### CENTRAL UNIVERSITY OF PUNJAB, BATHINDA



## Master of Physical Education (M.P.Ed.)

Session - 2019-21

**Department of Physical Education** 

#### **Programme Learning Outcome**

The Master of Physical Education (M.P.Ed.) two years (Four Semesters, Choice Based Credit System) programme is a professional programme meant for preparing Physical Education Teachers for senior secondary (Class XI and XII) level as well as Assistant Professor/Directors/Sports Officers in Colleges/Universities and teacher educators in College of Physical Education. The M.P.Ed. Programme is designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprise of compulsory and optional theory as well as practical courses and compulsory school internship in School/ College/Sports Organizations/Sports Academy/Sports Club.

It aims to engage in relentless pursuit of excellence in Physical education for students interested in sports and games for health, fitness and well-being of the citizens. The programme is designed to develop the professional and academic skills of students who would like to pursue their career in teaching or training sports and physical education. It utilizes best practices to ensure that students exit the programme capable of entering their research and professional field related to their area of study.

	SEMESTE					
Course	Course Title	Course Type		-		Hours
Code			L	Т	Р	Total Credits
MPE.506	Research Process in Physical Education	Core course	2	0	0	2
MPE.507	Physiology of Exercise	Core course	3	0	0	3
MPE.508	Tests, Measurement and			0	0	2
	Evaluation in Physical Education			Ū	U	
MPE.509	Tests, Measurement and Evaluation in Physical Education(Practical)	Skill	0	0	2	1
	Elective ( Any one	of following)			1	
MPE.510	Yogic Sciences	Elective	3	0	0	3
		course				
MPE.511	Adapted Physical Education	Elective	3	0	0	3
		course		-	-	-
	Practical C					
MPE.512	Practical-1	Skill	0	0	6	3
	1. Running Events			-	-	-
	2.Gymnastics					
	3. Swimming.					
	(Any one)					
MPE.513	Practical-2	Skill	0	0	6	3
	Flag Hoisting, March Past,	_				
	Ceremonies Like Opening,					
	Closing, Victory(During Intra					
	Murals Competitions) Of					
	Different Sports And Games/					
	Lead Up Games/ Minor					
	Games/ Relay Games (Two					
	Practicals for each subject)					
MPE.514	Practical-3	Skill	0	0	6	3
	Yoga				_	_
	Aerobics/Self Defence					
	Techniques-Martial Arts,					
	Taek-won-do/ Shooting/					
	Archery –(Any One activity +					
	Yoga)					
MPE.515	Practical-4	Skill	0	0	6	3
	Adventure Activities (outdoor	·	Ĩ	<u> </u>		-
	camps-hiking, trekking etc.)/					
	Calisthenics Activities					
	Inter-disciplinary Courses(fo	or other Depa	rtm	ent	s)	1
MPE 516	Yoga and Well Being	IDC 2	0		0	2
	Total	10	Ö		26	25
				· · · · ·		

#### SEMESTER -I

SEMESTER -II						
Course Code	Course Title	Course Type	L	Т	Р	Total Credits
MPE521	Applied Statistics in Physical Education	Core course	3	0	0	3
MPE.522	Sports Biomechanics & Kinesiology	Core course	3	0	0	3
MPE.523	Sports Management and Curriculum Designs in Physical Education	Core course	3	0	0	3
MPE.524	Research Proposal	Skill	0	0	2	1
	Electi	ve ( Any one	of fo	llow	ving)	•
MPE.525	Sports Journalism and Mass Media	· ·	3	0	0	3
MPE.526	Athletic Care and Rehabilitation	Elective course	3	0	0	3
	Practic	al			1	
MPE.527	Practical-5 Track and Field II: Jumping events + Hurdles *Gymnastics/ *Swimming (*any one)	Skill	0	0	6	3
MPE.528	Practical-6 Games Specialization- Kabaddi, Kho-Kho, Badminton/ Table Tennis/ Tennis/ Squash/ Baseball/ Volleyball/ Basketball/ Cricket/ football/ Handball/ Hockey/ Netball/ Softball (Any two games.)* <b>Subject to</b> availability of facility	Skill	0	0	6	3
MPE.529	Practical-7 Teaching Lessons of Indigenous Activities and Sports- 5 Lessons(4 Internal & 1 External)	Skill	0	0	6	3
MPE.530	Practical-8 Class room Teaching Lessons on theory of different Sports & Games- 5 Lessons (4 Internal & 1 External)	Skill	0	0	6	3
MPE 591	Internship	Skill	0	0	8	4
	Inter-disciplinary Courses (f	or other Dep	artm	ent	s)	-
MPE 532	Nutrition and Fitness Management	IDC	2	0	0	2
	Total		14	0	34	31

#### **SEMESTER -II**

#### SEMESTER -III

Course	Course Title	Course '	Гуре	(	Credi	it Hours
Code			L	Т	Р	Total Credits
MPE551	Science of Sports Training	Core	3	0	0	3
		course				
MPE.552	Sports Medicine	Core course	3	0	0	3
MPE.553	Health Education and Sports Nutrition		3	0	0	3
	Elective ( Any one	of follow	ing)			
MPE.554	Fundamentals of Sports Engineering	Elective course	3	0	0	3
MPE.555	Physical Fitness and Wellness	Elective	3	0	0	3
		course				
	PRACTICAL					
MPE556	Practical-9 Track and Field III: Throwing Events +introduction of Heptathlon event. *Gymnastics/*Swimming (*Any One)	Skill	0	0	6	3
MPE.557	Practical-10 Games Specialization- III Boxing/ Fencing/ Judo/ Karate/ Wrestling/ Wushu (Any Two)	Skill	0	0	6	3
MPE.558	Practical-11 Coaching Lessons of Track and Field/ Gymnastics/ Swimming - 5 Lessons (4 Internal & 1 External)	Skill	0	0	6	3
MPE.559	Practical-12 Coaching Lessons of Game Specialization - 5 Lessons (4 Internal & 1 External)	Skill	0	0	6	3
MPE 592	Internship	Skill	0	0	8	4
	Total		12	0	32	28
	Inter-disciplinary Courses(for o	-	1	-	· ·	
MPE516	Yoga and Physical Well Being	IDC	2	0	0	2

#### SEMESTER -IV

Course Code	Course Title	Course Type		Cr	edit H	ours
			L	Т	Р	Total Credits
MPE.571	Information & Communication Technology (ICT) in Physical Education	Core course	3	0	0	3
MPE.572	Sports Psychology and Sociology	Core course	3	0	0	3
MPE.600	Dissertation	Skill	0	0	6	3
	Elective ( Any one of	f following	ξ)			
MPE.574	Value and Environmental Education	-	3	0	0	3
MPE.575	Pedagogy in Physical Education	Elective	3	0	0	3
	PRACTICA	L				
MPE576	Practical-13 Track and Field Introduction of Decathlon event *Gymnastics * Swimming Practical Skill (*any one)	Skill	0	0	6	3
MPE.577	Practical-14 Games Specialization- Practical skills (any two)	Skill	0	0	6	3
MPE.578	Practical-15 Officiating Lessons of Track and Field/ Gymnastic/ Swimming - 5 Lessons (4 Internal & 1 External)	Skill	0	0	6	3
MPE.579	Practical-16 Officiating Lessons of Game Specializations - 5 Lessons (4 Internal & 1 External)	Skill	0	0	6	3
	Total		09	0	30	24
	Inter-disciplinary Courses(for	other Dep	partr	nen	its)	
MPE 532	Nutrition and Fitness Management	IDC	2	0	0	2
	Grand Total		41	0	122	108

