

**CURRICULUM/SYLLABUS FOR
MASTERS OF PHYSICAL EDUCATION AND SPORTS (M.P.E.S.)
TWO YEARS (UGC PROGRAM FOUR SEMESTERS)
(Under Self Financing Scheme)**

As Per NEP 2020

**पाठ्यक्रम
SYLLABUS
(FACULTY OF EDUCATION)**



**MAHARAJA GANGA SINGH UNIVERSITY
BIKANER**

W.E.F. : 2025

GUIDELINES OF REGULATIONS AND SYLLABUS STRUCTURE FOR M.P.E.S. TWO YEARS UGC PROGRAMME (FOUR SEMESTERS)(CBCS)

(If the University or affiliating body is following choice based credit system, (CBCS) as approved and Circulated by the UGC, the credit hours given in the following curriculum framework need to be considered along with the hours of teaching mentioned for each paper/ activity / course)

(If the University or affiliating body is yet to adopt CBCS, only the hours of teaching mentioned for each paper/ activity / course will be considered, the credit in teaching hours may be ignored)

Preamble: *Master of Physical Education and Sport (M.P.E.S.) two years (Four Semesters Choice Based Credit System) programme is a professional programme meant for preparing teachers of physical education at higher education and professional jobs at university and sports industries.*

M.P.E.S. programme is designed to integrate the study of subject knowledge, pedagogical knowledge, and the aim of Physical Education and communication of games and sports skills. The programme comprises of compulsory and optional theory as well as practical courses and compulsory internship. This course of study specifically meant for Maharaja Ganga Singh University, Bikaner.

1. A) M.P.E.S.

I Eligibility For Admission

A) Candidate seeking admission to M.P.E.S. programme must satisfy the following conditions.

B) He/She must have taken at least 50% marks in B.P.Ed., B.P.E.S (Three Year or Four Year) or B.Sc. (Health & Physical Education) from Recognize University / Institution.

C) Admission shall be made on merit on the basis of marks obtained in the entrance test (written test, sports proficiency test, physical fitness test & marks obtained in the qualifying examination) or any other selection process as per the policy of University of MGS University, Bikaner Admission ordinance.

D) The provision of seats and the relaxation in qualifying marks for SC/ST/OBC and other categories shall be as per the rules of the central government/state government. Whichever is applicable.

II For the M.P.E.S. Degree :

The candidates shall have subsequently undergone the prescribed course of study in the university department or a college affiliated to his University for a period of not less than two academic years, passed the examinations prescribed and fulfilled such conditions as have been prescribed there for M.P.E.S.

2. Duration:

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

3. The CBCS System:

All Programme shall run on Choice Based Credit System (CBCS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

4. Course:

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

5. Courses of Programme:

The M.P.E.S. Programme consists of a number of courses, the term 'Course' applied to indicate a logical part of subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of courses suggested for the M.P.E.S. Programme.

Theory:

Core Course & Elective Course

Practical Course:

Filed Teaching & Classroom Teaching

6. Semesters:

An academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. The odd semester may be scheduled from May/June to November/December and even semester from November / December to May/June. The institution shall work for a minimum of 36 working hours in a week (five or six days a week).

7. Working days:

There shall be at least 200 working days per year exclusive of admission and examination processes etc.

8. Credits:

The term 'Credit' refers to a unit by which the programme is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or one and half / two hours of practical work/field work per week. The term 'Credit' refers to the weight given to a course, usually in relation to the instructional hours assigned to it. The total minimum credits, required for completing a M.P.E.S. Programme is 90 credits and for each semester 20 credits.

9. Examinations:

A candidate admitted to the M.P.E.S. (Two years) Program shall be permitted to appear at University Examinations only when he/she has been enrolled as a student of the Maharaja Ganga Singh University, Bikaner.

To qualify for the M.P.E.S. (Two years), the candidate must earn the prescribed number of credits as mentioned in the Course structure/syllabus in force for the particular session.

The pass marks in each course / paper shall be 40% in theory examination and 50% in practical / teaching practices examination respectively. Every candidate will have to pass separately in Internal and External (Semester end) Assessment.

Where a candidate fails to take examination in any one or more papers or having taken the examination, has but failed to secure the minimum pass marks in any one or more papers or in the aggregate, his marks in the Internal Assessment / class tests /semester reports / assignments /demonstration shall be carried forward to the subsequent examination.

I - Semester Course & Examination

After appearing at the Examination of I-Semester the candidates can be put in the following categories in the context of declaration of the results of the I Semester Examination:

- (i) **Pass Promoted**, i.e., those who have passed in examinations of all courses of the Semester.
- (ii) **Back Promoted**, i.e., those who passed in at least 50% examinations of all the courses of the Semester i.e. the candidate has earned 50% or more credits in the examinations of I Semester.
- (iii) **Fail Promoted**, i.e., those who have not passed in at least 50% examinations of all the courses of the Semester i.e. the candidate has not earned a minimum of 50% credits in the examinations of I Semester.

Promotion from I to II Semester:

All students who have put in the minimum percentage of attendance in I Semester and filled up the examination form in time shall be promoted to the II-Semester.

II-Semester Course & Examination

After declaration of results of the I and II-Semesters, a candidate can be put in the following categories:

- (i) **Pass Promoted:** A candidate who has passed in examinations of all the courses of the I and II-Semesters.
- (ii) **Back Promoted:** A student, who has not passed in all the courses of either I or II Semester or both, shall be promoted to the III-Semester if he/she has earned 50% or more credits in the examinations of I and II-Semesters taken together. All such students shall have the option to clear the courses, in which they had failed, in the subsequent available examination(s) of the concerned semester.
- (iii) **Failed:** A candidate who has passed in less than 50% of prescribed courses (i.e. earned less than 50% credits) in the examinations of I and II-Semesters taken together shall be treated as failed.

Promotion from II to III-Semester:

- (i) A candidate who comes under the category 'Pass Promoted or Back Promoted' is eligible to be promoted to the III-Semester, if otherwise eligible.
- (ii) Failed candidates shall not be promoted to the III-Semester. However, they shall be promoted to the third semester when they become eligible to come under the category of either 'Passed Promoted or Back Promoted' as explained above after passing the failed courses in the subsequent available examination(s).

III-Semester Course & Examination

After declaration of results of the III Semester, a candidate can be put in the following categories:

- (i) **Pass Promoted:** A candidate who has passed in examinations of all the courses of the III Semester.
- (ii) **Back:** A student, who has not passed in all the courses of III Semester, shall not be promoted to the IV Semester. All such students shall have the option to clear the courses, in which they had failed, in the subsequent available examination(s) of the concerned semester.

Promotion from III to IV-Semester:

All students who have been put in '**Pass Promoted Category**' in Sem I and III (i.e. the candidate has passed in all examinations of all the courses of the Semester I and III) and has put in the minimum percentage of attendance in III Semester and filled in the examination form in time, shall be promoted to the IV Semester.

Candidates who have pending courses in Semester II (courses / subjects not passed for II Semester Examinations) shall appear for the same along with Semester IV Examinations.

Declaration of Results after IV Semester

(Based on the results of the I, II, III and IV Semester Examination)

After declaration of results of III and IV Semesters, a candidate can be put in the following two categories:

- (i) **Passed:** A candidate who has passed in all the courses of I, II, III, and IV Semesters and obtained at least CGPA of 5.0
- (ii) **Failed:** All those students who have not "Passed" shall be categorized as "Failed".

Such Failed students may clear their failed courses in subsequent examinations as Ex-students.

10. Condonation:

Student must have 75% of attendance in each course for appearing the examination. Students who have 74% to 65% of attendance shall apply for condonation in the prescribed form with the prescribed fee. Students who have 64% to 50% of attendance shall apply for condonation in prescribed form with the prescribed fee along with the Medical Certificate. Students who have below 50% of attendance are not eligible to appear for the examination.

