

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

MASTER OF PHYSICAL EDUCATION (M.P.Ed.) **Common Core Syllabus Approved by** **Andhra Pradesh State Council of Higher Education** **As per the guidelines of the** **NATIONAL COUNCIL FOR TEACHER EDUCATION** **2019- 2021**

1. Preamble

The Department of Physical Education was one of the Departments started with the inception of the University. The Department has Indoor stadium, the needed infrastructure for a multi gym and a 400 mts. standard track (clay). The Department started offering its Bachelor's Programme in (B.P.Ed.) in 2006 and Master's Programme (M.P.Ed.,) in 2013 under self- finance. The department also offers courses like Diploma and P.G. Diploma in Yoga education since 2017. The department is one of the most dynamic ones in the University and provides women students with excellent opportunities for personal growth and professional excellence in the field of Physical Education . The program meets the requirements of the Physical education and sports and a knowledge society by training students in the skills of Sports , Training, Coaching and Officiating etc. The main aim of the course is to promote physical and mental health among university students as well as women in the society and also providing them opportunities to establish their own centers, to pursue higher studies and to work as instructors in schools, colleges and private organizations etc.

2. General Graduate Attributes

Core Attribute 1: Core Knowledge of major concepts in Physical education and Govt and Private Sector industries

Core Attribute 2: Critical Thinking & Analysis

Critically thinks about the theoretical as well as practical phenomenon from a cause and effect perspective by analyzing various factors that might lead to creating Physical education and outcome of their distribution.

Core Attribute 3: Research Methods / Project / Practical Knowledge

Can carry out a research project by identifying the research need, formulate hypothesis, adopt appropriate research design, methods, and statistical tools and infer the outcome and present it in the form of a report.

Core Attribute 4: Professionalism and Values

Objectivity, fairness and unbiased ethical values reflect in the professional interaction in human as well as research context.

Core Attribute 5: Coaching Skills

Listens and speaks effectively with intent knowledge of the subject matter and is convincing at individual, social and research setting.

Core Attribute 6: Learning and the Application

Learnt Physical education and Sports principles are applied to personal, social, and organizational issues, in the areas of Sports management, Coaching and Training.

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Core Attribute 7: Entrepreneurship and Leadership

Theoretical, practical and production and professional skill sets are imparted to start an Coaching and Teaching venture like Training Officating and Managers as well as giving suitable employment.

3. Programme Specific Qualification Attributes

	CA 1	CA 2	CA 3	CA 4	CA 5	CA 6	CA 7
Knowledge (K1)	√	√	√			√	√
Understanding (K2)	√	√	√			√	√
Application (K3)	√	√	√		√	√	
Analytical (K4)		√	√			√	√
Evaluation capability (K5)	√	√	√	√	√	√	√
Scientific or synthesis (K6)	√	√	√	√	√	√	√

4.1 Vision

Department of Physical Education envisions a society in which all individuals enjoy an optimal quality of life through appreciation of and participation in an active and creative, health-promoting lifestyle. Department of Physical Education is recognized as dynamic role model in the realization of this desired future.

4.2 Mission

- To provide skills required for working in various sports industries.
- To train students to acquire skills required in Physical education and sports Sciences content creation, distribution and management.
- To promote sports education in the areas of sports sciences, sports technology, sports management and sports coaching besides functioning as the national training centre for select sports disciplines by adopting best international practices.

5. Program Objectives and Outcomes

Program Educational Objectives (PEO)

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PEO-1) The Master of Physical Education(M.P.Ed.) Programme is a professional Programme meant for preparing physical education teacher for high school (classes I to XII) level.

PEO-2) The curriculum and syllabus have been structured in such a way that each of the course meets one or more of the outcomes related to the skills, knowledge, and behaviors that students acquire as they progress through the program. Further, each course in the program spells out clear instructional objectives which are mapped to the student outcomes

PEO 3 To understand the practical application of developmentPhysical education , research methodology and sports.

Program Specific Objectives (PSOs)

PSO 1 To develop skills required to work in Physical education and Sports Sciences

PSO 2 To develop conceptualizing, Coaching and Physical education and Sports content creation skills

PSO 3 To Analyze the practical knowledge during the practical situation

PSO 4 To train in coaching and Teaching content creation, Sports Training and sports coaching skills.

PSO5 To obtain fundamental understanding of research methodology, development Physical education and Sports Sciences .

Program outcome (Master's program in Physical Education)

PO1. Domain knowledge: Apply the knowledge of basic sciences that may be relevant and appropriate to physical education and sports sciences leading to solution of complex sports related issues and problems.

PO2. Problem analysis: Ability to Identify, define the actual requirements, formulate, research literature, and analyze complex physical education and sports sciences related problems to reaching substantiated conclusions.

PO3. Design/Development of Solutions: Ability to design, implement, and evaluate process or program to meet desired needs in the field of physical education and sport sciences.

PO4. Individual and team work: Ability to function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings to accomplish a common goal.

PO5. Ethics: Understanding of professional, ethical, legal, security, social issues and responsibilities in teaching, learning and evaluation.

PO6. Communication: Ability to communicate effectively among a range of audiences/ stakeholders

PO7 Impact: Ability to analyze the local and global impact of physical activities and sports and games on individuals, organizations and society.

PO8 Professional Development: Recognition of the need for and an ability to engage in continuing professional development

PO9 Identification of Needs: Ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of physical education and sport sciences programs.

PO10 Integration: Ability to incorporate effectively integrate Science/ Technology/ IT-based solutions to applications

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PEO Vs PO

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
PEO1	√	√	√	√	√	√	√	√	√	√
PEO2	√			√	√	√		√	√	√
PEO3	√	√				√			√	√

PO Vs GA

	GA1	GA2	GA3	GA4	GA5	GA6	GA7
PO1	√	√	√	√	√	√	√
PO2	√	√		√		√	√
PO3	√	√	√	√		√	
PO4	√	√		√	√	√	√
PO5	√				√	√	
PO6	√	√	√	√		√	
PO7	√	√		√	√	√	√
PO8	√	√	√	√	√	√	√
PO9	√	√		√	√	√	
PO10	√	√	√	√	√	√	√

6. Candidate's eligibility for admission

The Intake, Eligibility and Admission Procedure as per the NCTE norms and standards / University common admission procedure

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7. Duration of the program

Two years (four semesters)

8. CBCS- Structure of the Program

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Course Component	No. of Courses	Hours of Learning per semester	Marks	Credits
Semester I				
Core Courses	3	12	300	9
Elective Courses	1	4	100	3
Practical Course	4	24	400	12
Total	8	36	800	24
Semester II				
Core Courses	3	12	300	9
Elective Courses	1	4	100	3
Practical Course	4	24	400	12
Total	8	36	800	24
Semester III				
Core Courses	3	12	300	9
Elective Courses	1	4	100	3
Practical Course	4	24	400	12
Total	8	36	800	24
Semester IV				
Core Courses	3	12	300	9
Diisertation	1	4	100	3
Practical Course	4	24	400	12
Total	8	36	800	24
Grand Total	32	144	3200	96

Note: Total number of hours required to earn 3 credits for each theory course are 51-60 hours per semester whereas 102-120 hours for each practicum course.

