OPJS UNIVERSITY, CHURU (RAJASTHAN)

SYLLABUS

for

MASTER PHYSICAL EDUCATION

(M.P.E.)

*

School of Physical Education

Opjs University, Churu (Rajasthan)

2014-15

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## SCHEME OF EXAMINATIONS

### Previous Year

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<tr>
<th>S.No</th>
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<td>2.</td>
<td>MPE-102</td>
<td>Test, Measurement and Evaluation in Physical Education</td>
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<td>3.</td>
<td>MPE-103</td>
<td>Physiology of Exercise</td>
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<td>MPE-104</td>
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<td>Track and Field I: Running Events / Gymnastics / Swimming or lesson Plan</td>
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### Final Year

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<td>1.</td>
<td>MPE-201</td>
<td>Scientific Principles Of The Sports Training</td>
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<td>2.</td>
<td>MPE-202</td>
<td>Sports Psychology</td>
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<td>MPE-203</td>
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<td>MPE-204(A)</td>
<td>Sports Biomechanics And Kinesiology &amp; Sports Management ‘or’ Dissertation</td>
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<td>MPE-205(P)</td>
<td>Class Room Teaching (Lessons on Theory Different Sports &amp; Games with lesson Plan)</td>
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Details of Syllabus

**Previous Year**

**Theory Courses**

**MPE-101-RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCE AND APPLIED STATISTICS**

**UNIT- I. Introduction**

Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a researcher.

**UNIT- II. Methods of Research a Experimental research**

Descriptive Methods of Research; Survey Study, Case Study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data. Historical Criticism: Internal Criticism and External Criticism.

**Experimental research**


**UNIT – III. Sampling**


**UNIT- IV. Introduction**

**Data Classification, Tabulation and Measurers of Central Tendency**

Meaning, uses and construction of frequency table. Meaning, Purpose, calculation and advantages of Measures of central tendency – Mean, median and mode.

**Measures of Dispersions and Scales**

Meaning, Purpose, Calculation and advances of range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose Calculation and advantages of scoring scales; Sigma scale, Z scale, Hull scale.
Inferential and Comparative Statistics
Tests of significance; Independent “t” test, Dependent “t” test- chi- square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation-calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.
Note: It is recommended that the theory topics be accompanied with practical, based on computer software of statistics.

Suggested Readings:

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MPE-102-TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

UNIT-I. Introduction

UNIT-II. Motor Fitness Tests
Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test (Separately for boys and girls) – JCR test. Motor Ability; Barrow Motor Ability Test Newton Motor Ability Test – Muscular Fitness – Kraus Weber Minimum Muscular Fitness Test.
UNIT- III. Physical Fitness Tests

Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger’s physical fitness Index. Cardiovascular test; Harvard step test, 12 minutes run / walk test, Multi-stage fitness test (Beep test)

UNIT- IV. Anthropometric and Aerobic – Anaerobic Tests


Suggested Readings:

Moorthy A. M. Research process n Physical Education (2010); friend Publication, New Delhi.

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MPE-103-PHYSIOLOGY OF EXERCISE

UNIT – I. Skeletal Muscles and Exercise

Macro & Micro structure of the Skeletal Muscle, Chemical Composition. Sliding Filament theory of Muscular Contraction. Type of muscle fibre Muscle Tone, Chemistry
of Muscular Contraction – Heat Production in the Muscle, Effect of exercises and training on the muscular system.

UNIT – II. Respiratory System and Exercise

UNIT – III. Cardiovascular System and Exercise

UNIT – IV. Climatic Conditions and Sports Performance and ergogenic aids

UNIT – V. Metabolism And Energy Transfer
Metabolism – ATP – PC or Phosphagen system – Anaerobic Metabolism – Aerobic Metabolic – Aerobic and Anaerobic Systems during Rest and Exercise. Short duration High Intensity Exercises – High Intensity Exercise Lasting Several Minutes – Long Duration Exercises.

Suggested Readings:

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UNIT – I. Introduction


Aasanas and Pranayam


UNIT – II. Kriyas


Mudras


UNIT – III. Yoga and Sports


Note: Laboratory Practicals be designed and arranged internally.