11. Pattern of Question Papers:

Question Papers shall have five questions corresponding to four units of each theory course.

M.P.E.S.: Format of Question Paper for 4 Units.

Each question paper shall have five questions. The pattern will be as follows:

Question No.	Description	Marks
1	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 1)	15
2	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 2)	15
3	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 3)	15
4	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 4)	15
5	M.C.Q. Type Questions (10 out of 12 Que.) (3 Questions. from each unit)	10
	Total	70

12. Evaluation:

The performance of a student in each course is evaluated in terms of percentage of marks with a provision for conversion to grade point. Evaluation for each course shall be done by a continuous internal assessment (CIA) by the concerned course teacher as well as by end of semester examination and will be consolidated at the end of course. The components for continuous internal assessment are;

One Test	15 Marks
Seminar / Quiz	5 Marks
Assignments	5 Marks
Attendance	5 Marks
Total	30 Marks

Attendance shall be taken as a component of continuous assessment, although the students should have minimum 75% attendance in each course. In addition to continuous evaluation component, the end semester examination, which will be written type examination of at least 3 hours duration, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 30:70. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end semester practical examination.

13. Minimum Passing Standard:

For theory courses minimum passing standard for Internal and External Examinations shall be 40%, i.e. 12 marks out of 30 marks and 28 marks out of 70 marks respectively. For practical / teaching practice course minimum passing standard for internal & external examination shall be 50%, i.e. 15 marks out of 30 and 35 marks out of 70 respectively.

14. Grading:

Once the marks of the CIA (Continues Internal Assessment) and SEA (Semester End Assesment) for each of the courses are available, both (CIA and SEA) will be added. The marks thus obtained for each of the courses will then be graded as per details provided in R. B.P.Ed. 17 from the first semester onwards the average performance within any semester from the first semester is indicated by Semester Grade Point Average (SGPA) while continuous performance (including the performance of the previous semesters also) starting from the first semester is indicated by Cumulative Grade Point Average (CGPA). These two are calculated by the following formula:

$$\frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

Where C_i is the Credit earned for the course in any semester; G_i is the Grade point obtained by the student for the course i and n number of courses obtained in that semester; is SGPA of semester j and N number of semester. Thus CGPA is average of SGPA of all the semesters starting from the first semester to the current semester.

15. Classification of Final Results:

For the purpose of declaring a candidate to have qualified for the Degree of Master of Physical Education and Sports in the First class / Second class / Pass class or First class with Distinction, the marks and the corresponding CGPA earned by the candidate in Core Courses will be the criterion. It is further provided that the candidate should have scored the First / Second class separately in both the grand total and End semester (External) examinations.

16. Award of the M.P.E.S. Degree:

A candidate shall be eligible for the award of the degree of the M.P.E.S. Only if he/she has earned the minimum required credit for the programme prescribed there for (i.e. 128 Credits).

17. End Semester Examination:

The University shall conduct the external Examination for the Semester-I, II, III & IV. The internal examination shall be conducted by the concerned Departments.

18. Letter Grades and Grade Points:

- I. Two methods-relative grading or absolute grading– have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students in the course and the grades are awarded based on a cut-off mark or percentile. Under the absolute grading, the marks are converted to grades based on pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.
- II. The grades for each course would be decided on the basis of the percentage marks obtained at the end Semester external and internal examinations as per following table:

For Theory examination

Percentage	Grade Point	Latter Grade	Description	Classification of final result
85 & above	8.50-10.0	O	Outstanding	First class with Distinction
70-84.99	7.00-8.49	A+	Excellent	
60-69.99	6.00-6.99	A	Very Good	First Class
55-59.99	5.50-5.99	B+	Good	Higher Second Class
50-54.99	5.00-5.49	B	Above Average	Second Class
40-49.99	4.00-4.99	C	Average	Pass Class
Below 40	0.00	F	Fail/ Dropped	Dropped
	0	AB	Absent	

For Practical / Teaching Practices examination

Percentage	Grade Point	Latter Grade	Description	Classification of final result
85 & above	8.50-10.0	O	Outstanding	First class with Distinction
70-84.99	7.00-8.49	A+	Excellent	
60-69.99	6.00-6.99	A	Very Good	First Class
55-59.99	5.50-5.99	B+	Good	Higher Second Class
50-54.99	5.00-5.49	B	Above Average	Second Class
Below 50	0.00	F	Fail/ Dropped	Dropped
	0	AB	Absent	

19. Grade Point Calculation:

Calculation of Semester Grade Point Average (SGPA) and Credit Grade Point (CGP) and declaration of class for M.P.E.S. Programme.

SEMESTER-1st

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-101	4	65	A	6.5	26
CC-102	4	60	A	6	24
CC-103	4	62	A	6.2	24.8
EC-101/EC-102	4	57	B+	5.7	22.8
PC-101	4	55	B+	5.5	22
PC-102	4	72	A+	7.2	28.8
PC-103	4	66	A	6.6	26.4
PC - 104	4	72	A+	7.2	28.8
	32				203.6

SEMESTER-2nd

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-201	4	76	A+	7.6	30.4
CC-202	4	64	A	6.4	25.6
CC-203	4	59	B+	5.9	23.6
EC-201/EC-202	4	80	A+	8	32
PC-201	4	49	C	4.9	19.6
PC-202	4	64	A	6.4	25.6
PC-203	4	55	B+	5.5	22
PC - 204	4	72	A+	7.2	28.8
	32				207.6

SEMESTER-3rd

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-301	4	64	A	6.4	25.6
CC-302	4	64	A	6.4	25.6
CC-303	4	59	B+	5.9	23.6
EC-301/EC-302	4	81	A+	8.1	32.4
PC-301	4	49	C	4.9	19.6
PC-302	4	64	A	6.4	25.6
PC-303	4	68	A	6.8	27.2
PC-304	4	75	A+	7.5	30
	32				209.6

SEMESTER-4th

Courses No.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
CC-401	4	83	A+	8.3	33.2
CC-402	4	76	A+	7.6	30.4
CC-403	4	59	B+	5.9	23.6
EC-401/EC-402	4	81	A+	8.1	32.4
PC-401	4	49	C	4.9	19.6
PC-402	4	78	A+	7.8	31.2
PC-403	4	81	A+	8.1	32.4
PC-404	4	75	A+	7.5	30
	32				232.8

20. Grievance Redressal Committee:

The college/department shall form a Grievance Redressal Committee for each course in each college/department with the course teacher / Principal / Director and the HOD of the faculty as the members. This Committee shall solve all grievances of the students.

21. Revision of Syllabi:

1. Syllabi of every course should be revised according to the UGC & University act.
2. Revised Syllabi of each year should be implemented in a sequential way.
3. In courses, where units / topics related to governmental provisions, regulations or laws, that change to accommodate the latest developments, changes or corrections are to be made consequentially as recommended by the Academic Council.
4. All formalities for revisions in the syllabi should be completed before the end of the Semester for implementation of the revised syllabi in the next academic year.
5. In case, the syllabus of any course is carried forward without any revision, it shall also be counted as revised in the revised syllabi.

Semester 1st

Part - A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-101	Research Methods in Physical Education	4	4	30	70	100
CC-102	Sports Training	4	4	30	70	100
CC-103	Yoga Education	4	4	30	70	100
Elective Course (Any One)						
EC-101	Health Education & Environmental Studies	4	4	30	70	100
EC-102	Sports Nutrition and Weight Management					
Part - B : Practical Course						
PC-101	Track and Field (Running Events)	6	4	30	70	100
PC-102	Gymnastics/Yoga (Any One)	6	4	30	70	100
PC-103	Indigenous Sports: Kabaddi/Kho-Kho (Any One)	6	4	30	70	100
PC-104	Classroom Teaching in Core Theory:	6	4	30	70	100
		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per Semester whereas 102-120 hours for each Practicum Course.

