

SAURASHTRA UNIVERSITY

RAJKOT

(ACCREDITED GRADE "A" BY NAAC)



FACULTY OF EDUCATION

Syllabus for

M.Phil. (PHYSICAL EDUCATION)

Choice Based Credit System

With Effect From: 2012-13

M.Phil. (Phy. Edu.)

O.M.Phil. 1.

The examination of the Degree of M.Phil in Physical Education shall consist of Two Semesters. Term arrangements shall be as per provisions containing rules of the University.

(1) Semester – I (1st July to 31st December)

(2) Semester – II (1st July to 31st December)

Each Semester Shall Consist of at least 90 working days excluding. the days of examination.

O.M.Phil. 2.

- a) Master of Physical Education (M.P.Ed) with at least fifty-five Percent marks shall be eligible for admission in “Masters in Philosophy in Physical Education” ‘M.Phil.’ (Phy.Edu).
- b) The reservation in seats and relaxation in qualifying marks for SC or ST or OBC and other categories shall be as per the rules of the Central Government / State Government , which ever applicable.
- c) In case of candidate who posses foreign degree the same should be as it is approved by the AIU shall be eligible for admission for “Master in philosophy in physical Education” M.Phil. (Phy.Edu).

O.M.Phil. 3.

M.Phil. degree programme is of one years (two Semesters) duration consisting of two semesters, which will be required to be completed within three years from the date of her / his first admission in the first semester.

O.M.Phil. 4.

M.P.Ed. one years (two semesters) Degree programme is regular full time Programme and therefore admitted candidate cannot be join any other course of study without prior permission of the University.

O.M.Phil. 5.

Medium of instruction and Examination shall be either English, or Hindi or Gujarati as the case may be and the same will not be changed during the entire Degree programme.

O.M.Phil. 6.

The candidate will require to keep minimum attendance 75% lectures and practical's out of the total working days available in particular term.

O.M.Phil. 7.

In case of even a ragging or gender problems noticed by the Department The Head of the Department shall have the power to propose the matter to the Registrar who will decide the matter.

O.M.Phil. 8.

The entrance examination will be conducted by the University. Admission Will be depending upon the merits earned by the candidate at the entrance test No other marks of feeding examination will be taken in to consideration for determining the merits of the candidate for admission to the program.

O.M.Phil. 9.

In Addition to above ordinances P.G. Recognition rules shall be applicable for the time being in force.

The Regulation

R.M.Phil. 1

Candidate admitted in semester I shall be promoted to higher semester as per mentioned below.

- (I) A candidate shall be admitted to semester II irrespective of her / his passing in semester I or irrespective of declaration of her.
- (II) However, the result Of the second semester will not be declared unless she / he has passed semester I and there is no back logon any Account such as theory, practical, internal or dissertation work.

R.M.Phil. 2

The examination for (M.Phil. in Phy. Edu) shall consist of 02 Theory papers (CCT-01 and ECT-01) in First semesters and one theory paper (ECT-02) in second semester. Besides the University examination, internal marks will be in added to each paper separately. A candidate must obtain for passing at least 40% marks in each theory paper in the university examination and also obtain at least 40% marks in the aggregate marks of the paper including the internal marks in each paper of each semester.

R.M.Phil. 3

The University examination in Dissertation for Semester II shall consist of the examination of the Dissertation of 100 marks. There shall be a viva-voce at internal and external examination.