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#### SEMESTER-I

#### **Course Code: MPE506 Course Title: Research Process in Physical Education**

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the meaning of research
- Classify different types of research •
- Analyse the different Methods of Research •
- Discuss the types of Sampling •
- Use different tools for data collection
- prepare a research proposal

### **UNIT I – Introduction**

Science and Scientific method, Meaning and Definition of Research - Need, Nature and Scope of research in Physical Education. Classification of Research, Characteristics of a good research and good researcher, Identification of Research Problem, Criteria for selection of a problem, Literature review-purpose, Need, Kind, Sources, abstract prepration and importance, Hypothesisdefinition, types, characteristics, Testing hypothesis

### **UNIT II – Methods of Research**

Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism and Weakness of historical research, Experimental Research - Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design

### **UNIT III – Sampling and Tools**

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

Questionnaire- types, constructing and administering questionnaire, standardization procedure

Interview- planning interview, preparing question schedule, conducting interview, summing up

Observation- Observational procedure, recording observation (check list, score card)

Method of Writing Research proposal, Thesis

Rating scale

Back materials.

### **UNIT IV – Data collection tools**

Chapterization of Thesis / Dissertation, Front Materials, Body of Thesis -

#### 15 hours

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10 hours

10 hours

Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals ,Mechanics of writing Research Report, Footnote and Bibliography writing. Precautions for writing research report.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 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, Londonl Routledge Press
- 4. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;
- 5. Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi
- 6. Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi
- 7. Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam
- 8. Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- 9. Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication
- 10. Scott, M. Gladys (ed.) Research Methods in health, physical education and recreation. Washington, D.C., American Association for Health, Physical Education and Recreation, 1968.
- 11. Sharma, Y. P. Physical Education and Research Methodology. New Delhi; Reliance Publishing House, 1997
- 12. Weimer. Jon Research Techniques in Human Engineering, Prentice Hall: New Jersey, 1994.

#### Course Code: MPE.507 Course Title: Physiology of Exercise

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the Structure of the Skeletal Muscle
- Infer the effect of exercise on muscular system
- Analyse the importance of exercise on Cardiovascular System
- Interpret the relation between exercise and respiratory system
- Analyse the relation between Metabolism and Energy Transfer

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#### UNIT I – Skeletal Muscles and Exercise

Definition of physiology and exercise physiology, Importance & Role of exercise physiology in the field of physical education & sports, Muscle: Structure, Function and type of muscle. Macro & Micro Structure of the Skeletal Muscle, Chemical Composition. Sliding Filament theory of Muscular Contraction. Types of Muscle fibre. Muscle Tone, Chemistry of Muscular Contraction – Heat Production in the Muscle, Effect of exercises and training on the muscular system.

#### UNIT II – Cardiovascular System and Exercise

Blood components & functions, structure, group and blood clotting. Heart Valves and Direction of the Blood Flow – Conduction System of the Heart – Blood Supply to the Heart – Cardiac Cycle – Stroke Volume – Cardiac Output – Heart Rate – Factors Affecting Heart Rate – Cardiac Hypertrophy – Effect of exercises and training on the Cardio vascular system.

#### **UNIT III – Respiratory System and Exercise**

Mechanics of Breathing – Respiratory Muscles, Minute Ventilation – Ventilation at Rest and During Exercise. Diffusion of Gases – Exchange of Gases in the Lungs –Exchange of Gases in the Tissues – Control of Ventilation – Ventilation and the Anaerobic Threshold. Oxygen Debt – Lung Volumes and Capacities – Effect of exercises and training on the respiratory system. Metabolism – ATP – PC or Phosphagen System – Anaerobic Metabolism – Aerobic Metabolism – Aerobic and Anaerobic Systems during Rest and Exercise. Short Duration High Intensity Exercises – High Intensity Exercise Lasting Several Minutes – Long Duration Exercises

## UNIT IV –Climatic conditions and sports performance and 10 hours ergogenic aids

Meaning, definition, classification and benefits of ergogenic aids, Energy cost of various sports activity, Variation in Temperature and Humidity – Thermoregulation – Sports performance in hot climate, Cool Climate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance. Doping: definition, classes, methods, side effect, detection & section against doping

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 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.

#### 10 hours

#### 15 hours

- 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. Sanders co.
- 7. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
- 8. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
- 9. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
- 10. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
- 11. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company.

#### Course Code: MPE508

Course Title: Test, Measurement and Evaluation in Physical Education

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#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the basic concepts and practices adopted in evaluation.
- Analyse the various tests used in Physical education.
- Categorise Anthropometric and Aerobic-Anaerobic Tests
- Apply various skill tests in Physical education

#### **UNIT I – Introduction**

Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection -Meaning, definition and establishing Validity, Scientific Authenticity. Reliability, Objectivity. Norms \_ Administrative Considerations, classification of tests, construction of test- Physical fitness test, knowledge tests, sports skill tests, organization and administration of test results. Suggestion for administer test- Medical examination, Testing, Personal time, Economic test record table report, Purpose justification worthy change in methodology

#### **UNIT II – Motor Fitness Tests**

Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test Mc-cloyes (Separately for boys and girls) -JCR test. Motor Ability; Barrow Motor Ability Test – Scott General motor Ability test-Newton Motor Ability Test – Muscular Fitness – Kraus Weber Minimum Muscular Fitness Test, Roger strength test, Tuttle Pulse ratio test,

#### 10 hours

10 hours

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#### UNIT III – Physical Fitness Tests

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

Physiological Testing: Hymen's Cardio Pulmonary Test (CPI), Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac. Measure of posture- 10WA posture test

#### **UNIT IV –Skill Tests**

#### 12 hours

Specific Spots Skill Test: Badminton: Miller Wall Volley Test, Lockhart and Mc Pherson Badminton test, French Short and Long service test. Basketball: Johnson Basketball Test, Knox Basketball test, AAPHERD Basketball test battery, Harrison Basketball Ability Test. Cricket: Sutcliff Cricket test. Hockey: Friendel Field Hockey Test, Harban's Hockey Test, Volleyball: Russel Lange Volleyball Test, Brady's Volleyball Test, AAHPER Volleyball test, SAI Volleyball test. Football: Mor-Christian General Soccer Ability Skill Test Battery, SAI Football skill test, Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test. Anxiety scale SCAT Self-Motivation Inventory (SMF), Personality (Martens and others), Questionnaire, Need Achievement Motivation Test, Socioeconomic Techniques

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
- 2. Baumgartner, T. A. and A. S. Jackson "Measurement for Evaluation in Physical and Exercise Science" Wm. C. Brown Publishers, University of Houston, U.S.A,1995.
- 3. Marrow James R., A.W. Jackson, Measurement and Evaluation in Human Performance Human KineticsPublisher, Urban Champaign, Illinois, U.S.A, 1995.
- 4. Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
- 5. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company
- 6. Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc
- 7. Johnson, B.L and Nelson, J.K, Practical Measurement for Evaluation in Physical Education, Delhi,Surjeet Publications, 1988.
- 8. Clake, H.H and Clarke, D.H. Application of Measurement to Physical Education, Englewood Cliffs, NJ, Prentice Hall, 1991.

- Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publising Co. Inc
- 10. Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications
- 11. Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
- 12. Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research
- 13. Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm IL: Human Kinetics
- 14. Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

#### **Course Code: MPE 509**

Course Title: Test, Measurement and Evaluation in Physical Education (Practical)

#### Practical will be on various physical fitness and skill tests

#### Course Code: MPE510

#### **Course Title: Yogic Sciences (Elective)**

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Create Interest for Yogic Practices and Meditation
- Perform Yogic practices with proficiency
- Actively participate in Sports and Games
- To make a report on Sports facilities/Counselling Centers
- Manage Stress and Develop Resilience through Meditation

#### **Unit I – Introduction**

Meaning and Definition of Yoga, historical background and origin of yoga, Relationsbip between yoga with physical education and sports, Astanga Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi, Concept of Yogic Practices; Principles of Breathing – Awareness – Relaxation, Sequence – Counter pose – Time – Place – Clothes – Bathing – Emptying the bowels – Stomach – Diet – No Straining – Age – Contra-Indication – Inverted asana – Sunbathing.

#### Unit II – Aasanas and Pranayam

Loosening exercise: Techniques and benefits. Asanas: Types- Techniques and Benefits, Surya Namaskar: Methods and benefits. Pranayama: Types-

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#### 10 hours

#### 15 hours

**L T P Cr in** 0 0 2 1 Methods and benefits. Nadis: Meaning, methods and benefits, Chakras: Major Chakaras- Benefits of clearing and balancing Chakras.

Shat Kriyas- Meaning, Techniques and Benefits of Neti – Dhati – Kapalapathi- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha.

#### Unit III – Mudras

#### 10 hours

Meaning, Techniques and Benefits of Hasta Mudras, Asamyukta hastam, Samyukta hastam , Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techiques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.

#### Unit V – Yoga and Sports

### 10 hours

Yoga Supplemental Exercise – Yoga Compensation Exercise – Yoga Regeneration Exercise- Power Yoga. Role of Yoga in Psychological Preparation of athlete: Mental Wellbeing, Anxiety, Depression Concentration, Self-Actualization. Effect of Yoga on Physiological System: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory System. Yoga and Treatment: Therapeutic and Corrective Values of Yoga Practices special reference to disease like: Diabetes, Asthma, Constipation, Obesity, Cervical, Gastric and Acidity.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- Debnath, Monica "Basic Core Fitness through Yoga and Naturopathy" (2006-07) Sports Publication, G-6,23/23B EMCA House, Ansari Road, Darya Ganj New Delhi
- 2. Yogeswar, "Text Book of Yoga",(2004) Penguin Books.
- 3. Harvey, Paul "Yoga for Everybody", (2001)Tucker Slingsby Publisher Ltd.
- 4. Osho, "Dhayan Vigyan" A Rebel Book, (2005)Tao Publishing Pvt. Ltd., 50 Koregoan Park, Pune-411001, MS India.
- Osho, "144 Meditation" A Rebel Book, (2006)Tao Publishing Pvt. Ltd., 50 Koregoan Park, Pune-411001, MS India.
- Osho, "Meditation the First and the Last Freedom" (2006) A Rebel Book, Tao Publishing Pvt. Ltd., 50 Koregoan Park, Pune-411001, MS India.
- 7. George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
- 8. Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prakashan.
- 9. Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
- 10. Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.

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- 11. Karbelkar N.V.(1993) Patanjal Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
- 12. 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.
- 14. Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
- 15. Sharma, Lalita "All You Wanted to Know About Yoga", (1991)Sterling Publisher Pvt. Ltd.
- 16. Sarawati, S Satyananda "Asana, Pranayam, Mudra and Bandhas".
- 17. Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
- 18. Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
- 19. Swami Satyananda Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.
- 20. Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
- 21. Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication.
- 22. Tiwari O.P. (1998), Asanas-Why and How. Lonavala: Kaivalyadham. .

#### Course Code: MPE511

#### **Course Title: Adapted Physical Education (Elective)**

#### Learning Outcome

On the completion of the course the students shall be able to;

- Develop understanding on different types of disability
- Analyse special adapted programme for various types and categories of physical disability
- Critically analyse different social welfare programmes for disabled Manage Stress and Develop Resilience through Meditation

#### **Unit 1 Introduction To Adapted Physical Education**

Meaning and definitions, Aims and objectives, Need and importance, Role of physical education in adapted physical education, Brief historical review of adapted physical education Classification of Disablity: Changing concept of disability handicaps, retardation, physically and mentally challenged, Physical disability, Characteristics, category, Functional limitation, general causes, Mental retardation and Learning disability, Characteristics and category, Functional limitation, general causes, Hearing and speech impairment, Characteristics and category, Functional limitation, general causes, Visual , impairment, Characteristics, Category, Functional limitation, General causes Other disabled conditions, Behavioral problem associated with disability, Adjustment problem, Emotional problem, Personality problem, Social problem, Social stigma, Discrimination, Social rejection

#### 12 hours

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#### UNIT-II Adapted Physical Education Programmes

Guiding principles for adapted physical education programme (AAHPER principle)

Physical education programme for disabled of : Elementary school, Middle school, High school

Special adapted programme for various types and categories of physical disability

Regular physical activity, Informal games and special activities, Informal and formal competitions, Special adapted programme for hearing and speech impairment, visual impairment, Mental retardation and learning impairment

Regular physical activity, Informal games and special activities, Informal and formal competitions

#### UNIT-III Activities for Disabled

Co-curricular activities for disabled, Outdoor programmes for disabled Adventure based outdoor programme, Creativity development and hobby & cultural development programme, Aquatic activity programme for disabled Importance of activity for disabled, Nature of aquatic activity programme based on types of various disability, Rehabilitative role and importance of aquatic activity

#### UINIT-IV

#### 1. Rehabilitation And Govermental Welfare Programmes

Rehabilitation: Aims and objectives of rehabilitation, Meaning of functional and occupational in rehabilitation , Importance of adapted programme in rehabilitation, Functional rehabilitation, Psychological rehabilitationadjustment, environmental and personality development, Governmental Welfare Programme, Provisions of special rights and privilege for disabled through legislations, Social welfare programmes for disabled, Mass public education/ awareness programme, Education approach, Service approach, Legislative approach

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Anoop Jain, "Adapted Physical Education" sports Publication, Ashok Vihar Delhi
- 2. Arthur G. Miller & james, "Teaching Physical Activities to impaired youth" John Wilag & Sons Inc. Canada
- 3. Arthur S. Daniels & Euilya, "Adapted Physical Education" Harpet & Row Publisher, New York.
- 4. Auxter, Byler, Howtting, "Adapted Physical Education and Reactions" Morbey- St. Louis Mirrauri.
- 5. K. Park, "Preventive Social Medicine" M/s Banarsidas Bhanot Publishers, Prem Nagar, Jabalpur
- 6. Ronald W. French & Paul J., "Special Physical Education" Charles E. Merrics Publishing Co. Edinburgh, Ohio.

10 hours

11 hours

#### **Course Code: MPE512 Course Title: PRACTICAL-1** Any one Of the Following-

- 1. Running Events
  - 2. Gymnastics
  - 3. Swimming
- Course Code: MPE513 Course Title: PRACTICAL-2 (Two Practicals for each subject)

**National Flag**: Meaning, concept and significance of National Flag, Symbolism of Tri-colour and Wheel. Code of hoisting or lowering of Flag, Dimensions of the Flag & tri-colour proportions. Honour of the Flag and its use. Penalty of misusing or dishonouring the Flag.

