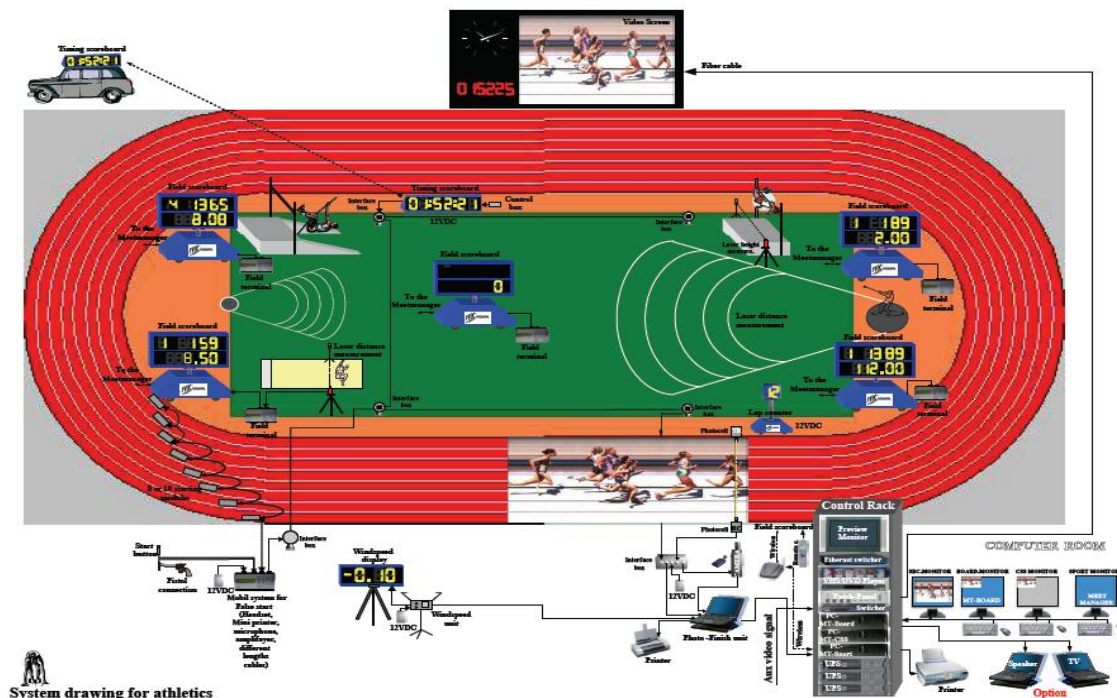


HEMCHANDRACHAYRA NORTH GUJARAT UNIVERSITY, PATAN



COURSE OF STUDY AND PRESCRIBED BOOK FOR THE M.Phil SEMESTER SYSTEM



September-2011-12

HEMCHANDRACHAYRA NORTH GUJARAT UNIVERSITY, PATAN

REGULATION, SCHEME OF EXAMINATION AND SYLLABUS FOR THE MASTER OF PHILOSOPHY IN PHYSICAL EDUCATION (M.Phil) COURSE

1. ELIGIBILITY FOR ADMISSION

A candidate for admission to the one year Master of Philosophy in Physical Education (M.Phil) Degree course shall fulfill the following conditions:

- a) Candidates who have passed post graduate degree in Physical Education (M.P.Ed., M.P.E.) of any University accepted by the Syndicate of this University with not less than 50% marks.
- b) Admission shall be made either on the basis of marks obtained in the qualifying examination or in the selection tests conducted by the University.
- c) There shall be reservation of seats for SC/ST/OBC as per the rules of the State/ Central Government, as the case may be.

2. DURATION OF THE COURSE

The duration of the course shall be one academic year with two semesters. The University Examination will be held in November/December in the odd semester and in April/May in the even semester of every academic year.

3. COURSE OF THE STUDY

The course structure shall consist of two papers in the first semester one paper and dissertation which includes viva voce examination will be conducted in the second semester by the Internal and External examiners.

The theory paper consists of internal and external assessment. The internal assessment marks awarded by the department shall be added to the marks obtained at the university examination in each theory paper calculating the percentage of marks. A candidate shall be deemed to have passed the written examination and thesis, if he/she obtains not less than 50% marks of the total aggregate marks.