Semester 2nd

Part - A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-201	Computer Application in Physical Education	4	4	30	70	100
CC-202	Sports Psychology	4	4	30	70	100
CC-203	Anatomy	4	4	30	70	100
Elective Course (Any One)						
EC-201	Education Technology in Physical education	4	4	30	70	100
EC-202	Contemporary issues in Physical Education, Fitness and Wellness					
Part - B : Practical Course						
PC-201	Track and Field (Jumping Events)	6	4	30	70	100
PC-202	Basketball/Football (Any One)	6	4	30	70	100
PC-203	Racket Sports: (Any One) Badminton/Table Tennis	6	4	30	70	100
PC -204	Classroom Teaching in Practical Course	6	4	30	70	100
		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester 3rd

Part - A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-301	Sports Biomechanics	4	4	30	70	100
CC-302	Sports Medicine, Athletic care & Rehabilitation	4	4	30	70	100
CC-303	Test Measurement and Evaluation in Physical Education and Sports	4	4	30	70	100
Elective Course (Any One)						
EC-301	Olympic Movement	4	4	30	70	100
EC-302	Theory of Sports and Game					
Part - B : Practical Course						
PC-301	Track and Field (Throwing Events)	6	4	30	70	100
PC-302	Combative Sports: (Any One) Boxing/Judo/Wrestling	6	4	30	70	100
PC-303	Team Games: (Any One) Cricket/Baseball	6	4	30	70	100
PC -304	Classroom Teaching in Core Theory:	6	4	30	70	100
		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester 4th

Part - A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
CC-401	Exercise Physiology	4	4	30	70	100
CC-402	Statistics in Physical Education and Sports	4	4	30	70	100
CC-403	Officiating & Coaching	4	4	30	70	100
Elective Course (Any One)						
EC-401	Curriculum Design	4	4	30	70	100
EC-402	Dissertation					
Part - B : Practical Course						
PC-401	Track and Field	6	4	30	70	100
PC-402	Team Games: (Any One) Hockey/Volleyball	6	4	30	70	100
PC -403	Classroom Teaching in Core Theory:	6	4	30	70	100
PC -404	Classroom Teaching in Practical Course	6	4	30	70	100
		40	32	240	560	800
All Semesters Grand Total		160	128	960	2240	3200

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per Semester whereas 102-120 hours for each Practicum Course.

**SCHEME OF EXAMINATION / MARKING
SEMESTER - I**

Paper	Subject	Internal	External	Total Marks
THEORY (400 Marks)				
CC-101	Research Methods in Physical Education	30	70	100
CC-102	Sports Training	30	70	100
CC-103	Yoga Education	30	70	100
EC-101/102	Health Education & Environmental Studies /Sports Nutrition & Weight Management (Elective Any One)	30	70	100
PRACTICAL (400 Marks)				
PC-101	Track and Field (Running Events)	30	70	100
PC-102	Gymnastics/Yoga (Any One)	30	70	100
PC-103	Indigenous Sports: Kabaddi/Kho-Kho (Any One)	30	70	100
PC-104	Classroom Teaching in Core Theory:	30	70	100
	Total	240	560	800

SEMESTER -II

Paper	Subject	Internal	External	Total Marks
THEORY (400 Marks)				
CC-201	Computer Application in Physical Education	30	70	100
CC-202	Sports Psychology	30	70	100
CC-203	Anatomy	30	70	100
EC-201/202	Education Technology in Physical education/ Contemporary issues in Physical Education, Fitness and Wellness (Elective-Any One)	30	70	100
PRACTICAL (300 Marks)				
PC-201	Track and Field (Jumping Events)	30	70	100
PC-202	Basketball/Football (Any One)	30	70	100
PC-203	Racket Sports: (Any One) Badminton/ Table Tennis/	30	70	100
PC-204	Classroom Teaching in Practical Course (Any One of above)	30	70	100
	Total	240	560	800

SEMESTER –III

Paper	Subject	Internal	External	Total Marks
THEORY (400 Marks)				
CC-301	Sports Biomechanics	30	70	100
CC-302	Sports Medicine, Athletic care & Rehabilitation	30	70	100
CC-303	Test Measurement and Evaluation in Physical Education and Sports	30	70	100
EC-301/302	Olympic Movement/ Theory of Sports and Game (Elective any one)	30	70	100
PRACTICAL (300 Marks)				
PC-301	Track and Field (Throwing Events)	30	70	100
PC-302	Combative Sports: (Any One) Boxing/Judo/Wrestling	30	70	100
PC-303	Team Games: (Any One) Cricket/Baseball	30	70	100
PC-304	Classroom Teaching in Core Theory:	30	70	100
Total		240	560	800

SEMESTER -IV

Paper	Subject	Internal	External	Total Marks
THEORY (400 Marks)				
CC-401	Exercise Physiology	30	70	100
CC-402	Statistics in Physical Education and Sports	30	70	100
CC-403	Officiating & Coaching	30	70	100
EC-401/402	Curriculum Design/ Dissertation (Elective Any One)	30	70	100
PRACTICAL (200 Marks)				
PC-401	Track and Field	30	70	100
PC-402	Team Games: (Any One) Hockey/Volleyball	30	70	100
PC-403	Classroom Teaching in Core Theory:	30	70	100
PC-404	Classroom Teaching in Practical Course (Any One of above)	30	70	100
Total		240	560	800
All Semesters Grand Total		960	2240	3200

M.P.E.S. Syllabus Semester -1

Part – A: Theory Courses

Core Course

CC-101 Research Methods in Physical Education

Unit – 1

- Research Methods: Meaning, Definition, Nature, Importance and Scope of Research in Physical Education & Sports.
- Meaning, Definition and Selection of Research Problem
- Hypothesis and Review of Related literature, Library Techniques

Unit – 2

- Sampling-Meaning, Definition, Types and importance
- Sampling- Process and Techniques
- Research Tools-Questionnaire, Interview, Opinion ireetc

Unit – 3:

- Research Methods and Procedure
- Historical Research-Meaning, Definition and Importance, Primary and Secondary Sources, External and Internal Criticism.
- Descriptive Research-Survey Studies(Meaning, Definition and Importance)
- Case Studies.
- Experimental Research- Meaning, Definition, Need and Experimental Designs and Laboratory Designs.

Unit – 4:

- Research Proposal
- Research Report
- Preparation of a Research Report.

References:

- Kamlesh M.L., "Methodology of Research in Physical Education and Recreation", AHPER, Washington D.C., 1973.*
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- Ahlawat, R. P. (2016). Research Process in Physical Education& Sports Sciences. Friends Publication*
- Author's Guide: "Research Methods Applied to Health Physical Education and Recreation", Washington, D.C., 1991.*
- Best J.W., "Research in Education", Prentice Hall, New Delhi 1982.*
- Clarke H. David, "Research Processes in Physical Education, Recreation and Health", Prentice HallInc, Englewood Cliffs, New Jersey, 1985.*

M.P.E.S. Syllabus Semester -1

Part – A: Theory Courses

Core Course

CC-102 Sports Training

Unit – 1:

- Meaning and Definition of Sports Training
- Aim and Objective of Sports Training
- Principles of Sports Training
- System of Sports Training – Basic Performance, Good Performance and High Performance Training

Unit – 2:

- Strength – Mean and Methods of Strength Development
- Speed – Mean and Methods of Speed Development
- Endurance - Mean and Methods of Endurance Development
- Coordination – Mean and Methods of coordination Development
- Flexibility – Mean and Methods of Flexibility Development

Unit – 3:

- Training Load- Definition and Types of Training Load
- Principles of Intensity and Volume of stimulus
- Technical Training – Meaning and Methods of Technique Training
- Tactical Training – Meaning and Methods of Tactical Training

Unit – 4:

- Periodization – Meaning and types of Periodization
- Aim and Content of Periods – Preparatory, Competition, Transitional etc.
- Planning – Training session
- Talent Identification and Development

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M.P.E.S. Syllabus Semester -2

Part – A: Theory Courses

Core Course

CC-103

YOGA EDUCATION

Unit – 1:

- Meaning and Definition of Yoga
- Aims and Objectives of Yoga
- Yoga in Early Upanisads
- The Yoga Sutra: General Consideration
- Need and Importance of Yoga in Physical Education and Sports

Unit – 2:

- The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- Yoga in the Bhagavadgita - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

Unit – 3:

- Effect of Asanas and Pranayama on various system of the body
- Classification of asanas with special reference to physical education and sports
- Influences of relaxative, meditative posture on various system of the body
- Types of Bandhas and mudras
- Type of kriyas

Unit – 4:

- Basic, applied and action research in Yoga
- Difference between yogic practices and physical exercises
- Yoga education centers in India and abroad
- Competitions in Yogasanas

References:

Brown, F. Y.(2000). How to use yoga. Delhi:Sports Publication.