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9. Curriculum structure for each semester as per course alignment

Semester – I

Part A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-101	Research Process in Physical Education & Sports Sciences	3	3	30	70	100
MPCC-102	Physiology of Exercise	3	3	30	70	100
MPCC-103	Applied Statistics in Physical Education & Sports	3	3	30	70	100
Elective Course (Anyone)						
MPEC-111	Fitness and Life Style Management	3	3	30	70	100
MPEC-112	Sports Technology					
Part- B Practical Course						
MPPC-121	Track and Field Running Events (compulsory) Any one of the following i.e. Gymnastics/ Swimming / Yoga	6	3	30	70	100
MPPC-122	Games Specialisation – Badminton / Baseball / Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho- kho / Netball/ Softball/ Table Tennis / Tennis / (Any two games – One Indigenous & one ball game)	6	3	30	70	100
MPPC-123	Teaching Lessons: Coaching lessons in the events of MPPC- 121 and 122.	6	3	30	70	100
MPPC-124	Class room Teaching Lessons on theory of different Sports & Games	6	3	30	70	100
Total		36	24	240	560	800

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Semester - II

Part A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-201	Yogic Sciences	3	3	30	70	100
MPCC-202	Sports Biomechanics and Kinesiology	3	3	30	70	100
MPCC-203	Tests, Measurement and Evaluation in Physical Education	3	3	30	70	100
Open Elective Course						
MPEC-211	Open elective / Non Core	3	3	30	70	100
Part- B Practical Course						
MPPC-221	Track and Field Jumping and hurdle Events (compulsory) Any one of the following i.e. Gymnastics/ Swimming / Yoga	6	3	30	70	100
MPPC-222	Laboratory Practical in Physiology of Exercise and Bio Mechanics & Kinesiology (Two practical in each subject)	6	3	30	70	100
MPPC-223	Any two of the following activities: Aerobics / Self Defensive Techniques – Taekwondo / Shooting / Archery.	6	3	30	70	100
MPPC-224	Adventure Activities / Mass demonstration Activities	6	3	30	70	100
Total		36	24	240	560	800

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Semester - III

Part A : Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-301	Scientific Principles of Sports Training	3	3	30	70	100
MPCC-302	Sports Medicine, Athletic Care and Rehabilitation	3	3	30	70	100
MPCC-303	Sports Psychology and Sports Sociology	3	3	30	70	100
Open Elective Course						
MPEC-311	Open Elective / Non Core	3	3	30	70	100
Part- B Practical Course						
MPPC-321	Track and Field: Throwing Events. Field test for Fitness & Skills	6	3	30	70	100
MPPC-322	Laboratory : Sports Psychology and Physiotherapy lab (Any two practical in each subject)	6	3	30	70	100
MPPC-323	Games Specialisation – Any two games other than two games opted from first semester Badminton / Baseball / Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis / Tennis	6	3	30	70	100
MPPC-324	Teaching Lessons: Coaching lessons in the events of MPPC- 321 and 323.	6	3	30	70	100
Total		36	24	240	560	800

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Semester - IV

Part A :Theoretical Course						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-401	Information & Communication Technology (ICT) in Physical Education	3	3	30	70	100
MPCC-402	Health Education and Sports Nutrition	3	3	30	70	100
MPCC-403	Education Technology in Physical Education	3	3	30	70	100
Elective Course (Anyone)						
MPEC-411	Dissertation / Project work / Event Management	3	3	30	70	100
MPEC-412	Sports Management and Curriculum Designs in Physical Education					
Part- B Practical Course						
MPPC-421	Track and Field – Combined events Training methods: Circuit, Interval, Fartlek, Plyometric & Resistance Trainings	6	3	30	70	100
MPPC-422	Game Specialisation – Practical Skills - any one opted from four games in previous semesters - Record & Viva-voce.	6	3	30	70	100
MPPC-423	Officiating in Track and Field / Gymnastics / Swimming/Yoga	6	3	30	70	100
MPPC-424	Coaching lessons in Game of Specialization - Internship	6	3	30	70	100
Total		36	24	240	560	800
Grand Total for Four Semesters		144	96	960	2240	3200

Subject Type: CC – Core Course
EC- – Elective Course
PC – Practical Course

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10. Credit and marks structure for each semester as per course alignment

Total number of credits and marks						
Course	No of courses	Core	Practical course	Elective course/ Internship/ Fieldwork	No of credits	Total marks
Semester 1	8	3	4	1	24	800
Semester 2	8	3	4	1	24	800
Semester 3	8	3	4	1	24	800
Semester 4	8	3	3	2	24	800
Grand total	32	12	15	5	96	3200

11. 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 M.P.Ed. programme is 90 credits and for each semester 20 credits.

Provision of Bonus Credits Maximum 06 Credits in each Semester

Sl. No.	Special Credits forte Extra Co-curricular Activities	Credit
1	Sports Achievement at State level Competition (Medal Winner)	1
	Sports Achievement National level Competition (Medal Winner)	2
	Sports participation International level Competition	4
2	Inter Uni. Participation (Any one game)	2
3	Inter College Participation (min. two games)	1
4	National Cadet Corps / National Service Scheme	2
5	Blood donation / Cleanliness drive / Community services /	2
6	Mountaineering – Basic Camp, Advance Camp / Adventure Activities	2
7	News Reporting / Article Writing / book writing / progress report writing	1

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Students can earn maximum 06 Bonus credits in each semester by his/her participation in the above mentioned activities duly certified by the Head of the institution / Department. This Bonus credit will be used only to compensate loss of credits in academic activities.

12. Examinations

There shall be examinations at the end of each semester, for first semester in the month of November / December: for second semester in the month of May / June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in November /December or May / June.

A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

13. Scheme for Evaluation and Attainment Rubrics

The Continuous Internal assessment tests and end semester examination will be conducted adhering to the CBCS norms.

Evaluation of theory paper for 70 Marks : All university examination theory papers shall be evaluated by two evaluators (internal and external) appointed by the university from the panel of external examiners.

Practicum Internal evaluation: The internal assessment shall be done for 30 marks in each practicum. If more than one event/game is present under the same practicum, each event/game shall be evaluated separately for 30 marks by the concerned teacher dealt the event/ game. The average of the awarded marks of all the teachers shall be taken.

Practicum External evaluation: The External assessment shall be done for 70 marks in each practicum. If more than one event/game is present under the same practicum, each event/game shall be evaluated separately for 70 marks by the external examiner nominated by the university. The average of the awarded marks of all the events/games of that practicum shall be for 70 marks.