Different Weightage Scales :

(For awarding grades to Internal , Semester End Exam Scores for Theory Examination)

Different Scales			Grade	Grade Point
Combined	Internal	Semester End Exam		
$90 < X \leq 100$	$27 < X \leq 30$	$63 < X \leq 70$	O	10
$80 < X \leq 90$	$24 < X \leq 27$	$56 < X \leq 63$	A	9
$70 < X \leq 80$	$21 < X \leq 24$	$49 < X \leq 56$	B	8
$60 < X \leq 70$	$18 < X \leq 21$	$42 < X \leq 49$	C	7
$50 < X \leq 60$	$15 < X \leq 18$	$35 < X \leq 42$	D	6
$40 < X \leq 50$	$12 < X \leq 15$	$28 < X \leq 35$	E	5
Less than 40	Less than 12	Less than 28	F	4

Scale for Awarding Grades based on SGPA & CGPA :

	Semester End SGPA	Programme End CGPA	Grade	Description
1	$9.0 < SGPA \leq 10$	$9.0 < CGPA \leq 10$	O	Outstanding
2	$8.0 < SGPA \leq 9.0$	$8.0 < CGPA \leq 9.0$	A	Upper Distinction
3	$7.0 < SGPA \leq 8.0$	$7.0 < CGPA \leq 8.0$	B	Distinction
4	$6.0 < SGPA \leq 7.0$	$6.0 < CGPA \leq 7.0$	C	First Class
5	$5.0 < SGPA \leq 6.0$	$5.0 < CGPA \leq 6.0$	D	Second Class
6	$4.0 < SGPA \leq 5.0$	$4.0 < CGPA \leq 5.0$	E	Passed
7	SGPA Less than 4.0	CGPA Less than 4.0	F	Failed

The Candidate who fails to obtain less than 40% in Practical activity examination shall have to clear the same in ensuring attempt and the marks of his / her previous attempt in which he/she have obtain more than 40% of marks will be carry forwarded for calculating his/her CGPA/SGPA & class.

R.M.Phil. 5

Internal marks obtain by a candidate shall be carried over if a candidate fails in the final examination in any or all papers of any semester and appears as and ex. Student.

When a candidate has failed in the examination but has obtained pass marks in the thesis, the thesis marks may be carried forward to the prescribed limits of 3 years as specified above. If candidate fails in thesis but secures his requirement for thesis within the required period of 03 years.

R.M.Phil. 6

The medium of instruction shall be gujarati; however Question paper shall be drawn in Gujarati and English language.

R.M.Phil. 7

Candidates qualify for appearing in semester and examination shall have to forward his/her application for appearing in university examination along with the fees prescribed by the University for Relevant Examination through the Head of the Department.

R.M.Phil. 8

The term shall be treated as complete when the students has satisfied the minimum number of attendance in each of the theory lecture and practical and also completed all components of internal assessment as well as submitted dissertation (where applicable) as per instruction of Head of the Department.

Program outcome

- 1.To get Preliminary idea of Physical Education Theory.
- 2.To study the behaviours of India and World Physical Education.
- 3.Students learn net surfing in order to get acquainted with different new writing materials.
- 4.Learn how to access books in e-library.
- 5.Learn different function of body parts, anatomy, physiology and exercise physiology of players.
- 6.Learn the different therapy process and use.
- 7.How to maintain and develop physical fitness.
- 8.How to organise the standard tournament or competition.
- 9.Proper rules of different game and sports and officiating of game and sports.
- 10.How to maintain proper health and active life style.
- 11.To understand the player psychology.

Program-specific outcomes

- 1.Understanding the meaning of physical education for an individual development and improving general health for professional activity;
- 2.Fostering motivational attitude to the physical education, healthy lifestyle and regular exercising;
- 3.Learning special knowledge, practical skills, which provide health protection, form compensatory process, correct present health abnormalities, provide mental prosperity, development and improvement of psychophysical skills, form professional qualities of an individual;
- 4.Body's adaptation for physical and mental workload and also at the increasing of the capability of physiological systems as well as raising of the resistance of immune defenses;
- 5.Learning the methodology of formation and taking health exercises independently, the methods of self-control while exercising, hygiene rules and sound schedule for work and rest;
- 6.Learning how to resist unfavorable factors and working conditions, decreasing fatigue during professional activities and raising the quality of results

DEPARTMENT OF PHYSICAL EDUCATION
SAURASHTRA UNIVERSITY, RAJKOT
Choice Based Credit System
STRUCTURE OF M.PHIL IN PHYSICAL EDUCATION

SEMESTER – I & II PROGRAMME In force June -2012

Regular students can opt M.Phil in physical education semester I & II programme. There shall be 04 (four) courses and 20 credits in M.Phil physical education .There will be two courses with eight credits in each semester. Each course is carrying 100 marks. M.Phil. Physical Education degree considered of 400 marks with 20 credits Each course required 4 credits. Whereas dissertation requires 08 credits.