Gharote, M. L. & Ganguly, H. (1988). Teaching methods for yogic practices.Lonawala: Kaixydahmoe.

Rajjan, S. M. (1985). Yoga strenthening of relaxation for sports man. New Delhi:Allied Publishers.

Shankar,G.(1998). Holistic approach of yoga. New Delhi:Aditya Publishers. Shekar,K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.

M.P.E.S. Syllabus Semester -1
Part – A: Theory Courses
Elective Course

EC-101 Health Education & Environmental Studies

Unit – 1:

- Concept, Dimensions, Spectrum and Determinants of Health
- Definition of Health, Health Education, Health Instruction, Health Supervision
- Aim, objective and Principles of Health Education
- Health Service and guidance instruction in personal hygiene

Unit – 2:

- 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 etc.

Unit – 3:

- Definition, Scope, Need and Importance of environmental studies.
- Concept of environmental education, Historical background of environmental education,
- Celebration of various days in relation with environment.
- Plastic recycling & probation of plastic bag / cover.
- Role of school in environmental conservation and sustainable development.

Unit – 4:

- Water resources, food resources and Land resources
- Definition, effects and control measures of: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution
- Management of environment and Govt. policies , Role of pollution control board.

References:

- Agrawal, K.C. (2001). Environmental biology. Bikaner: Nidhi publishers Ltd.*
Frank, H. & Walter, H., (1976). Turners school health education. Saint Louis: The C.V. Mosby Company.
Nemir, A. (n.d.). The school health education. New York: Harber and Brothers. *Odum, E.P. (1971). Fundamental of ecology. U.S.A.: W.B. Saunders Co.*

M.P.E.S. Syllabus Semester -1

Part – A: Theory Courses

Elective Course

EC-101 Sports Nutrition and Weight Management

Unit – 1:

- Meaning and Definition of Sports Nutrition
- Basic Nutrition guidelines
- Role of nutrition in sports
- Factor to consider for developing nutrition plan

Unit – 2:

- Carbohydrates, Protein, Fat – Meaning, classification and its function
- Role of carbohydrates, Fat and protein during exercise
- Vitamins, Minerals, Water – Meaning, classification and its function
- Role of hydration during exercise, water balance, Nutrition – daily caloric requirement and expenditure.

Unit – 3:

- Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
- Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss
- Obesity – Definition, meaning and types of obesity, Health Risks Associated with Obesity, Obesity - Causes and Solutions for Overcoming Obesity.

Unit – 4:

- Nutrition – Daily calorie intake and expenditure, Determination of desirable body weight
- Balanced diet for Indian School Children, 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

References:

- Bessesen, D. H. (2008). Update on obesity. *J Clin Endocrinol Metab.* 93(6), 2027-2034.
- Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity (Silver Spring)*. 15(12), 3091-3096.
- Chu, S.Y. & Kim, L. J. (2007). Maternal obesity and risk of stillbirth: a metaanalysis. *Am J ObstetGynecol*, 197(3), 223-228.
- DeMaria, E. J. (2007). Bariatric surgery for morbid obesity. *N Engl J Med*, 356(21), 2176-2183. Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA*. 299(3), 316-323

M.P.E.S. Syllabus Semester
Part – A: Theory Courses
Core Course

CC-201 Computer Application in Physical Education

Unit – 1:

- Meaning, need and importance of information and communication technology (ICT).
- Application of Computers in Physical Education
- Components of computer, input and output device
- Application software used in Physical Education and sports

Unit – 2:

- Introduction to MS Word
- Creating, saving and opening a document, Formatting Editing features Drawing table, page setup, paragraph alignment, spelling and grammar check printing option, inserting page number, graph, footnote and notes

Unit – 3:

- Introduction to MS Excel
- Creating, saving and opening spreadsheet o creating formulas
- Format and editing features, adjusting columns width and row height, understanding charts.

Unit – 4:

- Introduction to MS Power Point
- Creating, saving and opening a ppt. file format and editing features slide show, design, inserting slide number, picture, graph, table
- Preparation of Power point presentations

References:

Irtegov, D. (2004). Operating system fundamentals. Firewall Media.
Marilyn, M.& Roberta, B.(n.d.).Computers in your future. 2nd edition, India: Prentice Hall. Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia. Sinha, P. K. & Sinha, P. (n.d.).Computer fundamentals. 4th edition, BPB Publication.

M.P.E.S. Syllabus Semester -2
Part – A: Theory Courses
Core Course

CC-202

Sports Psychology

Unit – 1:

- Meaning, Definition, Nature, Scope and Importance.
- Process of Learning: Meaning, Definition, Principles, Laws and their implementation.
- Individual Differences: Meaning, Definition, Types and Reasons.
- Body Types: Sports Activity according to body types, Effect of Individual differences on skill acquisition and sports performance.

Unit – 2:

- Emotion: Meaning, Definition, Types and Characteristics. Factors effecting Sports Achievement such as Stress, Fear, Frustration and Aggression.
- Motivation: Meaning, Definition, Types and Importance of Motivation in Sports Achievement.

Unit – 3:

- Personality: Meaning, Definition and Principles.
- Dimensions of Personality, Views of Personality.
- Personality development through Physical Activities and Games.

Unit – 4:

- Psychological Dimension of Competition-Psycho-Regulative Method for Excitement and Mental Relaxation.
- Effect of Audience on the performance of the Athletes.
- Psychological Preparation for competition-Short term and Long Term Preparation.

References:

Bhatia, Hans Raj, Test Book of Education Psychology, Delhi: Macmillan, 2003

Jain, D., Introduction to Psychology, New Delhi: K.S.K, 2003.

Kamlesh, M.L. Education Sports Psychology, New Delhi, Friends Pub., 2006

Kamlesh, M.L., Key Ideas in Sport Psychology, New Delhi, Friends Pub., 2007 Kutty, S.K.

Foundations of Sports & Exercise Psychology, New Delhi: Sports, 2004

Jashwant Kaur Virk – Psychology of Training and Learning (Twenty First Century Publication Pardeep Kumar Sahu Patiala, 2008.

Dr. Arun Kumar Singh – Advanced General Psychology, Moti Lal Banarasi Das Bunglow Road Jawahar Nagar Delhi. M.P.Ed.- IV Semester

M.P.E.S. Syllabus Semester - 2

Part – A: Theory Courses

Core Course

CC-203

Anatomy

Unit – 1:

- Brief Introduction of Anatomy and physiology in the field of Physical Education.
- Introduction of Cell and Tissue.
- The arrangement of the skeleton – Function - of the skeleton – Ribs and Vertebral column and the extremities – joints of the body and their types
- Gender differences in the skeleton.
- Types of muscles.

Unit – 2:

- Blood and circulatory system: Constituents of blood and their function –Blood groups and blood transfusion, clotting of blood, the structure of the heart-properties of the heart Muscle, circulation of blood, cardiac cycle, blood pressure, Lymph and Lymphatic circulation. Cardiac output.