Attainment Rubrics for Theory Courses

Internal (Max. Marks: 30)

External (Max. Marks: 70)

End Semester Question Paper Pattern (Theory)

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Pattern of Question paper: Question papers shall have five questions corresponding to five units of each theory paper. M.P.Ed. format of Question Paper for 5 Units. Each question paper shall have six questions. The pattern will be as follows:

Question No.	Description	Marks
1	An swer in detail (Long Q u estion) Or An swer in detail (Long Q u estion) (For m Unit 1)	10
2	An swer in detail (Long Q u estion) Or An swer in detail (Long Q u estion) (For m Unit 2)	10
3	An swer in detail (Long Q u estion) Or An swer in detail (Long Q u estion) (For m Unit 3)	10
4	Write s hort notes: a ny two ou t of fo u r (For m Unit 4)	10
5	Write s hort notes: a ny two ou t of fo u r (For m Unit 5)	10
6	Write s hort notes: Any fou r ou t of six q u estion s Five q u estion s from five u nits a n d Extra one q u estion from a ny u nit	20
Total		70

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Semester – I

MPCC-101: RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS

SCIENCES

Learning Objectives

1. Gain knowledge about research in the field of physical education
2. To understand the concept of sample and population
3. To testing the existing theories/trainings methods
4. To develop systematic and scientific approach in finding solutions for the questions.

Unit-1 Introduction

Meaning, Definition, Nature, Scope and importance of research in Physical Education. Classification of Research: Basic, Applied and Action Research, Location of Research Problem, Criteria for selection of a Research problem and Qualities of a good researcher.

Unit-2 Methods of Research

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

Unit-3 Experimental Research

Experimental Research: Meaning, Nature and Importance, Variable: Definition, Types of Variables, Experimental Design: Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design and Factorial Design.

Unit-4 Sampling

Meaning and Definition of Sample and Population. Types of Sampling: Probability Methods: Systematic Sampling, Cluster sampling, Stratified Sampling, Area Sampling and Multistage Sampling. Non- Probability Methods: Convenience Sampling, Judgment Sampling and Quota Sampling.

Unit-5 Research Proposal and Report

Chapterization of Thesis / Dissertation: Front Materials, Body of Thesis, Back materials, Method of Writing Research proposal, Thesis / Dissertation: Method of writing abstract, full paper for presenting in a conference, publishing in journals, Mechanics of writing Research Report, Footnote and Bibliography.

References:

- 1) Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- 2) Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc.
- 3) Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London; Routledge Press
- 4) Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human Kinetics;
- 5) Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi; Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam

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- 6) Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- 7) Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication
- 8) Moorthy A. M. Research Processes in Physical Education (2010); Friend Publications

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MPCC-102 : PHYSIOLOGY OF EXERCISE

Learning outcomes

1. Understand the basic principles of physiology and Exercise Physiology
2. Apply the knowledge in the field of physical education and movement activity.
3. Analyze the practical knowledge during the practical situation.
4. Remember and recall the definition of physiology and co-relate the principles of physiology.
5. Appraise the effects during the training and practical sessions

Unit-1 Introduction, Skeletal Muscles and Exercise

Definition of Physiology, Exercise Physiology and importance of Exercise Physiology in sports. Macro & Micro Structure of the Skeletal Muscle, Types of Muscle fibers and their characteristics, Chemical Composition, Chemistry of Muscular Contraction, Sliding Filament theory of Muscular Contraction. Muscle Tone, Heat Production in the Muscle and Effects of exercise and training on the muscular system.

Unit-2 Cardiovascular System and Exercise

Structure of the Heart , Heart Valves and Direction of the Blood Flow, Conduction System of the Heart, cardiac Circulation, Cardiac Cycle, Heart Rate ,Stroke Volume, Cardiac Output and Heart Rate and stroke Volume interactions. Effects of exercise and training on Cardio vascular system.

Unit-3 Respiratory System and Exercise

External and Internal Respiration, Mechanism of Respiration, Respiratory Muscles, Minute Ventilation , Ventilation at Rest and During Exercise. Exchange of Gases in Lungs and Tissues, Control of Ventilation, Ventilation and Anaerobic Threshold, Oxygen recovery, Lung Volumes and Capacities, Anatomical Dead Space. Effects of exercise and training on respiratory system.

Unit-4 Metabolism and Energy Transfer

Metabolism : Definition and types- Anabolism and Ketabolism, Anaerobic Metabolism: ATP,PC or Phosphagen System, Anaerobic Glycolysis, Aerobic Metabolism: Aerobic Glycolysis, Fat Metabolism. Metabolism during Rest and Exercise (.High Intensity ,and Long Duration Exercises),

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Unit-5 Climatic conditions and Ergogenic aids

Variations in Temperature and Humidity,– Thermoregulation, –Sports performance in hot Cool and humid Climate, high altitude, acclimatization and circadian rhythm. Ergogenic Aids: Pharmacological, Hormonal, Physiological aspects and their effects on sports performance. Doping and WADA.

References:

- 1) Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
- 2) Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.
- 3) Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
- 4) David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
- 5) Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
- 6) Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sandersco. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
- 7) Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
- 8) Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company. John Bullock. et.al., Physiology, 4th Ed. New York

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MPCC-103: APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS

Learning outcomes

1. Understand and apply the statistics in research.
2. Organize the samples and sampling techniques which is relevant to the study.
3. Apply the statistics in research thesis for evaluation

UNIT I – Introduction

Meaning, Definition, types, Functions, need and importance of Statistics. Meaning of the terms, Population, Sample, Data and types of data. Variable: Definition and types of Variables, Discrete and Continuous. Parametric and non-parametric statistics.

UNIT II – Measures of Central Tendency

Construction of frequency table. Meaning, Definition, Importance, Computation, Advantages and Disadvantages of Measures of central tendency. – Mean, median and mode.

UNIT III – Measures of Dispersions and Scales

Meaning, Purpose, Calculation and Advantages of Range, Quartile Deviation, Mean Deviation, Standard Deviation, Probable Error. Scales : Meaning, Purpose, Computation and advantages of T scale; 6 Sigma scale, Z Scale and Hull scale.

UNIT IV – Probability Distributions and Graphs

Normal Curve. Principles of normal curve, Properties of normal curve. Meaning of probability,— Divergence from normality. Skewness and Kurtosis. Graphical Representations in Statistics: Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve and Pie Diagram.

UNIT V – Inferential and Comparative Statistics

Tests of significance, “T” test, “F” ratio, 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.

REFERENCE

- Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.
Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois;

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Human Kinetics;

Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi

Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc

Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication

Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.

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MPEC-111 : FITNESS AND LIFE STYLE MANAGEMENT (ELECTIVE)

Learning Outcome

The learning outcome of the paper are as:

1. To Know the sports concept and technique of Physical Fitness
2. To know about role foods and Nutrition in sports performance
3. To create the awareness regarding research in the field of physical fitness and wellness.
4. To know about various techniques of Aerobic and anaerobic exercise and its benefits
5. To Know about the flexibility exercise and its role on sports performance

Unit-1

Concept of Fitness Definition and meaning of Fitness, Different Kinds of Fitnesses, Physical Fitness, Skill Related and Health Related Physical Fitness. Relationship of fitness and health fitness to develop health of an individual, Wellness revolution: Life style and Health fitness relationship, Meaning of active life style, Physical Inactivity and associated health risks Diabetes, Hypertension, Atherosclerosis, Arthritis

Unit - 2

Meaning of Health, Health related fitness components: Body Compositions, Cardio Vascular Fitness, Muscular Endurance, strength, flexibility, benefits of health related fitness. Benefits of Health fitness Components: Meaning of health related and Physical fitness components Exercise protocols for the health fitness components, Body Composition, concepts of body weight and components of body weight, Assessment of body composition, Obesity, Meaning of Obesity and risk factors, of Obesity and over fatness- Muscular and joint flexibility-risk factors Associated with poor muscular and Joint flexibility. .