**Opening and Closing Ceremonies**: Schedule and formality of Opening Ceremony- Unfurling of Flag, Flame igniting, Oath, March-Past of players/teams, Salutation, Declaration of Opening of the Meet, brief address by the guests, announcement of beginning of competition Victory & Prize distribution Ceremony- Planning of schedule for victory ceremony.

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

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

#### Course Code: MPE514 Course Title: PRACTICAL-3 (Any one activity + Yoga)

Yoga, Asanas prescribed by Maharshi 'Patanjali', Shudhi Kriyas, jalneti, sutraneti, dugdhaneti, kunjal, Nauli, Bhastika, shatkriya, Pranayams, Anulom-vilom, Kapalbhati, AEROBICS

Rhythmic Aerobics - dance Low impact aerobics High impact aerobics Aerobics kick boxing Moves

March single, basics, side to side alternate, turn s/a ,double side to side, step touch, grapevine, knee up, leg curl, kick front, toe touch, kick side, side

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lunge, over the top, back lunge, straddle, kick front, travel s 11. kick side, corner, heel to reft, shape, 'e' shape, shapew, shape, repeater left mode Warm up and cool down Being successful in exercise and adaptation to aerobic workout. SELF DEFENCE TECHNIQUES-MARTIAL ARTS, TAEK-WON-DO/ SHOOTING/ ARCHERY

#### Course Code: MPE515 Course Title: PRACTICAL-4

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**ADVENTURE ACTIVITIES:** Trekking, Wall climbing, River crossing, Mountaineering, etc

**MASS DEMONSTRATION ACTIVITIES**- lezim, dumb-bell, umbrella, tipri, wands, hoops, free arms drill, folk dances, etc.(Students are expected to learn and organize mass drill in school situation)

- Apparatus/ Light apparatus Grip
- Attention with apparatus/ Light apparatus
- Stand at ease with apparatus/ light apparatus
- Exercise with verbal command, drum, whistle and music Two count, Four count, Eight count and Sixteen count.
- Standing Exercise
- Jumping Exercise
- Moving Exercise
- Combination of above all

**MALKHAMB:** Table of Exercises on Malkhamb should be prepared internally for teaching. General out-line of the contents of teaching of theory of Games and Sports Introduction of the game/sport and historical development with special reference to India, Orientation of the students to the play area and equipment used in the game/sport, Important tournaments held at National and International levels, Distinguished sports awards and personalities related to the Game/sport. Warming-up- General free hand exercises, specific work out using equipment. Fundamental skills, Lead up activities, General rules and their interpretations, Duties of officials, officiating in class competitions and Intramurals, Marking of the play area.

#### Course Code: MPE516 Course Title: Yoga and Well Being

#### Learning Outcomes

Students would be able to

- 1. Understand the importance of Yoga
- 2. Practice different types of yoga
- 3. Analyse the relationship between yoga and welbeing

#### Unit I

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Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual; Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy, Yogic Concept of Health and Disease: Concept of Adhi and Vyadhi; Meaning and definitions,

#### 16

#### Unit II

Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagatam; Potential causes of Ill-health: Tapatrayas and Kleshas, Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva; Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi

#### Unit III

Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing; Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing; Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Bhrantidarsana, Alabdha bhumikatva, Anavasthitatva, Duhkha and Daurmanasya

#### Unit IV

Yogic Diet - General Introduction of Ahara; Concept of Mitahara; Classification in Yogic diet according to traditional Yoga texts;; Diet according to the body constitution (Prakriti) – Vata, Pitta and Kapha as also Gunas, Concepts of Diet Pathya and Apathya according to Gheranda Samhita,Hatha Pradeepika and Bhagavad Gita; Importance of Yogic Diet in Yog Sadhana and its role in healthy living; Diet according to the body constitution (Prakriti) – Vata, Pitta and Kapha as also Gunas.

#### **Suggested Readings:**

- 1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
- 2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
- 3. T.S. Rukmani: Patanajala Yoga Sutra
- 4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
- 5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

#### 8 hours

#### 7 hours

#### SEMESTER II

#### **Course Code: MPE521 Course Title: Applied Statistics in Physical Education**

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Recognize the importance of statistics in the field of physical education
- Use different statistical techniques to different problems
- Interpret the analyzed data

#### **UNIT I – Introduction**

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

#### UNIT II – Data Classification, Tabulation and Measures of 12 hours Central Tendency, Measures of Dispersions and Scales

Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode. Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale

#### UNIT III – Probability Distributions and Graphs

Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis. Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.

#### **UNIT IV – Inferential and Comparative Statistics**

Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation – calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- 2. Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.

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10 hours

- 3. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;
- 4. Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi
- 5. Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- 6. Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication
- 7. Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.

#### Course Code: MPE522 Course Title: Sports Biomechanics and Kinsesiology

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Recognize the importance of applied kinesiology and Sports Biomechanics
- Analyse the action of muscles
- Classify the different types of motion and force and its application in sports

#### **UNIT I – Introduction**

Meaning, nature, role and scope of Applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity -Line of gravity plane of the body and axis of motion, Vectors and Scalars. Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, circular motion, uniform motion. Principals related to the law of Inertia, Law of acceleration, and law of counter force

#### UNIT II – Muscle Action and force

Origin, Insertion and action of muscles: Pectoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius, serratus, Sartorius, Rectus femoris, Abdominis, Quadriceps, Hamstring, Gastrocnemius. Meaning and definition of force- Sources of force -Force components .Force applied at an angle -pressure -friction -Buoyancy, Spin - Centripetal force -Centrifugal force

#### UNIT III- Projectile and Lever

Freely falling bodies -Projectiles -Equation of projectiles stability Factors influencing equilibrium - Guiding principles for stability -static and dynamic stability. Meaning of work, power, energy, kinetic energy and potential energy. Leverage -classes of lever - practical application. Water resistance - Air resistance -Aerodynamics.

#### 10 hours

#### 12 hours

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#### UNIT IV – **Movement Analysis**

Analysis of Movement: Walking, Running and Jumping. Types of analysis: Kinesiological, Biomechanical. Cinematographic. Methods of analysis -Qualitative, Quantitative, Predictive

Transaction Mode: Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Deshpande S.H.(2002). Manav Kriya Vigyan Kinesiology (Hindi Edition) Amravati :Hanuman Vyayam Prasarak Mandal.
- 2. Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005.
- 3. Steven Roy, & Richard Irvin. (1983). Sports Medicine. New Jersery: Prentice hall.
- 4. Thomas. (2001). Manual of structural Kinesiology, New York: Me Graw Hill.
- 5. Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)
- 6. Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.
- 7. Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

#### **Course Code: MPE523**

**Course Title: Sports Management and Curriculum Design in Physical Education** 

#### **Learning Outcomes**

On the completion of the course the students shall be able to;

- Discuss the basic principles and importance of Sports management
- List the Steps in programme development in sports
- Analyse the guidelines for Purchase and Supplies of Equipment •
- Prepare curriculum for Physical education

#### **UNIT I – Introduction to Sports Management**

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

#### **UNIT II – Program Management and Class Management**

Importance of Programme development and the role of management, Factors influencing programme development, Facilities management. Steps in development, Competitive Sports programme Programs, Benefits, Management Guidelines for School, Colleges Sports Programs, Management Problems in instruction programme, Community Based Physical Education and Sports program. Class Management: Meaning, Steps and principle.