Unit – 3:

- The Respiratory system: The Respiratory passage – the lungs and their structure and exchange of gases in the lungs, mechanism of respiration (internal and external respiration) lung capacity, tidal volume.
- The Digestive system: structure and functions of the digestive system, Digestive organs, Metabolism,
- The Excretory system: Structure and functions of the kidneys and the skin.

Unit – 4:

- The Endocrine glands: Functions of glands pituitary, Thyroid, Parathyroid. Adrenal, Pancreatic and the sex glands.
- Nervous systems: Function of the Autonomic nervous system and Central nervous system. Reflex Action,
- Sense organs: A brief account of the structure and functions of the Eye and Ear.

References:

- Gupta, A. P. (2010). *Anatomy and physiology*. Agra: Sumit Prakashan.
- Gupta, M. and Gupta, M. C. (1980). *Body and anatomical science*. Delhi: Swaran Printing Press.
- Guyton, A.C. (1996). *Textbook of Medical Physiology, 9th edition*. Philadelphia: W.B. Saunders.
- Karpovich, P. V. (n.d.). *Philosophy of muscular activity*. London: W.B. Saunders Co.
- Lamb, G. S. (1982). *Essentials of exercise physiology*. Delhi: Surjeet Publication.
- Moorthy, A. M. (2014). *Anatomy physiology and health education*. Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). *Physiology of exercise*. St. Louis: The C.V. Mosby Co.
- Pearce, E. C. (1962). *Anatomy and physiology for nurses*. London: Faber & Faber Ltd.
- Sharma, R. D. (1979). *Health and physical education*, Gupta Prakashan.
- Singh, S. (1979). *Anatomy of physiology and health education*. Ropar: Jeet Publications.

M.P.E.S. Syllabus Semester -2

Part – A: Theory Courses

Elective Course

EC-201

Education Technology in Physical Education

Unit – 1:

- Educational technology: meaning, characteristics and Scope. Types of educational technology: teaching technology, instructional technology, and behavior technology.
- Instructional design: Concept and Views, process and stages of development of Instructional design.

Unit – 2:

- Meaning of Teaching, Teaching and training, teaching and instructions, teaching as science, Nature and characteristics of teaching.
- Phases of teaching: Pre – active phase, Inter – active phase and Post active phase. General principles of teaching.

Unit – 3:

- Meaning of lesson Plan, Need of lesson plan, essentials of a good lesson plan. Different Types of lesson plans, Pre- requisites of a lesson plan.
- Structure of a lesson plan: Herbart’ s approach - Outline of lesson plan. Recent trends of Research in Educational Technology and its future.

Unit – 4:

- Meaning of Audio-visual media Aids, Classification of Audio-visual media Aids.
- Characteristics of Audio-visual media Aids. Procedure and organization of Teleconferencing/Interactive video experiences of institutions in schools and colleges.
- Audio Conferencing and Interactive Radio Conference - strengths and Limitations.
- Video/Educational Television: Telecast and Video recordings Strengths and limitations.

References:

Amita Bhardwaj, New Media of Educational Planning” .Sarup of Sons, New Delhi-2003
Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi : Doaba House), 1959.
Education and Communication for development, O. P. Dahama, O. P. Bhatnagar, Oxford Page 68 of 71 IBH Publishing company, New Delhi
Essentials of Educational Technology, Madan Lal, Anmol Publications
K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.) : 1981.
Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982
Kozman, Cassidy and kJackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

M.P.E.S. Syllabus Semester -2
Part – A: Theory Courses
Elective Course

EC-202

Contemporary issues in Physical Education, Fitness & Wellness

Unit – 1:

- Definition, Aims and Objectives of Physical Education, fitness and Wellness.
- Importance and Scope of fitness and wellness.
- Modern concept of Physical fitness and Wellness.
- Physical Education and its Relevance in inter Disciplinary Context.

Unit – 2:

- Fitness – Types of Fitness and Components of Fitness
- Understanding of Wellness
- Physical Activity and Health Benefits
- Modern Life Style and Hypo-kinetic Disease –Prevention and Management

Unit – 3:

- Means of Fitness development – aerobic and anaerobic exercises
- Exercises and Heart rate Zones for various aerobic exercise intensities
- Concept of free weight Vs Machine, Sets and Repetition etc
- Concept of designing different fitness training program for different age group.

Unit – 4:

- Health and Safety in Daily Life
- First Aid and Emergency Care
- Common Injuries and their Management

References:

Difiore, J.(1998). Complete guide to postnatal fitness. London: A & C Black,.
Giam, C.K & The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
Mcglynn, G., (1993). Dynamics of fitness. Madison: W.C.B Brown. Sharkey, B. J.(1990).
Physiology of fitness, Human Kinetics Book.

M.P.E.S. Syllabus Semester -3

Part – A: Theory Courses

Core Course

CC-301

Sports Biomechanics

Unit – 1:

- Biomechanics and Kinesiology: Meaning, Nature and Importance.
- Principles of plane and axis. Various types of movements.

Unit – 2:

- Motion: Linear motion, Rotary motion, Angular Motion, Curvilinear motion, Motion of transition.
- Balance, Newton's Laws of Motion, Acceleration, Velocity and speed.
- Force, Work, Power and Energy, Weight and Projectile.
- Leverage-Principles and Types.

Unit – 3:

- Friction-Resistance, Water and Air Resistance.
- Elasticity.
- Spin
- Centrifugal and centripetal force.

Unit – 4:

- Mechanical Analysis of Motor Movements-Walking, Jumping, Running, Throwing, Catching, Holding, Climbing, Lifting, Swinging, Gliding, Pulling.
- Mechanical Analysis of Sports Skills: Athletics (Running, Jumping, Throwing), Swimming, Football, Basketball, Volleyball, Cricket.

References:

- Chapman, A. E. (2008). *Biomechanical Analysis of Fundamental Human Movements. Human Kinetics. Knowledge Warehouse*
- Kumar, P. (2019). "Biomechanical Analysis of Forward Head Posture among Pondicherry University Research Scholars Based On the Laptop Working Hours: An Analytical Study". *International Journal Of Emerging Technologies And Innovative Research*, 6 (6), 463-466.
- Kumar, P., & Singh, R. R. M. (2019). "Biomechanical analysis of anisomelia among the young children's in Puducherry". *Discrepancy (LLD)*, 330, 19.
- Singh, R. R. M. (2019). "Biomechanical Analysis of Footprint Measurement among School Boys: A Positive Approach to Posture". *Journal of the Gujarat Research Society*, 21(1), 167-169.
- Uppal, A. K. (2018). *Kinesiology and Biomechanics. Friends Publications.*
- Bunn, Hohn W. *Scientific Principles of Coaching (Englewood Cliffs, N.J.: Prentice Hall Inc., 1972).*
- Simonian Charles, *Fundamentals of Sport Biomechanics (Englewood Cliffs, n.J.: Prentice Hall Inc., 1911).*

M.P.E.S. Syllabus Semester -3

Part – A: Theory Courses

Core Course

CC-302

Sports Medicine, Athletic care & Rehabilitation

Unit – 1:

- Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance.
- Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches.
- Injuries:
 - a. General Injuries: Wound, Lesion, Contusion, Burn, Abrasion, Sprain, Strain, Fracture.
 - b. Special Injuries: Injuries on Back, Abdomen, Thigh, Knee, Ankle, Feet, Legs.
- Reasons for Injuries, Preventive measures for injuries, Treatment for Rehabilitation.

Unit – 2:

- Hydrotherapy: Contrast Bath, Sauna bath, Water Massage, Whirlpool.
- Cryotherapy: Ice pack, Gel and chemical cold Pack, Ice Massage, melting ice cryotherapy.
- Electrotherapy: Shortwave diathermy, Ultrasound, Electric moist heating pad, stimulant, Infrared, Ultraviolet electric waves.
- Exercise Therapy: Isotonic, Isometric, Iso kinetic Exercise training.
- Massage: Meaning, Importance, need and Types.