4. ATTENDANCE

A student must have 75% percentage of attendance in theory classes to appear for the university examination.

5. Grade will be given below method :

Grade Point	Description	% Of Marks	Division / Grade
1	2	3	4
10	Outstanding	90%-99%	First / O
9	Excellent	80%-89	First / A
8	Very Good	70%-79	First / B
7	Good	60%-69	First / C
6	Fair	50%-59	Second / B
5	Average	40%-49	Pass / E
4	Dropped	Below 40%	F

Note : The percentage of marks will be converted in to whole number. When the percentage is in fraction, is grater than or equal to 0.50 is considered as 1 (one). For example if percentage is 69.45 than it will be considered as 69 but if the percentage is 69.50 will be considered as 70.

semester **Grade Point Average (SGPA)** indicates the performance of a student in a given semester. SGPA is based on the total credit points earned by the student in all the courses and the total number of credit assigned to each course in a semester.

Credit Point for the Course= No. of Credits Assigned to the Course

X

Grade point secured for the course

SGPA= Total credit points earned by a student in a semester/Total credits for

that semester

**Structure for M.Phil. Physical Education Syllabus
Semester-I**

Course No.	Paper Code	Title of Paper	Internal	External	Total Marks	Credit
Compulsory	101	Research Methods and Advanced Statistics	30	70	100	4
Compulsory	102	Measurement & Evaluation Techniques	30	70	100	4
Elective Subject (If Any)	103(a)	Sports Psychology	30	70	100	4
	103(b)	Sports Training	30	70	100	4
	103(c)	Exercise Management	30	70	100	4
Total					300	12

Semester-II

Course No.	Paper Code	Title of Paper	Internal	External	Total Marks	Credit
Compulsory	104	Sports Management	30	70	100	4
Compulsory	105	Dissertation	50	150	200	8
Total					300	12
Grand Total					600	24

Semester-I
Paper-I
RESEARCH METHODS AND ADVANCED STATISTICS(101)

UNIT – I

- 1.1. Meaning, Nature, Need and Scope of Research in Physical Education
- 1.2. Types of Research
- 1.3. Location and Criteria for Selection of Problem
- 1.4. Presenting the problem – Introduction, Statement of the problem, Hypothesis
Basic Assumptions, Delimitations and Limitations, Operationally defining
your Terms and justifying the significance of the study.
- 1.5. Literature – Purpose, Sources and Search techniques

UNIT - II

- 2.1 Steps in the Research Process
- 2.2 Meaning and Types of Variables in Research
- 2.3 Sources of Invalidity – Threats to Internal and External Validity
- 2.4 Research Design and Types of Designs
- 2.5 Reliability and Validity – Method of establishing Reliability

UNIT - III

- 3.1 Basic concepts of Statistical Techniques – Descriptive and Inferential Statistics
- 3.2 Analysis of Variance (ANOVA)- Simple, Factorial & Repeated groups
- 3.3 Analysis of Covariance (ANCOVA) & Follow-up test
- 3.4 Using SPSS commands for t-Tests, ANOVA and ANCOVA
- 3.5. Concepts of Multivariate Techniques

UNIT – IV

- 4.1 Nature of correlation coefficients – Pearson correlation
- 4.2 Partial and Multiple Correlations
- 4.3 Using correlation for prediction (Regression equation)
- 4.4 Using SPSS commands for correlation and regression.
- 4.5 Non-Parametric tests; Chi square and Rank order correlation

UNIT - V

- 5.1 Writing the Research Proposal, synopsis and abstract
- 5.2 Organisation of the Research report
- 5.3 Areas of Research
- 5.4 Common faults in student research
- 5.5 Application of computer in research and statistics

REFERENCES

1. Clarke, David H. Clarke, Harrison H. *Research Process in Physical Education*, New Jersey: Prentice Hall Inc. 1984.
2. Jerry R. Thomas, Jack K. Nelson and Stephen J. Silverman., *Research Methods in Physical Activity (5th Ed)*, New York: Human Kinetics. 2005.
3. Chris Gratton and Ian Jones., *Research Methods for Sports Studies*, London: Routledge Taylor & Francis Group, 2004.
4. Kothari C.R., *Research Methodology (2nd Ed)*, New Delhi: New Age International Pvt., 2004.
5. K.D. Broota., *Experimental Design in Behavioural Research*, New Delhi: New Age International Publishers, 2006.