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10 hours

10 hours

#### UNIT III – Equipments and Public Relation

Purchase and Care of Supplies of Equipment, Guidelines for selection of Equipments and Supplies, Purchase of equipments and supplies, Equipment Room, Equipment and supply Manager. Guidelines for checking, storing, issuing, care and maintenance of supplies and equipments. Public Relations in Sports: Planning the Public Relation Program – 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 centred, Activity centred, Community centred, Forward looking principle, Principles of integration, Theories of curriculum development, Conservative (Preservation of Culture), Relevance, flexibility, quality, contextually and plurality. Approaches to Curriculum; Subject centred, Learner centred and Community centred, Curriculum Framework. Factors that affecting curriculum: Sources of Curriculum materials –Sports Sciences – Curriculum research, Objectives of Curriculum research –

evaluation. **Transaction Mode:** Lecture, demonstration, group discussion, project

Importance of Curriculum research. Evaluation of Curriculum, Methods of

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

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

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- 12. NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
- 13. NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.
- 14. Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House.
- 15. Yadvnider Singh. Sports Management, New Delhi: Lakshay Publication.

#### Course Code: MPE524 Course Title: Research Proposal (Practical)

Practical will be conducted on how to identify the research problem, finding the research gap, formulation of objectives and hypothesis, review of related literature and development of a proposal for research.

#### Course Code: MPE525 Course Title: Sports Journalism and Mass Media (Elective)

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the Meaning and Definition of Journalism
- Analyse the ethics in sports
- Discuss the Concept of Sports Bulletin, Journalism and sports education
- Analyse the role of mass media on sports
- Prepare report on sports

#### **UNIT I Introduction**

Meaning and Definition of Journalism, Ethics of Journalism – Canons of journalism- Sports Ethics and Sportsmanship – Reporting Sports Events. National and International Sports News Agencies.

#### **UNIT II Sports Bulletin**

Concept of Sports Bulletin: Journalism and sports education – Structure of sports bulletin – Compiling a bulletin – Types of bulletin – Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education – Sports organization and sports journalism – General news reporting and sports reporting.

#### UNIT III Mass Media

Mass Media in Journalism: Radio and T.V. Commentary – Running commentary on the radio – Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment- Editing – Publishing.

Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games. Preparing report

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of an Annual Sports Meet for Publication in Newspaper. Organization of Press Meet.

#### **UNIT IV Journalism**

Sports organization and Sports Journalism – General news reporting and sports reporting. Methods of editing a Sports report. Evaluation of Reported News. Interview with and elite Player and Coach.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi : Surjeet Publications
- 2. Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication
- 3. Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication
- 4. Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
- 5. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
- 6. Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication,.
- 7. Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication
- 8. Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited.
- 9. Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
- 10. Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation. 43

#### Course Code: MPE526

**Course Title: Athletic Care and Rehabilitation (Elective)** 

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the objectives of corrective physical Education
- Discuss the various Rehabilitation Exercises
- Infer the application of Massage as an aid for relaxation
- Take precaution for Sports Injuries Care, Treatment and Support

#### **Unit I – Corrective Physical Education**

Definition and objectives of corrective physical Education. Posture and body mechanics, Standards of Standing Posture. Value of good posture, Drawbacks and causes of bed posture. Posture test – Examination of the spine.

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#### Unit II – Injury inspois and its Deformities

Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises.

#### Unit III – Rehabilitation Exercises, Sports Injuries Care, Treatment and Support

Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF techniques and principles.

Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports – Principles of apply cold and heat, infrared rays – Ultrasonic, Therapy – Short wave diathermy therapy, Hydrotherapy. Principles and techniques of Strapping and Bandages.

#### Unit IV – Massage and Athletic Nutrition

Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological , Chemical, Psychological effects of massage – Indication / Contra indication of Massage – Classification of the manipulation used massage and their specific uses in the human body – 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, Deep massage.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

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

#### 15 hours

### 10 hours

#### **Course Code: MPE527 Course Title: PRACTICAL-5** Track and Field Ii: Jumping Events / Swimming / **Gymnastics (Any One)**

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

#### **Course Code: MPE528 Course Title: PRACTICAL-6**

The Candidate has choice to select any two of the following games as the Specialization - II (Second best) in 2nd Semester. (Kabaddi, Kho-kho, Badminton/ Table Tennis/ Tennis/ Squash/ Baseball/ Volleyball/ Basketball/ Cricket/ football/ Handball/ Hockey/ Netball/ Softball) (Any Two games subject to availability of facility)

#### **Course Code: MPE529 Course Title: PRACTICAL-7** Teaching Lessons of Indigenous activities and Sports (Five Lessons: Four Internal and One External)

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

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

#### Course Code: MPE530 **Course Title: PRACTICAL-8 Classroom Teaching Lessons on Theory of different Sports and Games** (Five Lessons: Four Internal and One External)

The students of M.P.Ed - II Semester need to develop proficiency in taking teaching lessons as per selected games and sport or game specialization. In view of this, the students shall be provided with selected or specialized game teaching experience. The duration of the lesson to be conducted by these

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students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

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

Course code: MPE591 Course Title: Internship

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#### Course code: MPE532 Course Title: Nutrition and Fitness Management

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#### Unit-I

- Basic concept on Food, Nutrients, Nutrition, Malnutrition and Health: Scope of Nutrition. Classification of Food, Classification of Nutrients.
- Minimum Nutritional Requirement and RDA -Formulation of RDA and Dietary Guidelines Reference Man and Reference Woman. Adult consumption unit

#### Unit-II

- Understanding Fitness, Definition of fitness, health and related terms, Assessment of fitness Approaches for keeping fit
- Importance of nutrition, Role of nutrition in fitness, Nutritional guidelines for health and fitness, Nutritional supplements

#### Unit-III

- Growth & development from infancy to adulthood: Somatic, physical, brain and mental development, puberty, menarch, prepubertal and pubertal changes, Factors affecting growth and development. Importance of Nutrition for ensuring, adequate development
- Lipids Definition, Classification & Properties. Fatty acids composition, properties, types.

#### Unit-IV

- Proteins Definition, Classification, Structure & properties.Amino acids Classification, types, functions.
- Proteins Sources, daily requirements, functions. Effect of too high too low proteins on health. Digestion & absorption. Assessment of Protein quality (BV, PER, NPU). Factors affecting protein bioavailability including anti-nutritional factors.

#### Suggested readings:

1. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi 1989.

- 2. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford row, London 1998
- Dr. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992. Warner W.K. Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.
- 4. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986.
- 5. Emily R. Foster, Karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002.
- 6. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999
- 7. Robert Malt. 90 day fitness plan, D.K. publishing, Inc. 95, Madison Avenue, New York 2001

#### SEMESTER III

#### Course Code: MPE551 Course Title: Science of Sports Training Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the basic principles of sports training
- Develop mastery on techniques of physical fitness
- Critically analyze the effect of drugs on health and methods of dope testing

#### UNIT I – Introduction

Sports training: Definition – Aim, Characteristics, Principles of Sports Training, Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures – Super Compensation – Altitude Training – Cross Training, Adaptation process and conditional adaptation.