UNIT- IV. Health Education

Concept, Dimensions, Spectrum and Determinants of Health Definition of Health, Health Education, Health Instruction, Health Supervision Aims, objective and Principles of Health Education. Health Service and guidance instruction in personal hygiene.
Health Problems in India

Communicable and Non Communicable Diseases
Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive,
Population, Personal and Environmental Hygiene for Schools
Objective of school health service, Role of Health education in schools
Health services – Care of skin, Nails Eye Health service, Nutritional service, Health
appraisal, Health record, Healthful school environment, first – aid and emergency care
e etc.

Hygiene and Health

Meaning of Hygiene, Types of Hygiene, Dental Hygiene, Effect of Alcohol on Health,
Effect of Tobacco on Health, Life Style Management, Management of Hypertension,
Management of Obesity, Management of Stress.

UNIT – V. Introduction of Sports Nutrition

Meaning and definition of sports Nutrition, Role of nutrition in sports, Basic
Nutrition Guidelines, Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein
and fat), Role of carbohydrates, Fat and protein during exercise.

Nutrition and Weight Management

Concept of BMI (Body mass Index), Obesity and its hazard, Dieting versus exercise for
weight control maintaining a Healthy Lifestyle, Weight management program for sporty
child, Role of diet and exercise in weight management, Design diet plan and exercise
schedule for weight gain and loss.

Suggested Readings:
1. Bucher, Charles A. “Administration of Health and physical Education
   Programme”.
5. Turner, C.E. “The School Health and Health Education”.

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Practicum Course

MPE-105(P)TRACK AND FIELD I: RUNNING EVENTS / GYMNASTICS /
SWIMMING OR LESSON PLAN

Running
• Fundamental skills – Short and Middle Distance.
  Use of starting blocks – stance on the blocks.
  Body position at the start – starting technique, change in body position during running, movements of the aims, stride length and frequency, position of torso while running and at finish.
• Advanced Skills - Various techniques of sprint start: Bullet start, standing start.
• Active game practice
  **FLAG HOISTING, MARCH FAST, CEREMONIES LIKE OPENING, CLOSING, VICTORY,(DURING INTRA MULARS COMPETITIONS) OF DIFFERENT SPORTS AND GAMES/ LEAD UP GAMES / MINOR GAMES / RELAY GAMES**


  Opening and closing ceremonies: Schedule and formality of opening ceremony – Unfurling of flag, Flame igniting, Oath, March- Past of players / teams, Salutation, Declaration of Opening of the Meet. Brief address by the guests, announcement of beginning of competition Victory & Prize distribution Ceremony – Planning of schedule for victory ceremony.

  Closing Ceremony: Assembly of sports – persons, March Past, Salutation, re-assembly, brief address of the guests, Declaration of results and distribution of prizes / Certificates, Vote of thanks, Ceremonial Flag – lowering, Flame extinguishing, Declaration of Closing of the Meet.

  Practical of the organization of sports / Athletic Meet during Intramural Programme should be arranged as a project by the students under the supervision of the faculty. Organization of Sports festival, Play Day, Social party games, etc: should be encouraged.

  **TRACK AND FIELD II: JUMPING EVENTS / SWIMMING / GYMNASTICS**

  (Course contents in gymnastics and swimming should be chalked out internally considering advance level of students and suitable to their age and gender).

  **GAMES SPECIALIZATION II**

  The Candidate has choice to select two games as the Specialization – II in Final (Kabbaddi, Kho – kho, Badminton/ Table Tennis / Tennis / Squash / Baseball / Volleyball / basketball / Cricket / football / Handball/ Hockey/ Netball/ Softball) Boxing Athletic.

  **TEACHING LESSONS OF INDIGENOUSACTIVITIES AND SPORTS**

  The students of M.P.E – Previous Year need to develop proficiency in taking classes in indigenous activities and sport under school situation. In View of this, the students shall
be provided with teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes Depending on the class they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

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Final Year

MPE-201-SCIENTIFIC PRINCIPLES OF THE SPORTS TRAINING

UNIT-I. Introduction

UNIT- II. Components of Physical Fitness

UNIT –III. Flexibility
Flexibility: Methods to Improve the Flexibility – Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric. Training. Training for Coordinative abilities: Methods to improve Coordinative abilities: Second Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of movement Method, Type of Stretching Exercises.

