theoretical perspectives
- 2.4 Nature & content of professional preparation programs

### Credit 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

### Credit 4: Curriculum

- 4.1 Meaning, importance & fundamental principles of curriculum planning
- 4.2 Writing the curriculum guide
- 4.3 Implementing the Physical Education curriculum

### Suggested Reading:

1. KiranSandhu (2004). Professional preparation and career development in Physical Education and sports. New Delhi: Friends publication.
2. KiranSandhu (2004). Trends and developments in Professional preparation in Physical Education and sports. New Delhi: Friends publication.
3. Barrow, H. M. (1983). Man & movement (3<sup>rd</sup> 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 (11<sup>th</sup> 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.

### 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

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 etc.

## 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.

### Details of the course

Sr. No.	Classification	Components & Tests
1	<b>Anthropometric measurement</b>	<p>1. <b>General Body Measurement:</b> Body weight, Stature Height, Sitting Height</p> <p>2. <b>Skeletal Diameters:</b> Biacromial Diameter, Humerus Bicondylar Diameter, Wrist Diameter, Femur Bicondylar Diameter</p> <p>3. <b>Circumference:</b> Chest Circumference, Upper Arm Circumference, Thigh Circumference</p> <p>4. <b>Length:</b> Arm length, Leg length</p> <p>5. <b>Skinfold Measurement:</b> Biceps, Tricep, Subcapular, Suprailiac</p> <p>6. <b>Posture assessment</b></p>
2	<b>Health Related Physical Fitness</b>	<p><b>C. V. Endurance :</b> Beep test, Run/walk test, Step test, Ergometer test</p> <p><b>Muscular strength &amp; Endurance:</b> 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</p> <p><b>Flexibility:</b> Sit &amp; Reach, Trunk &amp; Neck Extention, Shoulder Flexibility, Shoulder lift, Shoulder &amp; Wrist Elevation, Trunk rotation, Goniometer</p> <p><b>Body Composition:</b> WHR, BMI, Digital body fat Monitor</p>
3	<b>Skill Related Physical Fitness</b>	<p><b>Speed:</b> 10 stride test, 40m multiple sprint test, 400m Drop off test, 50m. Dash, 30m. Flying test</p> <p><b>Agility:</b> Shuttle run, SEMO Agility run, Dodging run test, 505 Agility test, ZigZag run test, Side step test, Illinois Agility Run test</p> <p><b>Balance:</b> Stork stand, Bass stick test, Bass test of dynamic balance</p> <p><b>Reaction time:</b> Ruler drop test, Hand reaction time, Foot reaction time test</p> <p><b>Power:</b> SBJ, Vertical Jump, Medicine ball throw</p> <p><b>Co-ordination:</b> Wall Catch test, Wall Volley</p>
4	<b>Sports Skill Test</b>	<ol style="list-style-type: none"> <li>1. <b>Basket Ball:</b> Nelson-Johnson, AAHPERD, SAI</li> <li>2. <b>Foot Ball:</b> AAHPERD, McDonald &amp; SAI Soccer test</li> <li>3. <b>Volley Ball:</b> Brady, Russell-Lange &amp; AAHPERD Volley ball skill test</li> <li>4. <b>Badminton:</b> Miller wall volley badminton test, Service test</li> </ol>
5	<b>Psychological test</b>	Paper pencil test- 16 PF test etc
6	<b>Physiological test</b>	Heart rate, respiratory rate, VO <sub>2</sub> max

**Evaluation (Total marks= 50, Internal= 25 marks, external= 25 marks)**

## **Details of External Evaluation**

### **1. Submission of report**

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**

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

### **3. Viva-voce**

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.**

### **Credit 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 Credits 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.