#### **UNIT II – Components of Physical Fitness**

Strength: Methods to improve Strength: Weight Training, Isometric, Isotonic, Circuit Training, Speed: Methods to Develop Speed: Repetition Method, Downhill Run, Parachute Running, Wind Sprints, Endurance, Methods to Improve Endurance: Continuous Method, Interval Method, Repetition Method, Cross Country, Fartlek Training

#### UNIT III – Flexibility

Flexibility: Methods to Improve the Flexibility- Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric Training. Training for Coordinative abilities: Methods to improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method, Types of Stretching Exercises.

Training Plan: Macro Cycle, Meso-Cycle. Short Term Plan and Long Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Preparatory Period, Competition Period and Transition Period.

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#### UNIT IV – Training Plan

#### Definition of Doping – Side effects of drugs – Dietary supplements – IOC list of doping classes and methods. Blood Doping – The use of erythropoietin in blood boosting – Blood doping control – The testing programmes – Problems in drug detection – Blood testing in doping control – Problems with the supply of medicines Subject to IOC regulations : over-the- counter drugs (OTC) – prescription only medicines (POMs) – Controlled drugs (CDs). Reporting test results – Education

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue,

#### Suggested readings:

- 1. Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
- 2. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
- 3. Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company
- 4. Daniel, D. Arnheim (1991) Principles of Athletic Traning, St. Luis, Mosby Year Book
- 5. David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University
- 6. Gary, T. Moran (1997) Cross Training for Sports, Canada : Human Kinetics
- 7. Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications
- 8. Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia
- 9. Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications
- 10. Yograj Thani (2003), Sports Training, Delhi : Sports Publications

#### Course Code: MPE552 Course Title: SPORTS MEDICINE

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the principles of therapeutic exercises
- Elaborate the basic rehabilitation techniques
- Critically analyze the different types of injuries and their remedial means

#### **UNIT I – Introduction**

Meaning, definition and importance of Sports Medicine, Definition and Principles of therapeutic exercises. Coordination exercise, Balance training exercise, Strengthening exercise, Mobilization exercise, Gait training, Gym

#### 10 hours

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ball exercise Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE therapy, Aquatic therapy.

#### **UNIT II – Basic Rehabilitation**

Basic Rehabilitation: Strapping/Tapping: Definition, Principles Precautions Contraindications. Proprioceptive neuromuscular facilitation: Definition hold, relax, repeated contractions. Show reversal technique exercises. Isotonic, Isokinetic, isometric stretching. Definition. Types of stretching, Advantages, dangers of stretching, Manual muscle grading.

#### **UNIT III – Spine Injuries and Exercise**

Head, Neck and Spine injuries: Causes, Presentational of Spinal anomalies, Flexion, Compression, Hyperextension, Rotation injuries. Spinal range of motion. Free hand exercises, stretching and strengthening exercise for head neck, spine. Supporting and aiding techniques and equipment for Head, Neck and Spine injuries.

Lower Limb and Abdomen Injuries: Hip: Adductor strain, Dislocation, Strapping. Knee: Sprain, Strain, Strain, Strapping. Ankle: Sprain, Strain, Strapping. Abdomen: Abdominal wall, Contusion, Abdominal muscle strain. Free exercises - Stretching and strengthening exercise for Hip, knee, ankle and Foot. Supporting and aiding techniques and equipment for Lower limb and Abdomen injures.

#### **UNIT IV – Upper Extremity Injuries and Exercise**

Upper Limb and Thorax Injuries: Shoulder: Sprain, Strain, Dislocation, and Strapping. Elbow: Sprain, Strain, Strapping. Wrist and Fingers: Sprain Strain, Strapping. Thorax, Rib fracture. 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.

Transaction Mode: Lecture, demonstration, group discussion, project method, seminar, dialogue,

#### Suggested readings:

- 1. Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
- 2. James, A. Gould & George J. Davies. (1985). Physical Physical Therapy. Toronto: C.V. Mosby Company.
- 3. Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surjeet Publication.
- 4. Pande. (1998). Sports Medicine. New delhi: Khel Shitya Kendra
- 5. The Encyclopedia of Sports Medicine. (1998). The Olympic Book of Sports Medicine, Australia: Tittel Blackwell Scientific publications.

#### 10 hours

15 hours

#### Course Code: MPE553 **Course Title: Health Education and Sports Nutrition**

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain aim, objective and principles of Health Education
- Elaborate the health related problems in India
- Develop competence in health management techniques

#### **Unit - I Health Education**

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 - II Health Problems in India

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

#### Unit- III – Hygiene and Health

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

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

#### **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.

Transaction Mode: Lecture, demonstration, group discussion, project method, seminar, dialogue

#### **Suggested Readings:**

- 1. Bucher, Charles A. "Administration of Health and Physical Education Programme".
- 2. Delbert, Oberteuffer, et. al." The School Health Education".
- 3. Ghosh, B.N. "Treaties of Hygiene and Public Health".
- 4. Hanlon, John J. "Principles of Public Health Administration" 2003.
- 5. Turner, C.E. "The School Health and Health Education".

#### 15 hours

## 10 hours

10 hours

#### 10 hours

#### 30

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- 6. Moss and et. At. "Health Education" (National Education Association of U.T.A.)
- 7. Nemir A. 'The School Health Education" (Harber and Brothers, New York).
- 8. Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
- 9. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
- 10. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

#### Course Code: MPE554 Course Title: Fundamentals of Sports Engineering (Elective)

Learning Outcomes

On the completion of the course the students shall be able to;

- Explain the fundamentals of sports engineering
- Critically analyze the sports dynamics
- Evaluate the sports infrastructure and there utility

**Unit - I Introduction to sports engineering and Technology 10 hours** Meaning of sports engineering, human motion detection and recording, human performance, assessment, equipment and facility designing and sports related instrumsentation and measurement.

#### Unit - II Mechanics of engineering materials

Concept of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities –Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc.

#### **Unit- III Sports Dynamics**

Introduction to Dynamics, Kinematics to particles – rectilinear and plane curvilinear motion coordinate system. Kinetics of particles – Newton's laws of Motion, Work, Energy, Impulse and momentum. Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation

#### Unit- IV Building and Maintenance:

Sports Infrastructure- Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library, Sports Hostels, etc.

Requirements: Air ventilation, Day light, Lighting arrangement, Galleries, Store rooms, Office, Toilet Blocks (M/F), Drinking Water, Sewage and Waste Water disposal system, Changing Rooms (M/F), Sound System (echo-free), Internal arrangement according to need and nature of activity to be

# 10 hours

12 hours

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performed, Corridors and Gates for free movement of people, Emergency provisions of lighting, fire and exits, Eco-friendly outer surrounding. Maintenance staff, financial consideration.

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. Franz K. F. et. al., Editor, Routledge Handbook of Sports Technology and Engineering (Routledge, 2013)
- 2. Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)
- 3. Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)
- 4. Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)
- 5. Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013)
- 6. Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003)
- 7. Colin White, Projectile Dynamics in Sport: Principles and Applications
- 8. Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)

#### Course Code: MPE555 Course Title: PHYSICAL FITNESS AND WELLNESS (Elective)

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#### Learning Outcomes

On the completion of the course the students shall be able to;

- Explain he concept, techniques and components of physical fitness
- Elaborate the relationship between nutrition and health
- Analyze the utility of exercise in maintaining good health

#### **Unit I – Introduction**

Meaning and Definition" of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.