UNIT- IV. Training Plan
UNIT V. – Doping

Suggested Readings:


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MPE-202-SPORTS PSYCHOLOGY

UNIT I – Introduction

UNIT II – Motivation
Goal Setting
Meaning and Definition, Process of Goal Setting in Physical Education and Sports
Relaxation: Meaning and Definition, types and methods of psychological relaxation.
psychological tests: types of psychological Tests: Instrument based tests: Pass-along
test- Tachistoscope – Reaction Timer – Finger dexterity board – depth perception box –
Kinesthesiometer board. Questionnaire: Sports Achievement Motivation, Sports
Competition Anxiety.

UNIT III – Sports Sociology
Meaning and Definition – Sports and Socialization of Individual Sports as Social
Institution. Nation Integration through Sports. Fans and Spectators: Meaning and
definition, Advantages on Sports Performance. Leadership: Meaning, Definition, type
Leadership and Sports performance.

UNIT IV – Group Cohesion
Group: Definition and Meaning, Group Size, Groups of Composition, Group
Cohesion, Group Interaction, Group Dynamics. Current Problems in Sports and Future
Society, Participation Pattern among women, Gender inequalities in Sports.

Suggested Readings:

Philadelphia: Lea and Febiger.

MPE-203-SPORTS MEDICINE

UNIT I – Introduction
Meaning Definition and importance of sports Medicine, Definition and Principles
of therapeutic exercises. Coordination exercise, Balance Training exercise, Strengthening
exercise, Mobilization exercise, Gait Training, Gym ball exercise Injuries: acute, sub-
acute, chronic. Advantages and Disadvantages of PRICE, PRINCE therapy, Aquatic
therapy.
UNIT II – Basic Rehabilitation & Massage


Massage


UNIT III – Spine Injuries and Exercise


UNIT IV – Sports Injuries Care, Treatment and Support


UNIT V - Upper Extremity Injuries and Exercise


Lower Extremity Injuries and Exercise

and equipment for lower limb and abdomen injuries.

**Suggested Readings:**


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**MPE-204(A)SPORTS BIOMECHANICS AND KINSESIOLGY & SPORTS MANAGEMENT**

**UNIT I- Introduction**

Meaning Nature, role and scope of applied kinesiology and sports Biomechanics.

Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity - Line of gravity plane of the body and Axis of motion, Vectors and Scalars.

**Muscle Action**

Origin, Insertion and action of muscles: Pectoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius, serratus, Sartorius, rectus Femoris, Abdominis, Quadriceps, Hamstring, Gastrocnemius.

**UNIT II – Motion and Force**


**UNIT III Projectile and lever**

Meaning of work, power, energy, kinetic energy and potential energy. Leverage –

Note: Laboratory practicals should be designed and arranged for students internally

UNIT IV - Movement Analysis


UNIT V – Introduction of Sports Management


Program Management

Importance of Programme development and the role of management, Factors influencing programme development. Steps in Programme Development, Competitive Sports Programs, Benefits, management Guidelines for School, Colleges Sports Programs, Management Programs in Instruction Programme, Community Based Physical Education and Sports program.

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MPE-204(A) DISSERTATION

1. A candidate shall have dissertation for MPE – Final Year and must submit his/her synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Department Research Committee).
2. A candidate selecting dissertation must submit his/ her dissertation one Month after the end of the Final Year Examination.
3. The candidate has to face the Viva- voce conducted by DRC.

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MPE-205(P)

CLASS ROOM TEACHING

(LESSONS ON THEORY DIFFERENT SPORTS & GAMES WITH LESSON PLAN)

The students of MPE. – Final Year need to develop proficiency in taking teaching lessons as per selected games and sport or game specialization. In view of this, the
students shall be provided with selected or specialized game teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these Teaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

**TRACK AND FIELD III THROWING EVENTS / GYMNASTICS / SWIMMING**

**GAMES SPECIALIZATION – III BOXING / FENCING / JUDO / KARATE / WRESTLING / WUSHU**

**COACHING LESSONS OF GAME SPECIALIZATIONS**

The students of MPE – Final Year need to develop proficiency in taking coaching lessons as per selected game discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the third semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

**OFFICIATING LESSONS OF TRACK AND FIELD / GYMNASTICS / SWIMMING**

The students of MPE – Final Year need to develop proficiency in taking teaching officiating lessons on selected discipline. In view of this, the students shall be provided with advance mechanism of officiating in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for
the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

**OFFICIATING LESSONS OF GAME SPECIALIZATIONS**

The students of MPE – Final Year need to develop proficiency in taking teaching officiating lessons on selected game specialization. In view of this, the students shall be provided with advance mechanism of officiating in selected game specialization. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

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