PAPER– II
MEASUREMENT & EVALUATION TECHNIQUES(102)

UNIT-I

1. Critical appraisal of the definitions of Tests, Measurements and Evaluation.
2. Classification of Tests.
3. Criteria for selection and construction of tests
4. Uses and Philosophical consideration in assignments of grades.
5. Grading– Normal reference and criterion reference grading systems.

UNIT-II

1. Appraisal of test: Critical appraisal of knowledge Test.
2. Critical appraisal of standard test
3. Critical appraisal of personality inventories.
4. Preparation of Norms and Scales
5. Establishing Reliability

UNIT-III

1. Body classification
2. Physical fitness and Types
3. AAHPERD, AAPHER, and YMCA tests.
4. Barrow motor ability and Johnson Motor Educability tests
5. Postural and Body Alignment Tests

UNIT-IV

1. Measurement of body density from under water weighing
2. Converting body density to percent body fat
3. Body density by skin folds equations for men and women
4. Sports skill test – Basketball, Badminton and Volleyball
5. Sports skill test – Tennis, Hockey and Football

UNIT -V

1. Introduction to Computers
2. Programming Concept
3. Word Processing Concept
4. Introduction to MS word, MS office – Chart marking
5. Application of multimedia

REFERENCES

1. Barrow, Harold M & McGee, Rosemary.A *Practical Approach to Measurement in Physical Education*, Philadelphia: Lea and Febiger. 1979.
2. Clake, H. Harrison. *Application of Measurement to Health and Physical Education*, New Jersey: Prentice Hall Inc. 1976.
3. Safrit, Margaret J. *Introduction to Measurement in Physical Education and Exercise Science*, St. Louis: Mosby. 1995.
4. Edmund O. Acevedo and Michael A. Starks., *Exercise Testing and Prescription lab Manual*, USA: Human Kinetics Publishers, 2003.
5. Sunil Chauhan, Akash Saxena, Kratika Gupta, *Funadamentals of Computer, Firewall Media*, 2006.

**PAPER– III (a) – Elective
SPORTS PSYCHOLOGY(103)**

UNIT- I

- 1.1 Meaning and Nature of Sports Psychology
- 1.2 The history and development of sports psychology
- 1.3 Development of Sports Psychology
- 1.4 General Factors affecting learning and performance
- 1.5 Motivation of children and youth in sports

UNIT- II

- 2.1 Meaning of the term perceptual motor learning
- 2.2 The retention of motor skills
- 2.3 Transfer of skill
- 2.4 Learning Curve and its role in learning motor skills
- 2.5 Theories of Learning

UNIT- III

- 3.1 Motivation in sports
- 3.2 Theories of motivation
- 3.3 Achievement motivation and level of aspiration
- 3.4 Methods of assessing aspiration level motivation and motivation
- 3.5 Psychological Skill training

UNIT- IV

- 4.1 Emotions in Sports performance
- 4.2 Aggression and theories of aggression
- 4.3 Issue and controversies in physical activity and the psychology development
- 4.4 Mental plan
- 4.5 Psychological preparation for competition

UNIT- V

- 5.1 Physical activity and the psychology development of the handicapped
- 5.2 Personality of sportsmen and coach
- 5.3 Nature of personality heredity and personality traits of sports men
- 5.4 Assessment of personality traits
- 5.5 Implication for the coach

REFERENCES

1. Cratty Bryant, J. *Movement Behaviour and Motor Learning*. Philadelphia Lea & Febiger, 1975.
2. Kamlesh, M. L. *Psychology of Physical Education and Sports*. Metropolitan Book Co. Pvt. Ltd. 1983.

PAPER– III (b) – Elective
SPORTS TRAINING(104)

UNIT-I (Introduction)

- 1.1 Principles of training and conditioning
- 1.2 Structure of training
- 1.3 Components of load
- 1.4 Load and Adaptation
- 1.5 Circuit, Interval, Weight, Fartlek and Plyometric trainings

UNIT-II (Strength and Speed development)

- 2.1 Forms of strength and Characteristics of strength
- 2.2 Means and methods to develop strength
- 2.3 Forms of speed and Characteristics of speed
- 2.4 Means and methods to developing speed
- 2.5 Strength and speed training for women and children.