Unit – 3:

- Athlete Nutritional Diet – Factors effecting balance diet, Athlete's Diet for different sports and games, Malnutrition in athletes and its cause.
- Doping – Meaning, History, Definition, Classification, Types, Use of drugs and their side effects, Role of Coach and Managers in solving the problem of doping.

Unit – 4:

- Anatomical and Physiological differences.
- Health Problems: Menses, Pregnancy, Special problems.

References:

Jain, Rachna, Sports Medicine, KSK, New Delhi, 2002.

Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.

Khanna, G.L., Exercise Physiology & Sports Medicine, Lucky Enterprises, Delhi, 1990.

Mathew D.K. & Fox E.L., Physiological Basis of Physical Education and Athletics, W.B. Saunders Co: Philadelphia, 1971.

M.P.E.S. Syllabus Semester -3

Part – A: Theory Courses

Core Course

CC-303

Test Measurement & Evaluation in Physical Education and Sports

Unit – 1:

- Test, Measurement and Evaluation-Meaning, Definition and Importance. Modern Trends in Measurement and Evaluation.
- Test Evaluation-Criteria of Test Selection, Objectivity, Reliability, Norms of Validity.
- a. Classification of tests-Standardized tests, Teacher made tests, Subjective and objective tests.
- b. Construction of knowledge and skill tests.
- c. Steps in construction of knowledge and skill tests.

Unit – 2:

- Physical Fitness and Motor Fitness Tests: AAHPER Youth Fitness Test, National Physical Fitness Test, Indiana Motor Fitness Test, Philip's JCR Test.
- Common Motor Strength Tests: Baroni –Common Motor Strength test, Newton Motor Strength test, Cozen's athletic ability test, Mc.Cloy's General motor ability test.
- Cardio vascular and Respiratory Tests: Harvard StepTest, Cooper's 12 min continuous run/walk test, Kraus-Weber strength test, Roger strength test.
- Badminton- Lockhart and McPherson Badminton skill test, Miller wall Volley test.
- Basketball-Johnson Basketball skill test, Lilich Basketball skill test.
- Hockey-Harban singh Hockey Test.
- Tennis- Dyer Tennis skill test, Hewitt Tennis skill test.
- Volleyball-Russell Lange test, Brady Volleyball Skill Test.
- Football-Mcdonald Football skill test, SAI Football skill test.

Unit – 3:

- Mc.Cloy's behavior rating scale.
- Cowell social behavior trend index.
- Peterson's Social capacity test.
- Swakhyal test.

Unit – 4:

- Anthropometric measurements.
- Equipments.
- Body Fat measurement, General body measurements.
- Body composition measurements

References:

Measurement in Sports and Physical Education, New Delhi: DVS Publications.
Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications.

M.P.E.S. Syllabus Semester -3
Part – A: Theory Courses
Elective Course

EC-301 Olympic Movement

Unit – 1:

- Philosophy of Olympic movement
- The early history of the Olympic movement
- The significant stages in the development of the modern Olympic movement
- Educational and cultural values of Olympic movement

Unit – 2:

- Significance of Olympic Ideals, Olympic Rings, Olympic Flag
- Olympic Protocol for member countries
- Olympic Code of Ethics
- Olympism in action
- Sports for All

Unit – 3:

- Para Olympic
- Summer Olympics
- Winter Olympics
- Youth Olympic

Unit – 4:

- International Olympic Committee - Structure and Functions
- National Olympic committees and their role in Olympic movement
- Olympic commission and their functions
- Olympic medal winners of India

Reference:

Osborne, M. P. (2004). Magictree house fact tracker: ancient greece and the olympics: a nonfiction companion to magic tree house: hour of the Olympics. New York: Random House Books for Young Readers.

Burbank, J. M., Andranovich, G. D. & Heying Boulder, C. H. (2001). Olympic dreams: the impact of mega-events on local politics: Lynne Rienner

M.P.E.S. Syllabus Semester -3

Part – A: Theory Courses

Elective Course

EC-302 Theory of Sports and Game

Unit – 1:

- General Introduction of specialized games and sports– Athletics, Badminton, Basketball, Cricket, Football, Gymnastic, Hockey, Handball, Kabaddi, Kho-Kho, Tennis, Volleyball and Yoga.
- Each game or sports to be dealt under the following heads
 - History and development of the Game and Sports
 - Ground preparation, dimensions and marking
 - Standard equipment and their specifications
 - Ethics of sports and sportsmanship

Unit – 2:

- Motion – Types of motion and Displacement, Speed, Velocity, Acceleration, Distance and Newton's Law of motions.
- Force – Friction, Centripetal and Centrifugal force, Principles of force.
- Equilibrium and its types
- Lever and its types
- Sports Training – Aims, Principles and characteristics.
- Training load – Components, Principles of load, Over Load (causes and symptoms).

Unit – 3:

- Speed and its types
- Strength and its types
- Endurance and its types
- Flexibility and its types
- Coordinative ability and its types
- Training methods: - Development of components of physical fitness and motor fitness through following training methods (continuous method, interval method, circuit method, fartlek /speed play and weight training)

Unit – 4:

- Concept of Conditioning and warming up.
- Role of weight training in games and sports.
- Teaching of fundamental skill & their mastery (technique, tactic and different phases of skill acquisition).
- Recreational and Lead up games
- Strategy – Offence and defense, Principles of offence and defense.

References:

- Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs N.J. Prentice Hall.*
Bunn, J. W. (1972). Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd. Lawther, J.D. (1965). Psychology of coaching. New York: Pre. Hall.
Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.

M.P.E.S. Syllabus Semester - 4
Part – A: Theory Courses
Core Course

CC-401 Exercise Physiology

Unit – 1:

- Exercise Physiology: Meaning, Definition, Importance and Scope.
- Muscles, Types of Muscles and Types of muscular cells:
- Characteristics of Voluntary and Non voluntary Muscles.
- Design, Functions and Energy for Muscular Function
- Chemical Changes during muscular contraction.

Unit – 2:

- Structure and functions of different systems of the body and effect of exercise on various systems. (Muscular System, Cardio-vascular System, Respiratory system, Nervous System and Digestive System)

Unit – 3:

- Second Wind and Oxygen Debt.
- Warm up, Conditioning, Fatigue and (Prasham).
- Work Capacity under different environmental conditions.(Hot, Humid, Cold, High and Low Altitude)

Unit – 4:

- Sports and Nutrition.
- Concept of Balanced Diet.
- Pre Competition, During Competition and after competition diet of sportsman.
- Effect of smoking, Alcohol, Banned drugs on Sports Performance.

References:

- Guyton, Arthur C. Text Book of medical physiology. (Philadelphia: W.B. Saunder company, 1976).*
Morehouse, L.E. and Miller, A.T. physiology of Exercise. (Saint Louis: The C. V. Mosby Company, 1976).
Karpovich, P.V. and Sinning, Wayne E. Physiology of muscular Activity (Philadelphia: W.B. Saunders Company, 1971). 7thEd.
Bourne, Geoffery H. The Strucrure and Functon of Muscles: (London Academic Press1973).
Astrand, P.O. and Rodahi. Karri. Text Book of work Physiology. (Tokyo McGraw Hill kogakusha, Ltd. 1979).
Mathew, D.K.and Fox, E.L.Physiology Basis of Physical Education and Athletics (Philadelphia: W.B. Saunders Company, 1976).

M.P.E.S. Syllabus Semester - 4
Part – A: Theory Courses
Core Course

CC-402

Statics in Physical Education and Sports

Unit 1: Statistics: Meaning, Definition, Nature and Importance.

- Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables and Calculation.
- Graphical Presentation of Class Distribution, Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, Ogive, Pie Diagram.
- Measures of Central Tendency: Mean Median and Mode- Meaning, Definition, Importance, Advantages and Disadvantages.
- Calculation of Mean and Median, Grouped and Ungrouped data, Raw Mode and calculation of mode from class intervals.

Unit 2: Measures of Variability

- Deviation, Percentiles and Quartiles-Meaning and Use.
- Calculation of Deviation Percentiles and Quartiles.
- Range, Quartile Deviation, Mean/Average Deviation, Standard Deviation-Meaning, Definition and use.
- Calculation of Quartile, Mean and Standard Deviation from Grouped and Ungrouped data.

Unit 3: Correlation

- Meaning and Types.
- Calculation of Karl Pearson (Product Moment Method) and Spearman-Rank Order Correlation Method.

Reliability:

- Meaning, Factors affecting Reliability, Randomization, Significance of difference between Means T-test and F-test- Uses, Meaning, Calculation of T-test, Type I and Type II Errors, One Tailed and Two Tailed Tests, Null Hypothesis.

Unit 4: The Normal Curve:

- Meaning, Principles, Laws, Properties and Uses.
- Divergence from Normality-Skewness and Kurtosis.
- Scoring Scales- Sigma scale, Z Scale, T Scale.

References:

- Best, John W. Research in Education, New Delhi Prentice Hall of India (P) Ltd. 1963.*
- Clarke David H. and Clarke H. Harrison, research Process in Physical Education, Recreation and Health, Englewood Cliffs, New Jersey Prentice Hall Inc. 1979.*
- Clarke H. Harrison, the Application of Measurement in Physical Education New York, Prentice Hall Inc. 1979.*
- Good V. Caster and Scates Douglas E., Methods of research Application – Century, New York, 1954.*
- Maully George J., The Science of Educational Research, New Delhi Eurasia Publishing House (P), 1963.*
- Robson M, Brar T.S. and Uppal A.K., Thesis format, Gwalior, LNCPE, 1979.*
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- Garret, Harry E and Good Worth R.S., Statistics Psychology and Education, Bombay Allied Pacific Private Ltd. 19.*
- Sukhia S.P., Mehrotra P.V. and Mehrotra R.N., Elements of Educational Research (Hindi), Agra Vinod Bood Publisher, 1984.*
- Guilford J.P., fundamental of Statistics in Psychology Educational, New York: McGraw Hill Book Co. Inc. 1956.*

M.P.E.S. Syllabus Semester - 4
Part – A: Theory Courses
Core Course

CC-403

Officiating & Coaching

Unit – 1:

- Concept of officiating and coaching
- Importance and principles of officiating
- Relation of official and coach with management, players and spectators
- Measures of improving the standards of officiating and coaching

Unit – 2:

- Duties of coach in general, pre, during and post game.
- Responsibilities of a coach on and off the field
- Psychology of competition and coaching

Unit – 3:

- Duties of official in general, pre, during and post game.
- Philosophy of officiating
- Mechanics of officiating – position, singles and movement etc.
- Ethics of officiating

Unit – 4:

- Qualities and qualification of coach and official
- General rules of games and sports
- Eligibility rules of intercollegiate and inter-university tournaments, preparation of TA, DA bills
- Integrity and values of sports

Reference:

Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs N.J. Prentice Hall. Bunn, J. W. (1972). *Scientific principles of coaching. Englewood cliffs N. J. Prentice Hall.* Dyson, G. H. (1963). *The mechanics of athletics. London: University of London Press Ltd.* Dyson, G. H. (1963). *The mechanics of Athletics. London: University of London Press Ltd.* Lawther, J.D. (1965). *Psychology of coaching. New York: Pre. Hall.* Singer, R. N. (1972). *Coaching, athletic & psychology. New York: M.C. Graw Hill.*

M.P.E.S. Syllabus Semester - 4
Part – A: Theory Courses
Elective Course

EC-401

Curriculum Design

Unit – 1:

- Need and importance of curriculum, Need and importance of curriculum development, the role of the teacher in curriculum development.
- Factors affecting curriculum - Social factors - Personnel qualifications - Climatic consideration - Equipment and facilities -Time suitability of hours.
- National and Professional policies, Research finding

Unit – 2:

- Focalization
- Socialization
- Individualization
- Sequence and operation
- Steps in curriculum construction.

Unit – 3:

- Basic principles of curriculum construction.
- Curriculum Design, Meaning, Importance and factors affecting curriculum design.
- Principles of Curriculum design according to the needs of the students and state and national level policies.
- Role of Teachers

Unit – 4:

- Areas of Health education, Physical education and Recreation.
- Curriculum design-Experience of Education, Field and Laboratory.
- Teaching practice.
- Professional Competencies to be developed-Facilities and special resources for library, laboratory and other facilities.

Reference:

- Barrow, H. M. (1983). Man and movement: principles of physical education. Philadelphia: Lea and Febiger.*
- Bucher, C. A. (1986). Foundation of physical education: St. Louis: The C. V. Mosby & Company.*
- Cassidy, R. (1986). Curriculum development in physical education. New York: Harper & Company.*
- Cowell, C.C. & Hazelton, H.W. (1965). Curriculum designs in physical education. Englewood Cliffs: N.J. prentice Hall Inc.*
- Larson, L.A. (n.d.). Curriculum foundation in physical education. Englewood Cliffs: N.J. Prentice Hall Inc*

M.P.E.S. Syllabus Semester - 4
Part – A: Theory Courses
Elective Course

EC-401 Dissertation

Course Outcome:

- A candidate shall have dissertation for M.P.E.S.-IV Semester and must submit his/her Synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).
- A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.
- The candidate has to face the Viva-Voce Conducted by DRC.

Semester - I
Part – B
Practical Courses

PC – 101 Track and Field (Running Event)

- Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
- Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug, Ground Marking, Rules and Officiating
- Hurdles: Fundamental Skills- Starting, Clearance and Landing Techniques. Types of Hurdles, Ground Marking and Officiating.
- Relays: Fundamental Skills, Various patterns of Baton Exchange, Understanding of Relay Zones, Ground Marking, Interpretation of Rules and Officiating.

Semester - I
Part – B: Practical Courses (Any One)

PC – 102 Gymnastics

- Parallel Bar
- Mount from one bar
- Straddle walking on parallel bars.
- Single and double step walk
- Perfect swing
- Shoulder stand on one bar and roll forward. Roll side, Shoulder stand
- Front on back vault to the side(dismount)
- Horizontal /Single Bar: ,Grip, Swings, Fundamental Elements, Dismount
- Uneven Parallel Bar: Grip, Swings, Fundamental Elements, Dismount

PC – 102 Yoga

- Surya Namaskara,
- Pranayams
- Corrective Asanas
- Kriyas
- Asanas – Sitting, Standing, Laying Prone Position, Laying Spine Position

Semester - I
Part – B: Practical Courses
Indigenous sports (Any One)

PC – 103 Kabaddi

- Skills in Raiding-Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
- Skills of Holding the Raider-Variou formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.
- Additional skills in raiding-Bringing the antis in to particular position, escaping from various hold, Techniques of escaping from chain formation, Combined formations in offence and defense.
- Ground Marking, Rules and Officiating

PC – 103 Kho - Kho

- General skills of the game-Running, chasing, Dodging, Faking etc.
- Skills in chasing-Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgment in giving Kho, Rectification of Foul.
- Skills in Running-Zig zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.
- Ground Marking
- Rules and their interpretations and duties of officials.