Unit-3

Nutrition: base for human performance-Carbohydrates, Fats and Proteins. Recommended intake for Normal persons and exercising individuals. Vitamins, Minerals and Water. Osteoporosis and Calcium, Minerals and performance. Optimal nutrition for exercise, Energy value of different important foods, Food Pyramid, fluid replacement before, during and after exercise for temperature regulation and injury prevention, carbohydrates and electrolytes during exercise.

Unit-4

Stress-meaning and types of stress, Physical and mental stress-Harmful effects of overtraining and excessive exercise on health, -mental stress and painful effects of mental stress on health. Anxiety, Depression, insomnia, Compulsive obsessive behaviors, Stress relief through exercise and stress management protocols.

Unit-5

Health behavior, Self efficacy and health behavior, Behavioral modification for wellness, Social support and health of an individual, Life style and other related aspects of activity during childhood . Facts on childhood obesity and activity.

References:

1. Lifestyle management in Health and Social care, Merinda Thew and Jim McKenna, Blackwell Publishing. United Kingdom.

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2. Predicting Health behavior, Mark Connor and Paul Norman, Open University Press, Buckingham, UK.
3. Health Behavior and health education: Theory, research and Practice, Karen Glanz, Barbara Rimer, Viswanath, John Wiley and sons, USA. (Free pdf book)
4. Human Body Composition, Steven B Heymstead, Timothy Lohan, Zimian Wang, Scott B Going, Human Kinetics, USA.
5. Science of Flexibility, Michael J Alter, Human Kinetics, USA.
6. Applied Body Composition Assessment, Vivian H Heyward, Dale R Wagner, Human Kinetics, USA.
7. Coping with life stress-the Indian experience, Meena Hariharan, Amazon Books.
8. Stress Management- a Wellness approach, Nanette E Tummers, Human Kinetics, USA.
9. Wellness Workbook: How to achieve enduring health and vitality, John W Travis and Regina S R

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

MPEC-112: SPORTS TECHNOLOGY (Elective)

Learning Objectives

1. To understand the procedure of selection and use of various sports technologies.
2. To learn the method of construction and installation of sports surface
3. Help to improve knowledge about modern playing equipment

Unit I – Sports Technology

Meaning, definition, Importance of technology in Sports, General Principles and purpose of instrumentation in sports, Technological impacts on sports.

Unit II – Science of Sports Materials

Adhesives- Nano glue, nano moulding technology, Nano turf. Foot wear production, Factors and applications in sports, constraints. Foams- Polyurethane, Polystyrene, Styrofoam, closed-cell and open-cell foams, Neoprene, Foam. Smart Materials: Shape Memory Alloy (SMA), Thermo chromic film, High-density modeling foam.

Unit III – Surfaces of Playfields

Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials: synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities. Use of computer and software in Match Analysis and Coaching.

Unit IV – Modern equipment

Playing Equipments: Balls: Types, Materials and Advantages, Bat/Stick/ Racquets: Types, Materials and Advantages. Clothing and shoes: Types, Materials and Advantages. Measuring equipments: Running, Throwing and Jumping Events. Protective equipments: Types, Materials and Advantages. Sports equipment with nano technology, Advantages.

Unit V – Training Gadgets

Basketball: Ball Feeder, Mechanism and Advantages. Cricket: Bowling Machine, Mechanism and Advantages, Tennis: Serving Machine, Mechanism and Advantages, Volleyball: Serving Machine, Mechanism and Advantages. Lighting Facilities: Method of erecting Flood Light and measuring luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events. Use of computer and software in mater analysis and coaching.

Note: Students should be encouraged to design and manufacture improvised sports testing equipment in the laboratory/workshop and visit sports technology factory/ sports goods manufacturers.

REFERENCE:

- Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK: Butterworth Heiremann.
- Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.
- John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group.
- Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982

Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester-II

MPCC-201 : Yogic Sciences

Learning outcomes

1. Understand the basic Concepts of Yoga
2. Apply the principles of Yoga to live healthy and active life style.
3. Promote the awareness of health through yoga
4. Analyse the techniques and of body posture to bring out healthy change.
5. Develop the knowledge through practice, participate and organize.

Unit I – Introduction

Meaning, Definition, Scope and importance of Yoga, Essentials For Yoga Practices; Age, Diet, Stomach Emptying bowels, bathing, Clothes, Sun Bathing, No Straining, Place, Time, Awareness, Sequence. Contra indication, Counter Pose, Inverted Asana, Breathing, and Relaxation. Basic Systems of Yoga with importance - Astanga Yoga: Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi. Streams of Yoga: Hatha Yoga, Raja Yoga, Karma Yoga, Bhakti Yoga and Gnana Yoga.

Unit II – Aasanas , Kriyas, Bandhas and Mudras:

Asana: Definition, Classification, Sitting, Standing, Lying, & Inverted ASanas. Benefits of Asanas, Asanas and Loosening Exercises, Surya Namaskara- Description and Benefits. Kriyas : Meaning, Neti, Nauli, Dhauti, Kapalabhati, Trataka, Bhastrika, Benefits. Bandhas: Jalandhara, , Udyana, Mula and their Importance. Mudras: Definition, Purpose, Benefits of Hastamudras, Asamyuktahasta, Samyuktahasta, Manamudra, Kayamudra, Bandha Mudra, Adharamudra.

Unit III – Pranayama: Definition, Tradition, Types , Importance & Impact of Pranayama on naadis. Chakras: Definition and types, Effects of Pranayama on major chakras.

Unit IV – Meditation: Meaning, Definition and Benefits. Types of Meditation: Passive, active, Saguna and Nirguna Meditation. Meditation and Health, Meditation and stress Management. Need of Yoga for a positive health for modern man; Concept of health and disease: Medical and Yogic perspectives; Concept of Pancha Kosha for integrated and positive health; Yoga and Modern age; Stress in yogic perspectives; Yoga as a way of life to cope up stress; Yoga and self-development, Yoga for the children and human excellence.

Unit V – Yoga and Sports

Effects of Yoga on Physiological Systems: Respiratory, Circulatory, Digestive, Nervous and Excretory Systems. Place of Yoga as Supplementary, Compensatory, Regenerative and Yogic Power. Role of Yoga in Sports: Promotion of Mental Wellbeing, Self Actualization, Concentration, Suppression of Anxiety and depression. Role of Yoga in Making out a Sports Person.

Note: Laboratory Practicals be designed and arranged internally.

REFERENCE:

George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prakashan.
Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House

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book.

Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.

Karbelkar N.V.(1993) Patanjali Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal

Kenghe. C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: Bharata Manishai. Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.

Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy.

Coimbatore: Teachers Publication House. Swami Kuvalayanda,

(1998), Asanas. Lonavala: Kaivalyadhama.

Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra

Bandha. Munger: Bihar School of Yoga. Swami Satyananda

Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications

Trust.

Swami Sivananda, (1971), The Science of Pranayama. Chennai: A

Divine Life Society Publication. Thirumalai Kumar. S and Indira.

S (2011) Yoga in Your Life, Chennai: The Parkar Publication.

Tiwari O.P. (1998), Asanas-Why and How. Lonavala: Kaivalyadham.

Satya Murty.K, *Elements of Yoga, Veadri Brahma Gnana Kendra, Pedakakani, Guntur, India, (2015)*

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MPCC-202: SPORTS BIOMECHANICS AND KINESIOLOGY

Learning outcomes

1. Identify biomechanical, health, physiological, and psychological limitations and interventions for improving physical performance.
2. Analyze and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during acute and chronic exercise.
3. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance.
4. Understand mechanical principles that can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
5. Know effectiveness of human movement using mechanical principles.

UNIT I – Introduction

Meaning, nature, importance and scope of Applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Statics, Kinematics, Kinetics, gravity, Center of Gravity, Line of gravity and base of the body. Vectors and Scalars.

UNIT II – Muscle Action

Origin, Insertion and action of Muscles around shoulder, Elbow, Hip, Knee and muscles of Abdomen & Trunk.

UNIT III – Motion and Force

Meaning and definition of Motion. Types of Motion: Linear motion, angular motion and General motion. uniform & Non Uniform motion. Laws of Motion : law of Inertia, Law of acceleration and law of reaction. Force: Definition and types of force: Centripetal Force, Centrifugal Force, Sources of force, components of Force, Factors of Force. pressure, friction, Buoyancy and Spin.

UNIT IV – Projectiles and Levers

Freely falling bodies, Projectiles: Principles of Projectiles: Stability, equilibrium and its Types. Factors Effecting on Equilibrium. Definition of Work, Power and Energy. Mechanical Energy: kinetic energy, potential energy and strain energy. Levers: Definition and Types of Levers and their practical application. Mechanical Advantage. Fluid Resistance, Aerodynamics.

UNIT V – Movement Analysis

Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Video Analysis. Methods of analysis – Qualitative, Quantitative, Predictive methods.

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

REFERENCE:

Deshpande S.H.(2002). Manav Kriya Vigyan – Kinesiology (Hindi Edition) Amravati :Hanuman Vyayam Prasarak Mandal.
Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005. Steven

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Roy, & Richard Irvin. (1983). Sports Medicine. New Jersey: Prentice hall. Thomas. (2001). Manual of structural Kinesiology, New York: McGraw Hill. Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)
Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.
Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.
Peter.M.Mc.Ginnis, Biomechanics of Sport and Exercise, Human Kinetics, U.S.A, 1999

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MPEC-203 : MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Learning outcomes

1. Understand the Test, Measurement and Evaluation in physical education, Health and Fitness.
2. Know about the different types of test for different sports and games.
3. Apply the tests in minor research areas.
4. Analyse the performance and movements in the field of sports.
5. Evaluate the battery test and others tests prescribed by the government efficiently

UNIT I – Introduction

Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection: Scientific Authenticity, Administrative Considerations and Educational Applications. Scientific Authenticity: Validity, Reliability, Objectivity, Norms, Duplicate Forms and Standard Directions.

UNIT II – Physical Fitness Tests

Physical Fitness: Meaning and Definition, Physical Fitness Tests: AAHPER, JCR Tests. ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardio vascular test: Harvard step test, Cooper's 12 minutes run / walk test.

UNIT III – Motor Fitness Tests

Meaning and Definition of Motor Fitness, Motor Fitness Tests; Indian Motor Fitness Test, Oregon Motor Fitness Test. Motor Ability: Meaning, Definition. Motor Ability Test: Barrow Motor Ability Test, Newton Motor Ability Test. Muscular Fitness: Kraus Weber Minimum Muscular Fitness Test.

UNIT IV – Anthropometric and Aerobic-Anaerobic Tests

Physiological Test - Aerobic Capacity: Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females Beep test. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Girth: Arm, Waist, Hip, Thigh. Skin Folds: Chest, Abdomen, Midthigh, Triceps, Iliac Crest.

UNIT V – Skill Tests

Specific Sports Skill Test: Badminton: French Stalter Short Service Test, Miller Wall Volley Test. Basketball: Knox, Johnson Basketball Test, Harrison Basketball Ability Test Cricket: Sutcliff Cricket test. Hockey: Henry Friedel Field Hockey Test, Harban's Hockey Test, Schmithal's Field Hockey Test, Volleyball: Russel Lange Volleyball Test, Brady Volleyball Test. Football: Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test, Broer Miller Test.

Note: Practicals of indoor and out-door tests be designed and arranged internally.

REFERENCES :

Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company
Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc
Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc
Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications
Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research
Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaign IL: Human Kinetics
Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

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Semester III

MPCC-301: SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

Learning outcomes

1. Understand training as performance based science
2. Explain different means and methods of various training
3. Prepare training schedule for various sports and games
4. Appraise types of periodization for performance development
5. Create various training facilities and plans for novice to advance performers

UNIT I – Introduction

Sports training: Definition – Aims, Characteristics, Principles of Sports Training. Load: Definition, Components of load. Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures for over load – Super Compensation . Recovery. Detraining and Retraining.

UNIT II – Components of Physical Fitness

Strength: Meaning, types - Isometric, Isotonic and Iso kinetic exercises – Factors determining strength – Methods to improve strength. Speed: Meaning – types - Factors determining speed – Methods to improve speed. Endurance: Meaning – types - Factors determining endurance – Methods to improve Endurance.

UNIT III – Flexibility and Coordination

Flexibility: Meaning – types - Factors determining flexibility – Methods to improve flexibility - Coordination : Meaning, types - Factors determining coordination – Methods to improve coordination.

UNIT IV – Methods of Sports Training

Aerobic training, Anaerobic training, Weight training, Fartlek Training, Interval training, Plyometric training, Resistance training, Pressure training, High Altitude training, Functional training, Repetition method of training, and Transfer of training effects.

UNIT V – Periodization

Training Plan: Micro, Meso and Macro Cycles. Short Term Plan and Long Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Phases of Periodisation, Preparatory Period, Competition Period and Transition Period. Top form, Tapering performance. Training schedules.

REFERENCES :

- Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
- Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosby Company
- Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Louis, Mosby Year Book
- David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University
- Gary, T. Moran (1997) – Cross Training for Sports, Canada : Human Kinetics Hardayal
- Singh (1991) Science of Sports Training, New Delhi, DVS Publications
- Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia
- Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Bartlett Publications

Yograj Thani (2003), Sports Training, Delhi : Sports

Publications Michael; J. Alter : Sciences of stretching

(1988) Human Kinetics.

The Physiology basis of Physical Education and Athletics, 4th Edition, Fox,

Bruises and Foss. Larry G. Shaver : Essentials of Exercise Physiology.

Stwven J. Flack & Willam J. Kraemer : Designing resistance training programme (1997) Human Kinetics.