UNIT-III (Endurance, Flexibility and Coordination development)

- 3.1 Types of endurance and Means and methods to improve Endurance
- 3.2 Types of Flexibility and Means and methods to improve Flexibility
- 3.3 Types of Coordination and Means and methods to improve Coordination
- 3.4 Physiological adaptations to training
- 3.5 Characteristics of Endurance, Flexibility and Coordination

UNIT-IV (Periodisation)

- 4.1 Physical preparation
- 4.2 Technical preparation
- 4.3 Tactical preparation
- 4.4 Psychological Preparation
- 4.5 Overtraining, Detraining and Retraining

UNIT -V

- 5.1 Effect of drugs, alcohol and smoking on performance
- 5.2 Effect of climate changes and high altitude on performance
- 5.3 Effect of diet on performance
- 5.4 Effect of travel on Performance
- 5.5 Effect of sleep and rest on performance

REFERENCES

1. Bill Foren, *High Performance Sports Conditioning*, USA: Human Kinetics Publishers, 2001.
2. Tudor O. Bompa, *Periodisation Training Sports*, USA: Human Kinetics Publishers, 1999.
3. Dick, Frank W., *Sports Training Principles*, London: Leipus Book. 1980Singh, Hardayal, *Science of Sports Training*, New Delhi: D. A.V. Publications. 1991.
4. Thomas R. Baechle and Roger W. Earle, *Essentials of Strength Training and Conditioning (2nd Ed.)*, USA: Human Kinetics Publishers, 2000.
5. Tudor O. Bompa, *Periodisation*, USA: Human Kinetics Publishers, 1999.

PAPER– III (c) – Elective
EXERCISE MANAGEMENT(201)

UNIT – I Introduction

- 1.1 Introduction to Exercise Management
2. 2 Families of Exercise Tests Measures
3. 3 Exercise and Medicines
4. 4 Risk, Cost and Benefits of exercise
5. 5 Considerations regarding Physical Activity for Children and Youth

UNIT –II Cardio Pulmonary Diseases

- 2.1 Myocardial Infraction
- 2.2 Angina and Silent Ischemia
- 2.3 Hypertension and Chronic Heart Failure
- 2.4 Chronic Obstructive and Restrictive Pulmonary Disease
- 2.5 Asthma

UNIT–III–Metabolic Disease/Immunological/Hematological Disorders

- 3.1 End stage Metabolic Disease: Renal and Liver Failure
- 3.2 Diabetes
- 3.3 Hyperlipedemia and Obesity
- 3.4 Chronic Fatigue Syndrome and Anemia
- 3.5 Bleeding and Clotting Disorders

UNIT – IV - Orthopedic Disease/Neuromuscular disorders

- 4.1 Arthritis
- 4.2 Low back syndrome
- 4.3 Osteoporosis
- 4.4 Stroke and Brain Injury
- 4.5 Spinal cord disabilities: Paraplegia and Tetraplegia

UNIT – V – Cognitive, Psychological and Sensory Disorders

- 5.1 Mental retardation
- 5.2 Alzheimer’s Disease
- 5.3 Mental Illness
- 5.4 Deaf and Hard-of-Hearing
- 5.5 Visual Impairment

REFERENCES

1. J. Larry Durstine and Geoffrey E. Moore., *Exercise Management for Persons with Chronic Diseases and Disabilities*, USA: Human Kinetics, 2003.
2. Allen W. Jackson et al, *Physical Activity for Health and Fitness*, USA: Human Kinetics, 1999.
3. Jerrold S. Greenberg et al., *Physical Fitness and Wellness (3rd Ed.)*, USA: Human Kinetics, 2004.
4. Joseph P. Winnick and Francis X. Short, *Physical Fitness Training Guide*, USA: Human Kinetics, 1999.
5. Frederick C. Hatfield, *Fitness: The Complete Guide*, Official Book of ISSA, 2004.
6. Darryl E. Barnes, *Action Plan for Diabetes*, USA:Human Kinetics Publishers, 2004.