#### **Unit II – Nutrition**

Nutrients; Nutrition labelling information, Food Choices, Balance Diet, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders, Proper hydration, the effects of performance enhancement drugs

### 10 hours

#### **Unit III – Aerobic Exercise**

Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits. Planiry: for fitness progress, for different age group and for different sex.

Flexibility Training, Relaxation Techniques and Core Training, Safety techniques (stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques. Pilates, Yoga.

#### **Unit IV – Anaerobic Exercise**

#### 10 hours Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness. and proper breathing techniques). Weight training principles and concepts; basic resistance exercises (including free hand exercise, free weight exercise, weight machines, exercise bands and tubing. medicine balls, fit balls) Advanced techniques of weight training

**Transaction Mode:** Lecture, demonstration, group discussion, project method, seminar, dialogue

#### Suggested readings:

- 1. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surject Publication Delhi 1989.
- 2. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford row, London 1998
- 3. Dr. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992. Warner W.K. Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.
- 4. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986.
- 5. Emily R. Foster, Karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002.
- 6. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999
- 7. Robert Malt. 90 day fitness plan, D.K. publishing, Inc. 95, Madison Avenue, New York 2001

#### Course Code: MPE556 **Course Title: PRACTICAL-9**

#### Learning Outcomes

On the completion of the course the students shall be able to;

• Develop skills on track and field related events

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• TRACK AND FIELD III: THROWING EVENTS/ GYMNASTICS/ SWIMMING (Any One)(Course contents in Gymnastics and Swimming should be chalked out internally considering advance level of students and suitable to their age and gender).

#### Course Code: MPE557 Course Title: PRACTICAL-10

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Competence on their game of specialization
- GAMES SPECIALIZATION- III BOXING/ FENCING/ JUDO/ KARATE/ WRESTLING/ WUSHU (Any Two) (Course contents in the game of specialization should be chalked out internally considering advance level of students and suitable to their age and gender).

#### Course Code: MPE558 Course Title: PRACTICAL-11

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop skills for coaching
- COACHING LESSONS OF TRACK AND FIELD/ GYMNASTICS/ SWIMMING (Five Lessons: Four Internal and One External)

The students of M.P.Ed – III Semester need to develop proficiency in taking coaching lesson on above mentioned selected discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class, they are going to handle at school and college level.

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

#### Course Code: MPE559 Course Title: PRACTICAL-12

### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop skills for coaching on their area of specialization
- COACHING LESSONS OF GAME SPECIALIZATIONS (Five Lessons: Four Internal and One External)

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The students of M.P.Ed – III Semester need to be develop proficiency in taking coaching lesson in selected game discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

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

#### Course Code: MPE.592 Course Title: INTERNSHIP

#### Learning Outcomes

On the completion of the course the students shall be able to;

#### Course Code: MPE516

Course Title: Yoga and Physical Wellbeing

#### Learning Outcomes

On the completion of the course the students shall be able to;

#### Unit-I

Yoga life style – getting up (Brahmi Muhurta), cleansing the body (Kriyas), exercise (Asana – stability, health and lightness of body), Prayer (devotion to unseen forces), Vyavahara (behavioral modification; positivity in deeds and thoughts), Vihara (company of pious souls)

#### Unit-II

Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health; Concept of Cleansing (Shuddi), its role and importance in Health; Concept of Swara Yoga and its efficacy in Health.

#### Unit-III

Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara; Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living, Concept of Bhavas and Bhavanas with its relevance in Health and well-being; Yogic principles of Lifestyle management and its role in prevention of disease and health promotion; Yogic Principles of Diet and its role in Healthy living; Yogic Practices of Healthy living : i.e. Yama, Niyama, Shatkarma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

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#### Unit-IV

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation.

Books for Reference:

- 1. Ghosh, Shyam : The Original Yoga Munshiram Manoharlal, New Delhi, 1999)
- 2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
- 3. Hatha Ratnavali : Tirumala Tirupathi Devasthana, Andhra Pradesh.
- 4. Gheranda Samhita : Shri Sadguru Publication, New Delhi.
- 5. Dr R Nagarathna and Dr H R Nagendra: Yoga and Health, Swami Vivekananda Yoga Prakashana, 2002
- 6. Dr R Nagarathna and Dr H R Nagendra: Yoga for Promotion of Positive Health Published by SVYP, Bangalore
- 7. Dr Nagendra H R : The Secret of Action Karma Yoga, Published by SVYP, Bangalore, 2003

#### SEMESTER IV

#### Course Code: MPE571 Course Title: Information & Communication Technology (ICT) in Physical Education

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Differentiate between hardware and software in sports
- Develop skills on application of ICT in sports
- Develop competence of using innovative ICT integrated pedagogy in classrooms

#### **Unit I – Communication & Classroom Interaction**

Elements, Process & Types of Communication Communication Barriers & Facilitators of communication, Communicative skills of English - Listening, Speaking, Reading & Writing Concept & Importance of ICT Need of ICT in Education Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration Challenges in Integrating ICT in Physical Education

#### **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

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#### 10 hours

37

#### **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 MS Publisher: Newsletter & Brochure

#### **Unit IV – ICT Integration in Teaching Learning Process** 10 hours Approaches to Integrating ICT in Teaching Learning Process, Project Based Co-Operative Learning, Learning (PBL), Collaborative, ICT and Constructivism: A Pedagogical Dimension, E-Learning, Web Based Learning, Visual Classroom

#### Suggested readings:

- 1. B. Ram, New Age International Publication, Computer Fundamental, Third Edition-2006
- 2. Brain under IDG Book. India (p) Ltd Teach Yourself Office 2000, Fourth Edition-2001
- 3. Douglas E. Comer, The Internet Book, Purdue University, West Lafavette in 2005
- 4. Heidi Steel Low price Edition, Microsoft Office Word 2003-2004
- 5. ITL Education Solution Ltd. Introduction to information Technology, **Research and Development Wing-2006**
- 6. Pradeep K. Sinha & Priti; Sinha, Foundations computing BPB Publications -2006.
- 7. Rebecca Bridges Altman Peach pit Press, Power point for window, 1999
- 8. Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006

#### Course Code: MPE572 **Course Title: Sports Psychology and Sociology**

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Describe the status of sports psychology in India
- Develop competency in motivating students and setting goals on sports
- Critically analyze the implications of social leadership in sports

#### **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. Psychological & physiological limits

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10 hours

#### **UNIT II - Motivation and Emotions**

Types of Motivation: Intrinsic, Meaning and Definition, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation. Anxiety: Meaning and Definition, Nature, Causes, Method of Measuring Anxiety. Competitive Anxiety and Sports Performance. Stress: Meaning and Definition, Causes. Stress and Sports Performance. Aggression: Meaning Definition, Method of Measurement. Aggression and and Sports Performance. Self-Concept: Meaning and Definition. Method of Measurement. Emotion: Meaning & types of emotions, influence of emotion (success and failure), level of aspiration and Achievements, Frustration and Conflict and its effect on sports performance.

#### UNIT III – Goal Setting

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

#### UNIT 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. Leadership: Meaning, Definition, types. Leadership and Sports Performance. Group: Definition and Meaning, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics. Current Problems in Sports and Future Directions – Sports Social Crisis Management – Women in Sports: Sports Women in our Society, Participation pattern among Women, Gender inequalities in Sports.