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MPCC-302: SPORTS MEDICINE, ATHLETIC CARE AND REHABILITATION

Learning outcomes

1. Understand the primary responsibilities the sports trainer has in preventing sports injuries and providing initial care for injured athletes.
2. Demonstrate the basics of sport first aid during and after game situation.
3. Recognise and appropriately treat common sports injuries and conditions from onset through rehabilitation.
4. Identify and apply knowledge of anatomy to the design and execution of research studies.

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, Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE (Protection, Rest, Ice, NSAIDS (Non Steroidal anti inflammatory drugs), Compression & Elevation) therapy, Aquatic therapy.

Unit II – Posture

Posture, Values of Good posture, Causes of Bad posture, Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knees, Bow legs, Flat foot. Causes for deviations and treatment including exercises. Posture test, Gait and types.

Unit III – Rehabilitation Exercises

Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF techniques and principles. Gait training, swiss ball exercises. Breathing exercises, Relaxation techniques, Free hand exercise, Stretching and strengthening exercise for shoulder, Elbow, Wrist and Hand. Supporting and aiding techniques and equipment for Upper Limb and Thorax Injuries.

Unit IV – Massage

Brief history of massage – Massage as an aid for relaxation, Principles of massage, Physiological, Chemical, Psychological effects of massage, Contra indications of Massage, Classification of Massage, Stroking manipulation: Effleurage, Pressure manipulation: Petrissage Kneading (Finger, Kneading, Circular) ironing Skin Rolling, Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation: Vibration and shaking.

Unit V – Sports Injuries Care, Treatment and Support

Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports, Therapeutics modalities: Cryo, thermo, Hydro, Electro, Actino therapy Strapping, Taping and Bandages, supporting, Aiding techniques for equipment for upper extremities and Lower extremities and spine.

Note: Each student shall submit Physiotherapy record of attending the Clinic and observing the cases of athletic injuries and their treatment procedure. (To be assessed internally)

REFERENCES:

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Doherty, J. Meno. Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc.
Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century. Naro, C.
L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd. Rathbome, J.I.
(1965) Corrective Physical education, London: W.B. Saunders & Co. Stafford and Kelly,
(1968) Preventive and Corrective Physical Education, New York.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

MPCC-303: SPORTS PSYCHOLOGY AND SPORTS SOCIOLOGY

Learning outcomes

1. Explain group mechanisms and group psychology in a sports context
2. Reflect upon motivational psychology as applied to sports activitiesFormulate relevant constructs of exercise psychology
3. Demonstrate the ability to discuss sociological theories, concepts, and ideas in large and small groups and to express empirically as well as theoretically-based opinions.
4. To apply core sociological theories to specific social problems in order to analyse social problems

UNIT I - Introduction

Meaning, Definition, History, Need and Importance of Sports Psychology. Present Status of Sports Psychology in India. Motor Learning: Basic Considerations in Motor Learning, Motor Perception, Factors Affecting Perception-Perceptual Mechanism. Personality: Meaning, Definition, Structure, Measuring Personality Traits. Effects of Personality on Sports Performance.

UNIT II – Motivation, Emotion

Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning Goal Setting,. Anxiety: Meaning and Definition, Nature, Types, Causes, Method of Measuring Anxiety. Competitive Anxiety and Sports Performance. Stress: Meaning, Definition, Causes of Stress and Sports Performance. Aggression: Meaning, Definition and Types of Aggression, Aggression and Sports Performance. Relaxation: Meaning, Definition and Types of relaxation. Methods of measuring, Motivation, Anxiety, Stress and Aggression.

UNIT III – Psychological Test

Types of Psychological Test: Instrument based tests: Pass-along test, Tachistoscope, Reaction timer, Finger dexterity board, Depth perception box, Kinesthesiometer board. Questionnaire: Sports Achievement Motivation tests, Sports Anxiety test, Sports aggression tests, stress test.

UNIT IV – Sports Sociology

Meaning and Definition – Sports and Socialization of Individual. Sports as Social Institution, National Integration through Sports. Fans and Spectators: Meaning and definition, Advantages and disadvantages on Sports Performance. Violence in Sports.

UNIT V – Group Cohesion

Group: Definition and Meaning, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics, Competition and cooperation. Current Problems in Sports and Future Directions, Sports Social Crisis Management , Women in Sports: Sports Women in our Society, Gender inequalities in Sports, Participation pattern among Women, Factors effecting women sports participation.

***Practicals:** Atleast five experiments related to the topics listed in the Units above should be conducted by the students in laboratory. (Internal assessment.)*

REFERENCES:

Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT)
Catalogue of Test, New Delhi: National Council of Educational Research and Training
Publication.

Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.

Jay Coakley. (2001) Sports in Society – Issues and Controversies in International Education, Mc-Craw
Seventh Ed.

John D Lauther (2000) Psychology of Coaching. Ner Jersy: Prenticce Hall Inc. John D.

Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.

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Semester - IV

MPCC-401: INFORMATION & COMMUNICATION TECHNOLOGY (ICT) IN PHYSICAL EDUCATION

Learning outcomes

1. Understand concept of information and communication technology in physical education field
2. Analyse sporting data of various types via astute use of statistical packages.
3. Practice mathematics, statistics, information technology in sport technology related problems.
4. Offer Hands on Knowledge in information and communication Technology

Unit I – Communication & Classroom Interaction

Concept, Elements, Process & Types of Communication, Communication Barriers & Facilitators of communication, Communicative skills of English. Listening, Speaking, Reading & Writing Concept & Importance of ICT, challenges in integrating ICT in Physical Education in Education

Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration.

Unit II – Fundamentals of Computers

Characteristics, Types & Applications of Computers, Hardware of Computer: Input, Output & Storage Devices, Software of Computer: Concept & Types, Computer Memory: Concept & Types Viruses & its Management, Concept, Types & Functions of Computer Networks, Internet and its Applications Web Browsers & Search Engines, Legal & Ethical Issues.

Unit III – MS Office Applications

MS Word: Main Features & its Uses in Physical Education, MS Excel: Main Features & its Applications in Physical Education, MS Access: Creating a Database, Creating a Table, Queries, Forms & Reports on Tables and its Uses in Physical Education, MS Power Point: Preparation of Slides with Multimedia Effects and MS Publisher: Newsletter & Brochure

Unit IV – ICT Integration in Teaching Learning Process

Approaches to Integrating ICT in Teaching Learning Process, Project Based Learning (PBL), Co-Operative Learning, Collaborative Learning, ICT and Constructivism: A Pedagogical Dimension

Unit V – E-Learning & Web Based Learning

E-Learning
Web Based Learning
Visual Classroom

REFERENCES:

B. Ram, New Age International Publication, Computer Fundamental, Third Edition-2006 Brain under IDG Book. India (p) Ltd Teach Yourself Office 2000, Fourth Edition- 2001 Douglas E. Comer, The Internet Book, Purdue University, West Lafayette in 2005
Heidi Steel Low price Edition, Microsoft Office Word 2003- 2004
ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing-2006

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Pradeep K. Sinha & Priti; Sinha, Foundations computing BPB Publications -2006. Rebecca

Bridges Altman Peach pit Press, Power point for window, 1999

Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006

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MPCC-402: HEALTH EDUCATION AND SPORTS NUTRITION

Learning outcomes

1. Explain Health Education. Concept, Dimensions, in a sports context
2. Explain about Health Problems in India
3. Nutrition and Weight Management
4. Explain Sports Nutrition, Role of nutrition in sports

Unit - I Health Education

Meaning, Definition of Health, Health Education. Concept, Dimensions, and Determinants of Health. Health Instructions, Aims, objectives and Principles of Health Education. Health Service, Health supervision .