➤ Allocation of Hours for Course teaching 04 Credits

Unit –I 12 Hours

Unit –II 18 Hours

Unit –III 18 Hours

Unit –IV 12 Hours

Total 60 Hours

➤ Allocation of Hours for Dissertation 08 Credits

(i) Personal Guidance 40 Hours

(ii) Field work and Report Writing 80 Hours

➤ Marks Assigned and its division into External & Internal Examination

(i) Marks of External Examination 70

(ii) Marks of Internal Examination 30

➤ Design and Structure of Semester End Examination :

1. Scheme of Internal Examination 30 Marks

(i) Assignment Writing 05 Marks

(ii) Seminar Paper Presentation 05 Marks

(iii) Teaching Work for M.P.Ed Degree 10 Marks

(iv) Internal Examination 10 Marks

2. Scheme for External Examination 70 Marks

Long Question 30 Marks

Short Question 20 Marks

Short Notes 20 Marks

3. Marking Scheme for Dissertation 100 Marks

Thesis Main Body }
 Viva –voce Examination }

At Present only an External Examiner Evaluates the Dissertation by the way of marks.

Sr. No.	Course Code	Name of Course	Credits
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M.Phil Semester -1

1	CCT – 01	Research Methodology and Statistics	04
2	ECT - 01	Sports Physiology	04
Or			
	ECT - 01	Sports Psychology	04
Or			
	ECT - 01	Current Trends and Issues in Physical Education and Sports	04
Total			08