## **Credit 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.

## **Credit 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.

## **CREDIT 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 Jersey: 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. Ludhiana: Tondon Publication.
5. Susan, J. H (2003). Basic Biomechanics.(4<sup>th</sup>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.**

### **Credit 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

### **Credit 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

### **Credit 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

### **Credit 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, (12<sup>th</sup> Edn.). New York: McGraw Hill.
2. Voltmer, E.F. (1979). The organization and administration of Physical Education (5<sup>th</sup> Edn). New Jersey: Prentice Hall.
3. Parkhouse, B. L. (1991). The Management of Sports Foundation & Application St. Louis: 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**

#### **Credit1: Introduction**

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

#### **Credit2: 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).

#### **Credit3: 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

#### **Credit4: Performance enhancement**

- 4.1 Performance enhancing drugs, substances
- 4.2 Athletic nutrition- Balanced diet & appropriate diet before, during & after athletic performance

#### **Suggested Reading:**

1. Roy, 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. (3<sup>rd</sup> Ed.). Oxford University press.
4. Armstrong & Tucker. Injuries in sports. London: Staples press.

## Course 304 Philosophical & Sociological bases of PE

### 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.

### Credit 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)

### Credit 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.

### Credit 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

### Credit 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. Kretchmar R, (1994) Practical Philosophy of Sport. U.S.A: Human Kinetics.
2. Bucher, (1992) Foundations of Physical Education. (1<sup>st</sup> 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. Saunders.
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 of 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.

### Credit 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

### Credit 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

### Credit 3: Developing effective Credits 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

### Credit 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 (4<sup>th</sup> Ed). NY: Macmillan College Publishing Company
3. Kelly, L.E., Nelogran, V.J. (2004). Developing the Physical Education curriculum. Champaign, IL: Human Kinetics
4. Hoppie, C.J. (2005). Elementary Physical Education teaching & assessment- A practical guide. Champaign IL: Human Kinetics

**306 Open Course**

**The Facility of open course provides for presentation of a faculty member's current research or specialized academic interest. The title and syllabus will be framed by the faculty member. The course will be given on approval by the Institutional/college Committee. The course content will include the detailed syllabus and evaluation pattern for internal and external assessment.**

## 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	10	-	10
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	Research Paper Presentation	Semester IV	10	-	10
6	Dissertation and Viva-voce	Semester IV	-	50	50
		<b>Total</b>	<b>50</b>	<b>50</b>	<b>100</b>

- Workshop/ seminars will be organized by college during specified semester with adequate time interval in between.
1. **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
  2. **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.
  3. **Data Collection Tools & its Reliability:** Selection or Preparation appropriate data collection tool, finding its reliability, administration of tool and scheduling.
  4. **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.
  5. **Research Paper Presentation:** Student will have to prepare a research paper on his/her research study & present it before guide & an expert appointed by college
  6. **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.

- 7. 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 Specialization (Practical)

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

<b>1. Athletics</b>	<b>6. Basketball</b>	<b>11. Cricket</b>	<b>16. Boxing</b>	<b>21. Netball</b>
<b>2. Yoga</b>	<b>7. Hockey</b>	<b>12. Table tennis</b>	<b>17. Judo</b>	<b>22. Korfball</b>
<b>3. Kabaddi</b>	<b>8. Football</b>	<b>13. Badminton</b>	<b>18. Taekwondo</b>	<b>23. Swimming</b>
<b>4. Kho-Kho</b>	<b>9. Handball</b>	<b>14. Tennis</b>	<b>19. Mallakhamb</b>	<b>24. Fitnesss &amp; conditioning</b>
<b>5. Volleyball</b>	<b>10. Softball</b>	<b>15. Wrestling</b>	<b>20. Gymnastics</b>	<b>25. Physical Education</b>

Each student will undergo advanced training in the event of his/her choice. The selected event will be taught for the advanced level with reference to the given points:

#### **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. Hands-on training program** - Each candidate has to undergo a 3 week Hands-on training program at college, health club or school specified by institute whichever is applicable. This program will be conducted based on the guidelines given below.