Unit - II Health Problems in India

Communicable: Tuberculosis, Measles, Mumps, Rabies, Polio, whooping cough, Hepatitis, Ebola, Swine flu, Dengue, Malaria and STD:Gonorrhea, HIV/Aids, Syphilis. and Non Communicable Diseases: Cancer, Osteoporosis, Asthma, Hypertension, Diabetes. Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population, Personal and Environmental Hygiene in schools
Objective of school health service, Role of health education in schools
, Nutritional service, Health appraisal, , Healthful school environment, first- aid and emergency care. Health Agencies: Red cross, WHO, St.John Ambulance, UNICEF, UNESCO.

Unit- III –Hygiene and Health

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

Unit – IV- Introduction to Sports Nutrition

Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Carbohydrate, Protein, Fats, Vitamins, Minerals, Water Dehydration and fluids replacement, Classification of food, organic food, Carbohydrate loading, Hyponatremia., Role of carbohydrates, Fat and protein on Sports Performance.

Unit – V 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.

References:

Bucher, Charles A. "Administration of Health and Physical Education Programme". Delbert, Oberteuffer, et. al." The School Health Education".
Ghosh, B.N. "Treaties of Hygiene and Public Health".
Hanlon, John J. "Principles of Public Health Administration" 2003. Turner, C.E. "The School Health and Health Education".
Moss and et. At. "Health Education" (National Education Association of U.T.A.) Nemir A. "The School Health Education" (Harber and Brothers, New York). Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

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MPEC-403: EDUCATION TECHNOLOGY IN PHYSICAL EDUCATION

Learning outcomes

1. Understand concept of Educational technology in physical education field
2. Analyse sporting data of various types via astute use of statistical packages.
3. Practice Educational technology related problems.
4. Offer Hands on Knowledge in Educational technology

Unit I – Nature and Scope

Educational technology: concept, Nature and Scope. Forms of educational technology: teaching technology, instructional technology, and behavioural technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stages; media application stage and computer application stage.

Unit II – Systems Approach to Physical Education and Communication

Systems Approach to Education and its Components: Goal Setting, Task Analysis, Content Analysis, Context Analysis and Evaluation Strategies; Instructional Strategies and Media for Instruction. Effectiveness of Communication in instructional system; Communication: Modes, Barriers and Process of Communication.

Unit III- Instructional Design

Instructional Design: Concept, Views. Process and stages of Development of Instructional Design, Overview of Models of Instructional Design. Instructional Design for Competency Based Teaching: Models for Development of Self Learning Material.

Unit IV – Audio Visual Media in Physical Education

Audio-visual media: meaning, importance and various forms Audio/Radio: Broadcast and audio recordings,- strengths and Limitations, criteria for selection of instructional units, script writing, pre-production, post-production process and practices. Audio Conferencing and Interactive Radio Conference. Video/Educational Television: Telecast and Video recordings Strengths and limitations, Use of Television and CCTV in instruction and Training, Video Conferencing, SITE (Satellite Instructional, Television, Experiment) experiment, countrywide classroom project and Satellite based instructions. Use of animation films for the development of children's imagination.

Unit V – New Horizons of Educational Technology

Recent innovations in the area of ET interactive video - Hypertext, video-texts, optical fiber technology, laser disk, computer conferencing. Procedure and organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Recent experiments in the third world countries and pointers for, India with reference to Physical education. Recent trends of Educational Technology in Physical Education..

REFERENCE:

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.
Communication and Education, D. N. Dasgupta, Pointer Publishers

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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.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

MPEC-411 : DISSERTATION/PROJECT WORK/EVENT MANAGEMENT (ELECTIVE)

Learning Outcomes

The learning outcome of the paper are as:

1. To Know about the process of research in physical education
2. To know about review of related literature in research
3. To create data analysis in research
4. To know about statistical intervention in research.
5. To increase the writing competency in research reporting

1. Student who have chosen elective paper in Dissertation / Project Work / Event Management has to choose the Supervisor in the Department and select the Topic/Event of his choice in consultation with his/her Supervisor and submit the proposal on or before the end of the second semester to the Principal / Head of the Department.
2. Further the student has to submit his/her Dissertation (four copies)/Project/Event not less than 15 days before the beginning of the Fourth Semester examinations and appear Viva-voce examination.
3. Student who have chosen elective paper in Dissertation / Project Work / Event Management has to choose the Supervisor in the Department and select the Topic/Event of his choice in consultation with his/her Supervisor and submit the proposal on or before the end of the second semester to the Principal / Head of the Department.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

MPEC- 412: SPORTS MANAGEMENT AND CURRICULUM DESIGN IN PHYSICAL EDUCATION (Elective)

Learning outcomes

1. Know sports management and employ principles of strategic planning, and financial and human resource management.
2. Assess marketing needs and formulate short term and long term solutions.
3. Conceive, plan, execute, and evaluate a sports event.
4. Introduce the teaching and curriculum objectives and course module design
5. Analyze the planning strategies, teaching, learning and assessment
6. Develop strategies to promote quality learning, practice marking and consider methods of course and self-evaluation
7. Evaluating learning intentions and the process that is guided through explicit and manageable criteria.

UNIT I – Introduction to Sports Management

Definition, Importance. Basic Principles and Procedures of Sports Management. Functions of Sports Management. Personnel Management: Objectives of Personnel Management, Personnel Policies, Role of Personnel Manager in an organization, Personnel recruitment and selection.

UNIT II – 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 Problems in instruction programme, Community Based Physical Education and Sports program.

UNIT III – Equipment and Public Relation

Purchase and supplies of Equipment, Guidelines for selection of Equipment and Supplies, Purchase of equipment and supplies, Equipment Room, Equipment and supply Manager. Guidelines for checking, storing, issuing, care and maintenance of supplies and equipment. Public Relations in Sports: Planning the Public Relation Programme – Principles of Public Relation, Public Relations in School and Communities, Public Relation and the Media.

UNIT IV – Curriculum

Meaning and Definition of Curriculum. Principles of Curriculum Construction: Students centered, Activity centered, Community centered, Forward looking principle, Principles of integration, Theories of curriculum development, Conservative (Preservation of Culture), Relevance, flexibility, quality, contextuality and plurality. Approaches to Curriculum; Subject centered, Learner centered and Community centered, Curriculum Framework.

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UNIT V – Curriculum Sources

Factors affecting curriculum: Sources of Curriculum materials, text books, Journals, Dictionaries, Thesis, Encyclopaedias, Micropaedias, Magazines, Internet. Integration of Physical Education with other Sports Sciences, Curriculum research, Objectives of Curriculum research, Importance of Curriculum research. Evaluation of Curriculum, Methods of evaluation.