#### Suggested readings:

- 1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
- 2. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Test, New Delhi: National Council of Educational Research and Training Publication.
- 3. Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.
- 4. Jay Coakley. (2001) Sports in Society Issues and Controversies in International Education, Mc-Craw Seventh Ed.
- 5. John D Lauther (2000) Psychology of Coaching. Ner Jersy: Prenticce Hall Inc.
- 6. John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.
- 7. Miroslaw Vauks & Bryant Cratty (1999). Psychology and the Superior Athlete. London: The Macmillan Co.

#### 12 hours

## 13 hours

- 8. Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.
- 9. Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co. Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.
- 10. Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.
- 11. Whiting, K, Karman.,. Hendry L.B & Jones M.G. (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

#### Course Code: MPE.600 Course Title: DISSERTATION

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#### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop competency in the process of conducting research
- 1. A candidate shall have dissertation for M.P.Ed. 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).
- 2. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.
- 3. The candidate has to face the Viva-Voce conducted by DRC.

#### Course Code: MPE574 Course Title: Value and Environmental Education (Elective)

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Analyze the relationship between value and environmental education
- Develop skills of protecting the environment
- Critically analyze the rural and urban health and sanitation related problems

#### UNIT I – Introduction to Value Education.

Values: Meaning, Definition, Concepts of Values. Value Education: Need, Importance and Objectives. Moral Values: Need and Theories of Values. Classification of Values: Basic Values of Religion, Classification of Values. Meaning and Definition of Personal and Communal Values, Consistency, Internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to values.

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#### UNIT II – Natural Resources and related environmental issues: 8 hours

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.

#### **Unit- III – Environmental Education**

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 & prohibition of plastic bag / cover, Role of school in environmental conservation and sustainable development, Pollution free eco-system.

#### Unit - IV Rural Sanitation and Urban Health

Rural Health Problems, Causes of Rural Health Problems, Points to be kept in Mind for improvement of Rural Sanitation, Urban Health Problems, Process of Urban Health, Services of Urban Area, Suggested Education Activity, Services on Urban Slum Area, Sanitation at Fairs & Festivals, Mass Education.

#### Suggested readings:

- 1. Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.)
- 2. Odum, E.P. Fundamentals of Ecology (U.S.A.: W.B. Saunders Co.) 1971.
- 3. Rao, M.N. & Datta, A.K. Waste Water Treatment (Oxford & IBH Publication Co. Pvt. Ltd.) 1987
- 4. Townsend C. and others, Essentials of Ecology (Black well Science)
- 5. Heywood, V.H. and Watson V.M., Global biodiversity Assessment (U.K.: Cambridge University Press), 1995.
- 6. Jadhav, H. and Bhosale, V.M. Environmental Protection and Laws (Delhi: Himalaya Pub. House), 1995.
- 7. Mc Kinney, M.L. and Schoel, R.M. Environmental Science System and Solution (Web enhanced Ed.) 1996.
- 8. Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.)

#### Course Code: MPE575 **Course Title: Pedagogy in Physical Education (Elective)**

### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop understanding on the use of technology in physical education
- Develop skills of applying technology in physical education
- Critically analyze the implications of technology in sports

#### 10 hours

12 hours

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#### Unit I – Nature and Scope

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

#### Unit II – Systems Approach to Physical Education and 10 hours 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. New Horizons of Educational Technology Recent innovations in the area of ET interactive video -Hypertext, video-texts, optical fiber technology - laser disk, computer Procedure and conferencing. etc. organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Recent trends of Research in Educational Technology and its future with reference to education.

#### 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, postproduction 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 experiment, countrywide classroom project and Satellite based instructions. Use of animation films for the development of children's imagination. New horizons of educational technology: Recent innovations in the area of education technologyinteractive video-hypertext, optical fiber technology-laserclisk, computer conferencing etc., procedure and organisation of tele conferencing etc., Recent experiment in the world and pointers for India with reference to physical education. Recent trends of research technology and its future with reference to physical education.

#### Suggested readings:

- 1. Amita Bhardwaj, New Media of Educational Planning".Sarup of Sons, New Delhi-2003
- 2. Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi : Doaba House), 1959.

#### 15 hours

- 3. K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.) : 1981.
- 4. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982
- 5. Kozman, Cassidy and kJackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

#### Course Code: MPE576 Course Title: PRACTICAL-13

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#### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop their skills on the game of their specialization like track and field/swimming/gymnastics
- Guide and coach on the area of their specialization

#### TRACK AND FIELD/ SWIMMING/ GYMNASTICS (Any One)

(Course contents in Gymnastics and Swimming should be chalked out internally considering advance level of students and suitable to their age and gender. Practical Skill Test any one out of these after completion of syllabus)

#### Course Code: MPE577 Course Title: PRACTICAL-14

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Demonstrate their skills on the game of their specialization
- Guide and coach on the area of their specialization

#### GAMES SPECIALIZATION (Any Two)

(Course contents in game or sport of specialization should be chalked out internally considering advance level of students and suitable to their age and gender .Practical skill test- any two)

#### Course Code: MPE578 Course Title: PRACTICAL-15

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop skills of officiating lesson on track and field/gymnastics/swimming
- Analyze the strengths and weakness of different games
- Competency in games related teaching

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## **Officiating Lessons of Track and Field/ Gymnastics/ Swimming** (Five Lessons: Four Internal and One External)

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

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

#### Course Code: MPE579 Course Title: PRACTICAL-16

#### Learning Outcomes

On the completion of the course the students shall be able to;

- Develop skills of officiating lesson on selected game specialization
- Handle students on different games
- Competency in games related teaching

# **Officiating Lessons of Game Specializations** (Five Lessons: Four Internal and One External)

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

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

#### Course Code: MPE532 Course Title: Nutrition and Fitness Management Learning Outcomes

On the completion of the course the students shall be able to;

#### Unit I

7 hours

Energy in Human Nutrition: Idea of Energy and its unit, Energy Balance, Assessment of Energy Requirements—deficiency and excess, Determination

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of Energy in food, B.M.R. and its regulation, -S.D.A. Growth monitoring and promotion: Use of growth charts and standards, Preventions of growth faltering

#### Unit –II

Carbohydrates - Definition, Classification. Structure and properties. Monosaccharides - glucose, fructose, galactose. Disaccharides - Maltose, lactose, sucrose Polysaccharides - Dextrin, starch, glycogen, resistance starch.

Carbohydrates - Sources, daily requirements, functions. Effects of too high too low carbohydrates on health. Digestion & Absorption. Blood glucose and effect of different carbohydrates on blood glucose. Glycemic Index. Functional role of Sugars in food, Fermentation of Sugar

#### Unit III

7 hours

Importance of Physical activity and benefits of physical activity, Physical Activity - frequency, intensity, time and type with examples, Physical Activity Guidelines and physical activity pyramid

#### **Unit IV**

Concept of Weight Management, Assessment, etiology, health complications of overweight and obesity, Diet and exercise for weight management, Fad diets, Principles of planning weight reducing diets.

#### Suggested readings:

- 1. David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surject Publication Delhi 1989.
- 2. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford row, London 1998
- 3. Dr. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992. Warner W.K. Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.
- 4. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986.
- 5. Emily R. Foster, Karyn Hartiger & Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002.
- 6. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999
- 7. Robert Malt. 90 day fitness plan, D.K. publishing, Inc. 95, Madison Avenue, New York 2001

#### 8 hours