**PAPER– III (d) – Elective
EXERCISE
PHYSIOLOGY(201)**

UNIT- I

- 1.1 Structure of muscles, function of muscles and fiber characteristics
- 2.2 Muscular theories of contraction- sliding filament models of contraction
- 3.3 mechanical and dynamic properties of muscles contraction and cooling
heat production in muscles
- 4.4 Types of muscles
- 5.5 Effect of exercise on muscular system

UNIT- II

- 2.1 Nervous system and proprioceptors
- 2.2 The motor neuron and synapses
- 2.3 The action potential and transmission of the impulse
- 2.4 Muscles spindle and Golgi tendon organ, Joint receptors
- 2.5 Effect of exercise on nervous system

UNIT- III

- 3.1 Mechanism of breathing
- 3.2 Lung volume and pulmonary pressures
- 3.3 Regulation of respiration
- 3.4 Oxygen and carbon-di-oxide transport system.
- 3.5 Effect of exercise on respiratory system

UNIT- IV

- 4.1 Cardiac cycle- cardiac output- cardiac index- stroke volume
- 4.2 Sterling's law of heart
- 4.3 Nervous and chemical control of the heart
- 4.4 Effect of exercise on cardiac output
- 4.5 Effect of exercise on muscles blood flow

UNIT- V

- 5.1 Metabolism and energy transfer
- 5.2 Anaerobic metabolism
- 5.3 Aerobic metabolism
- 5.4 Energy release
- 5.5 Energy cost for various sports activities

REFERENCES

1. Mathew D.K. and Fox E. L, *Physiological Basis of Physical Education and Athletics*, W. B. Saunders Co: Philadelphia, 1971.
2. Jay Hoftman, *Physiological Aspects of Sports training and Performance*, USA: Human Kinetics Publishers, 2000.
3. Jack H. Wilmore, David L. Costill and W. Larry Kenny, *Physiology of Sports and Exercise (4th Ed.)*, USA: Human Kinetics Publishers, 2008.
4. Herbert A. Devries and Terry J. Housh, *Physiology of Exercise (5th Ed.)*, Brwon and Benchmark Publishers, 1994.
5. Christine M. Drews, *Physiology of Sports and Exercise*, USA: Human Kinetics Publishers, 1999.

Semester-II
PAPER – IV Compulsory
SPORTS MANAGEMENT(201)

UNIT - I

1. History and Evaluation of Management
2. Principles of Sports Management
3. Polices of Sports Management
4. Standard Practices of Sports Management
5. Functions of Sports Management

UNIT - II

- 2.1 Legal aspects of Physical Education
- 2.2 Administration in Sports
- 2.3 Community involvement and Public relations
- 2.4 Stress, burnout and conflicts in Management
- 2.5 Management of Recreation and Leisure activities

UNIT - III

- 3.1 Functions in the Process of Management and Effective communication
- 3.2 Planning and Organizing activity based programmes
- 3.3 Controlling the Activity Based Programmes
- 3.4 Delegation of duty in the activity based programmes
- 3.5 Staffing and Leading personal in activity based programme

UNIT – IV

- 4.1 Office, Class and Staff Management
- 4.2 Managing sports facilities – Designing and Planning sports facilities, sports facility specifications, standards and structures.
- 4.3 Managing of Sports equipments–Selection, purchase and maintenance security.
- 4.4 Finance Management
- 4.5 Risk Management

UNIT - V

- 5.1 Training for Administrators/Manager for better performance
- 5.2 Behaviour Management
- 5.3 Crisis Management
- 5.4 Event management
- 5.5 Career opportunities in Sports Management

REFERENCES

1. Chelladurai .P. *Managing organizations for Sports and Physical Activity*, Holcomb Hathaway Publishers: Arizona, 2001.
2. Davis Kathleen A., *Sports Management*, WCB Brown & Benchmark, Iowa, 1994.
3. Lisa Pike Masteralexis, Carol A. Barr and Mary A. Hums, **Principles and Practice of Sports Management**, Jone and Bartlett Publishers, 2005.
4. David C. Watt, *Sports Management and Administration*, Routledge Taylor & Francis Group, 2003.
5. ASEP, *Event Management for Sport Directors*, USA:Human Kinetics, 1996.