REFERENCE:

- Aggarwal, J.C (1990). Curriculum Reform in India – World overviews, Doaba World Education Series – 3 Delhi: Doaba House, Book seller and Publisher.
- Arora, G.L. (1984): Reflections on Curriculum, New Delhi: NCERT.
- Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
- Bucher A. Charles, (1993) Management of Physical Education and Sports (10th ed.,) St. Louis: Mosby Publishing Company.
- Carl, E, Willgoose. (1982). Curriculum in Physical Education, London: Prentice Hall.
- Chakraborty & Samiran. (1998) . Sports Management. New Delhi: Sports Publication.
- Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
- Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
- John, E, Nixon & Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.
- McKernan, James (2007) Curriculum and Imagination: Process, Theory, Pedagogy and Action Research,. U.K. Routledge
- NCERT (2000) . National Curriculum Framework for School Education, New Delhi: NCERT.
- NCERT (2000) . National Curriculum Framework for School Education, New Delhi: NCERT.
- NCERT (2005). National Curriculum Framework, New Delhi: NCERT. NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester - I Practicum Course

MPPC- 121: Track and Field - Running Events (compulsory)

Any one of the following i.e. Gymnastics/ Swimming / Yoga .

Running

Fundamental techniques –Short and Middle distance.

Use of Starting blocks- stance on the blocks.

Running ABC, Body position at the start- starting technique, change in body position during running, movements of the arms, stridelenlength and frequency, position of torso while running and at finish. Drills.

Advanced techniques Various techniques of sprint start: Bullet, Medium and Elongated
Laying out of Standard Track with staggers

Gymnastics

Floor Exercise, Pyramids, Parallel bars and Balancing beam.

Swimming

Float, Free style, and Breast stroke.

Yoga

Yoga postures in standing, sitting, prone, supine and balancing Asanas.

MPPC- 122 : Game of Specialisation – Badminton / Baseball / Cricket/ Football/
Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis /
Tennis

A candidate has to learn and perform proficiency and officiating in any two games – One
Indigenous & one ball game

MPPC- 123: Teaching Lessons: Coaching lessons in the events of MPPC- 121 and 122.

Student has to take Coaching lessons of each 45 mins in the activities and games mentioned
above MPPC 121 and 122. 5 lessons (4 Internal and 1 External)

MPPC- 124: Class room teaching Lessons on theory of different Sports & Games

Student has to take Teaching lessons on theory of each 45 mins in different sports and games
of the above MPPC 121 and 122. 5 lessons (4 Internal and 1 External)

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester - II Practicum Course

MPPC- 221: Track and Field - Jumping Events (compulsory)

Any one of the following i.e. Gymnastics/ Swimming / Yoga .

Jumping

Fundamental techniques –Broad jump, High Jump, Triple jump and Pole vault

Advanced techniques in jumps and Drills.

Laying out of Jumping Sectors

Gymnastics

Horizontal bar, Roman rings, Gymnastics positions, Rhythmic Gymnastics and Vaulting horse.

Swimming

Butterfly, Back stroke, Medley and Rules regarding swimming.

Yoga

Pranayama, Dhyana, Bhandas, Mudras and Kriyas.

MPPC- 222 : Laboratory Practical in Physiology of Exercise and Kinesiology and Bio mechanics

Student has to learn atleast two practical in Exercise Physiology and Kinesiology and Biomechanics in the laboratory and prepare work book on practicals.

MPPC- 223: Any two of the following activities:

Aerobics / Self Defensive Techniques – Taekwondo / Shooting / Archery.

Student has to learn atleast two activities from the above and exhibit proficiency in examination.

MPPC- 224: Adventure Activities (Trucking, rock climbing and cycling) / Mass demonstration Activities (Bharathiyam, Pyramids, Callisthenics and light apparatus)

Student has to learn the activity from the above and exhibit demonstration and show proficiency during examination.

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester - III Practicum Course

MPPC- 321: Track and Field – Throwing Events (compulsory)

Throwing Events

Fundamental techniques –Shot-put, discuss, javelin and Hammer

Advanced techniques in throws and Drills.

Laying out of Throwing Sectors

Field Test for Fitness and Skills

Student has to learn testing procedures to test any two fitness variables and skills related to sports / games on ground and prepare practical work book on practical done.

MPPC- 322: Laboratory Practical in Psychology and Physiotherapy

Student has to learn atleast two practical in Psychology and Physiotherapy in the laboratory and prepare work book on practical done.

MPPC- 323: Game of Specialisation – Badminton / Baseball / Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis / Tennis

A candidate has to learn and perform proficiency and officiating in any two games – other than two games opted in the First Semester.

MPPC- 324: Teaching Lesson – Coaching lessons in the Track and Field of this Semester / Gymnastics / Swimming / Yoga

Student has to take Coaching lessons on the above of each 45 mins. 5 lessons (4 Internal and 1 External)

MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester - IV Practicum Course

MPEC- 411: Dissertation / Project work / Event Management

Student who have chosen elective paper in Dissertation / Project Work / Event Management has to choose the Supervisor in the Department and select the Topic/Event of his choice in consultation with his/her Supervisor and submit the proposal on or before the end of the second semester to the Principal / Head of the Department.

Further the student has to submit his/her Dissertation (four copies)/Project/Event not less than 15 days before the beginning of the Fourth Semester examinations and appear Viva-voce examination.

MPPC- 421: Track and Field – Combined Events

Combined Events

Pentathlon – Order of events , Heptathlon – Order of events and Decathlon – Order of events.

Rules regarding Track and Field.

Officiating in Track and Field.

Training Methods – Design Circuit, Interval, Fartlek, Plyometric and Resistance training with load dynamics. Training Schedules.

Student has to prepare a detailed work book of the above.

MPPC- 422: Game of Specialization

A student has to choose any one of the games learned in the previous semesters as a Game of Specialization and exhibit the proficiency, and officiating ability.

Student has to prepare a detailed Record with the following guidelines and attend for viva-voce.

1. Origin, History and development of game
2. Technical terms related to the game
3. Fundamental Skills
4. Techniques and Tactics
5. Advanced Skills / drills
6. Game strategies / set play
7. Lead up games
8. Training Schedules for six weeks.
9. Skill tests
10. Talent identification
11. Selection criteria
12. Rules of the game, laying of court, advanced gadgets,
13. Officiating and signals

14. Mechanics of officiating
15. Major Tournaments, Trophies and the results
16. Awards and Awardees in the respective game/event.
17. Paper cuttings and latest articles

MPPC- 423: Officiating in Track and Field / Gymnastics / Swimming/Yoga

Student has to learn system of officiating in any one of the above events, participate in the intramural or extramural as official and show his abilities during the examinations.

MPPC- 424: Coaching lessons in Game of Specialization (Internship)

Student has to take 10 coaching lessons of each 45 mins duration in his/her game of specialization. 5 lessons at schools and 4 internal and 1 external at the institution/department.