- i) Duration of the Hands-on training program- 3 weeks (Maximum 3 hours/day).
  - ii) The candidate will report to the director/manager/teacher concerned and undergo the training program developed by the college teacher and concerned director.
  - iii) At the end of completion, candidate will obtain certificate of completion from the Head & the director/manager/teacher concerned.
  - iv) Activities to be completed-
    - a) Understanding the administrative system related to competition participation, purchase & maintenance in the concerned college/Health club/School and duties related to teaching/training
    - b) Role, duties & responsibilities of the Director/Trainer/Teacher
    - c) Organization of event- required documentation, planning etc
    - d) Training program – sports coaching/fitness training etc
    - e) Assessment of students/clients
- **Syllabus for the specialization in Fitness & conditioning and for Physical Education, college should form a committee and design the syllabus with details of internal and external evaluation of the mentioned specialization area.**

### Evaluation

#### Internal evaluation (50 marks) –

1. **Lessons**- For internal evaluation, each candidate has to conduct 5 advanced coaching lessons to be evaluated for 50 marks each. The college or institution can design the internal evaluation pattern in addition to the lessons. The pattern should be approved by the institutional committee.



### **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, gameperformance, officiating & coaching strategies. The external evaluation of this course will be developed by the institutional committee.

## **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.**

### **Credit 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

### **Credit 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

### **Credit 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

#### **Credit 4: Communicable & non-communicable diseases**

- 4.1 Pathogens- 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 (4<sup>th</sup> Ed). Boston: Allyn& Bacon
3. Park, K. (2007). Park's textbook of Preventive & social medicine (19<sup>th</sup> Ed). India: BanarasidasBhanot 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

#### **Credit 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

#### **Credit 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

**Credit 3: Developmental Considerations of an Individual**

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

**Credit 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. (4<sup>th</sup> 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 (4<sup>th</sup> Edition).
5. Pangrazi, R.P. and Dauer, V. P. Dynamics Physical Education for Elementary School Children. (11<sup>th</sup> 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**

**Credit 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

**Credit 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

**Credit 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

**Credit 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.

**Credit1: 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), ChittaVrtti (Causes for the modification of the mind), ChittaViksepa (Directions & obstacles)
- 1.4 Sisya & Guru (A pupil & a master), Sadhana (A key to freedom)

**Credit2: 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

**Credit3: Yoga & mental health**

- 3.1 Mental health & hygiene – yogic & medical perspectives
- 3.2 Yoga & modern psychology
- 3.3 Emotional disorders, conflicts & frustration

**Credit4: Research in Yoga**

- 4.1 Meaning & 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. & Ambrosi, D. M. (2006). Instructing hata yoga. Champaign: Human kinetics.
3. Alice, C. (2000). Yoga for sports. Chicago: CB.
4. SawmiKavalayanand (1993). 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.

**Course 407 Open Course**

**The Facility of open course provides for presentation of a faculty member's current research or specialized academic interest. The title and syllabus will be framed by the faculty member. The course will be given on approval by the Institutional/college Committee. The course content will include the detailed syllabus and evaluation pattern for internal and external assessment.**

## Appendix A

University of Pune

### Research Report Format Guidelines for M.P.EdDissertation Organization

Following guidelines should be used in making the draft of the research work.

- 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.
- c) **Printing:** Preliminary pages to be printed on one (right) side of the page and Body of the Thesis on both sides of the pages. Every new chapter should start on right hand side page.
- 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.

General sequence to be followed in the final draft to be submitted in print and electronic format should be as follows: 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.
- b) **Copyright Permission:** Where a thesis includes copyrighted material (e.g., publications), copyright permission letters should be included as a separate appendix. Reprints may be included in the appendices, provided copyright permission is obtained.

#### **Electronic Formats**

- a) **General:** Students may include supplementary material in electronic format. A CD-ROM or DVD-ROM (read-only) containing this material should be submitted in a hard case and will go in the back pocket of the thesis. A description of the supplementary material, including file names, formats, and a brief description of the contents, should be included as an appendix in the paper copy of the thesis and as a "read-me" file on the CD/DVD-ROM.
- b) **Labeling:** The CD/DVD-ROM must include both electronic and physical labels that list the thesis title, author, institution, and date.

#### **Vita**

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.