Semester - I
Part – B: Practical Courses

PC – 104 Classroom Teaching in Core Theory

- Teaching Practices 10 Lessons in Class Room Teaching of Core Theory Subjects (CC-101, CC-102 & CC-103)

Semester - II
Part – B: Practical Courses

PC – 201 Track and Field (Jumping Events)

- Athletics: Jumping Events
- High Jump (Straddle Roll)
- Approach Run,
- Take off
- Clearance over the bar.
- Landing

Semester - II
Part – B: Practical Courses (Any one)

PC – 202 Basket ball

- Player stance and ball handling
- Passing-Two Hand chest pass, Two hand Bounce Pass, One Hand Base ball pass, Side Arm Pass, Over Head pass, Hook Pass.
- Receiving-Two Hand receiving, One hand receiving, Receiving in stationary position, Receiving while jumping, Receiving while running.
- Dribbling-How to start dribble, How to drop dribble, High dribble, Low dribble, Reverse dribble, Rolling dribble.
- Shooting-Layup shot and its variations, one hand set shot, One hand jump shot, Hook shot, Free throw.
- Rebounding-Defensive rebound, Offensive rebound, Knock out, Rebound Organization.
- Individual Defensive-Guarding the man with the ball and without the ball.
- Pivoting.
- Rules and their interpretations and duties of the officials.

PC – 202 Football

- Kicks-Inside kick, Instep kick, Outer instep kick, lofted kick
- Trapping-trapping rolling the ball, trapping bouncing ball with sole
- Dribbling-With instep, inside and outer instep of the foot.
- Heading-From standing, running and jumping.
- Throw in
- Feinting-With the lower limb and upper part of the body.
- Tackling-Simple tackling, Slide tackling.
- Goal Keeping-Collection of balls, Ball clearance-kicking, throwing and deflecting.

Semester - II
Part – B: Practical Courses
Racket Sports (Any One)

PC – 203 Badminton

- Racket parts, Racket grips, Shuttle Grips.
- The basic stances.
- The basic strokes-Serves, Forehand-overhead and underarm, Backhand-overhead and underarm
- Drills and lead up games
- Types of games-Singles, doubles, including mixed doubles.
- Rules and their interpretations and duties of officials.

PC – 203 Table Tennis

- The Grip-The Tennis Grip, Pen Holder Grip.
- Service-Forehand, Backhand, Side Spin, High Toss.
- Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shot, Loop Drive.
- Stance and Ready position and foot work.
- Rules and their interpretations and duties of officials.

Semester - II
Part – B: Practical Courses

PC – 204 Classroom Teaching in Practical Course

- Teaching Practices 10 Lessons in Class Room Teaching of Practical Course (PC-201, PC-202 & PC-203)

Semester - III
Part – B: Practical Courses

PC – 301 Track and field (Throwing Events)

- Discus Throw, Javelin, Hammer throw, shot-put
- Basic Skills and techniques of the Throwing events – Grip, Stance, Release, Reserve (Follow through action)
- Ground Marking / Sector Marking
- Interpretation of Rules, Officiating and duties of officials.

Semester - III
Part – B: Practical Courses
Combative sports (Any One)

PC – 302 Boxing

- Player Stance - Right hand stance, left hand stance.
- Footwork – Attack, defense.
- Punches – Jab, cross, hook, upper cut, combinations.
- Defense slip – bob and weave, parry/block, cover up, clinch, counter attack
- Tactics – Toe to toe, counter attack, fighting in close, feinting
- Rules and their interpretations and duties of officials.

PC – 302 Judo

- Rei (Salutation)- Ritsurei (Salutation in standing position), Zarai (Salutation in the sitting position)
- Kumi kata (Methods of holding judo costume), Shisei (Posture in Judo)
- Kuzushi (Act of disturbing the opponent posture), Tsukuri and kake (Preparatory action for attack)
- Ukemi (Break Fall)-UrhiroUkemi (Rear break Fall), Yoko Ukemi (Side Break Fall), Mae Ukemi (Front Break Fall), Mae mawariUkemi (Front Rolling break fall)
- Shin Tai (Advance or retreat foot movement) -Suri-ashi (Gliding foot), Twugi-ashi (Following footsteps), Ayumi-ashi (Waling steps).
- Tai Sabaki (Management of the body)
- NageWaze (Throwing techniques)-HizaGuruma (Knee wheel), SesaeTwurikomi-ashi (Drawing ankle throw), De ashihari (Advance foot sweep), O Goshi (Major Ioinm), SeoiNage (Shoulder throw).
- Katamawaze(Grappling techniques)-Kesagatame (Scaff hold), Kata gatame (Shoulder hold), Kami shihogatama (Locking of upper four quarters), Method of escaping from each hold.

PC – 302 Wrestling

- Take downs, Leg tackles, Arm drag.
- Counters for take downs, Cross face, Whizzer series.
- Escapes from under-sit-out turn in tripped.
- Counters for escapes from under-Basic control back drop, Counters for stand up.
- Pinning combination-Nelson series (Half Nelson, Half Nelson and Bar arm), Leg lift series, Leg cradle series, Reverse double bar arm, chicken wing and half Nelson.
- Escapes from pinning: Wing lock series, Double arm lock roll, Cridge.
- Standing Wrestling-Head under arm series, whizzer series
- Referees positions.

Semester - III
Part – B: Practical Courses
Team Games (Any One)

PC – 303 Cricket

- Batting-Forward and backward defensive stroke
- Bowling-Simple bowling techniques
- Fielding-Defensive and offensive fielding
- Catching-High catching and Slip catching
- Stopping and throwing techniques
- Wicket keeping techniques

PC 303 Base Ball

- Player Stances – walking, extending walking, L stance, cat stance.
- Grip – standard grip, choke grip,
- Batting – swing and bunt.
- Pitching
- Baseball : slider, fast pitch, curve ball, drop ball, rise ball, change up, knuckle ball, screw ball
- Fielding –Catching: basics to catch fly hits, rolling hits, Throwing: over arm, side arm.
- Base running – Base running: single, double, triple, home run, Sliding: bent leg slide, hook slide, head first slide.
- Rules and their interpretations and duties of officials.

Semester - III
Part – B: Practical Courses

PC – 304 Classroom Teaching in Core Theory

- Teaching Practices 10 Lessons in Class Room Teaching of Core Theory Subjects (CC-301, CC-302 & CC-303)

Semester - IV
Part – B: Practical Courses
Track and Field

PC – 401 Track and field

- Interpretation of Rules (Throwing, Jumping and Running)
- Officiating and duties of officials (Throwing, Jumping and Running)
- Conduct Annual Athletic Meet in campus.

Semester - IV
Part – B: Practical Courses
Team Games (Any One)

PC 402 Hockey

- Player stance & Grip
- Rolling the ball
- Dribbling
- Push, Stopping, Hit, Flick, Scoop
- Passing – Forward pass, square pass, triangular pass, diagonal pass, return pass, Reverse hit
- Dodging
- Goal keeping – Hand defence, foot defence
- Positional play in attack and defense.
- Rules and their interpretations and duties of officials.
- Ground Marking.

PC 402 Volleyball

- Players Stance-Receiving the ball and passing to the team mates,
- The Volley (Over head pass), The Dig(Under hand pass).
- Service-Under Arm Service, Side Arm Service, Tennis Service, Round Arm Service.
- Rules and their interpretations and duties of officials.

Semester - IV
Part – B: Practical Courses

PC – 403 Classroom Teaching in Core Theory

- Teaching Practices 10 Lessons in Class Room Teaching of Core Theory Subjects (CC-401, CC-402 & CC-403)

Semester - IV
Part – B: Practical Courses

PC- 404 Classroom Teaching in Practical Course

- Teaching Practices 10 Lessons in Class Room Teaching of Practical Course (PC-401, PC-402 & PC-403)

Table – 1: Semester wise distribution of hours per week

Year	Theory	Practicum	Teaching Practice	Total
I	32	42	06	80
II	32	30	18	80
Total	64	72	24	160
Minimum of 36 teaching hours per week is required in five or six days in a week				

Table – 2: Number of credits per Semester

Year	Theory	Practicum	Teaching Practice	Total
I	32	28	04	64
II	32	20	12	64
Total	64	48	16	128
Minimum of 36 teaching hours per week is required in five or six days in a week				