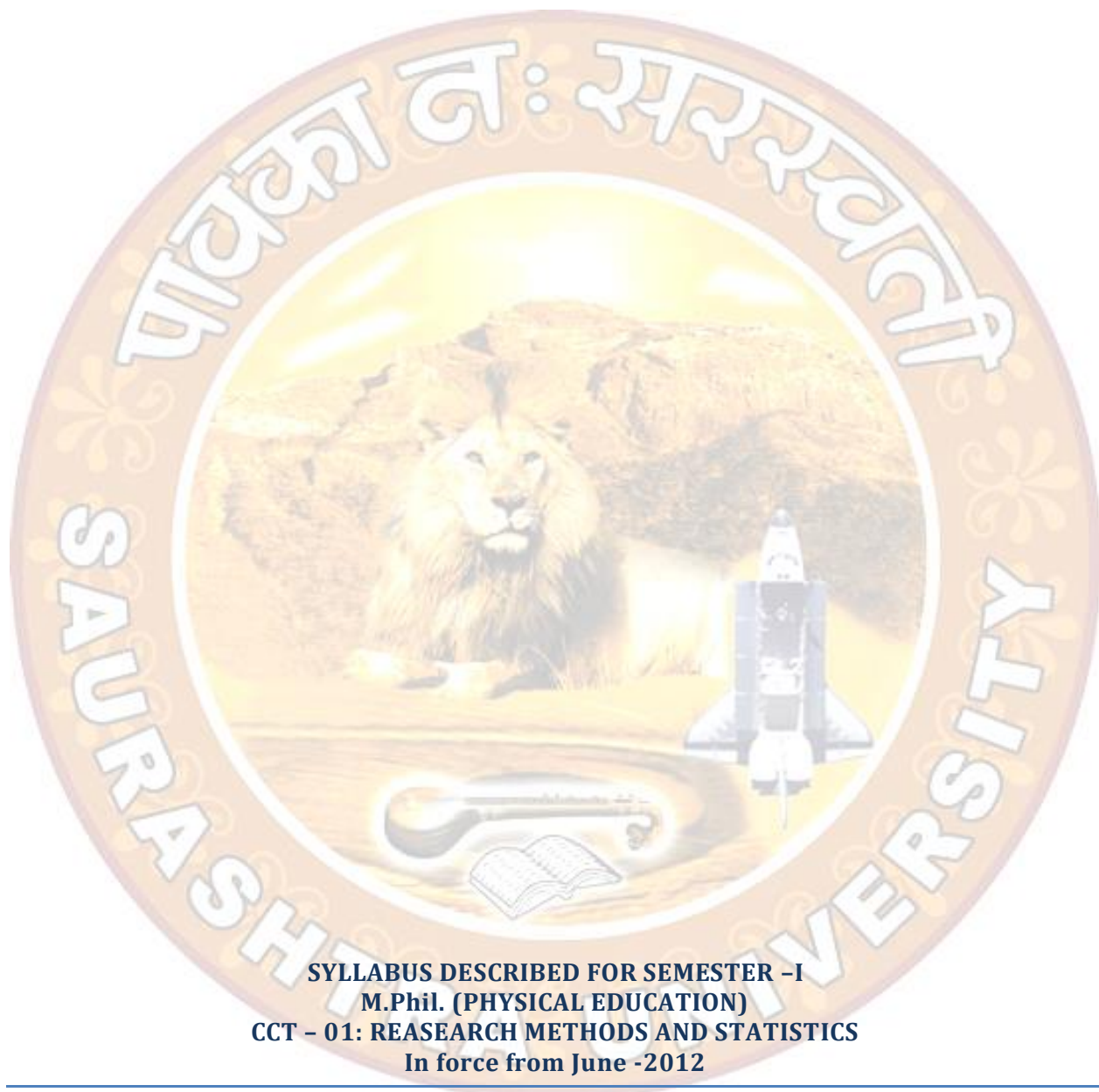
Sr. No.	Course Code	Name of Course	Credits
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M.Phil Semester -II

3	ECT - 02	Sports medicine	04
Or			
	ECT - 02	Measurement and Evaluation in Sports Science	04
Or			
	ECT - 02	Yoga and Physical Fitness	04
Or			
4	CCT - 02	Dissertation	08
Total			12
Grand Total			20

Session	Hours				
	1	2	3	4	5
Monday	Class room Teaching of Two courses in Each Semester: 4(Four) hours for each course per week Total Teaching Hours per week =08				
Tuesday					
Wednesday					
Thursday					

Friday				
Saturday	Data Collection	Data Collection	Data Collection	Data Collection



[Internal =30 Marks]

[External = 70 Marks]

Unit – I (a) Meaning nature Need and Scope of Research in Physical Education
Classification of Research – Basic Research Applied Research and
Action Research Difference between fundamental and Action
Research.

- (b) The Problem Locating the problem and criteria in selecting a Problem , statement of the problem Delimitations and limitations Literature search.

Unit – II (a) non-Laboratory studies, Historical Research, Philosophical studies , Surveys (Questionnaire , Interview) Case study

(b) Laboratory research

Experimental Design- Principles of Experimental enquiry (mythcarron) Control of Experimental factors, Instrumentation Establishing the Research Laboratory

Unit – III (a) preparation of research report

Organization of thesis Report tables, figures, footnote s and Bibliography.

(b) Introduction to the use of calculators and computers in analysis of Data ,available equipment / instrument and their specific uses for Research in Physical education and Sports

Unit – IV (a) Review of elementary statistical concept , measures in analysis of Tendency measures of variability scale-z or (Sigma) Scale T-scale, Hull scale , seven sigma scale

(b) Analysis of variance

Need for analysis of variance, one way analysis of variance Post Hock Test of significance, Analysis of co-variance (No Problem To be given in this area)

Unit – V (a) Partial and multiple correlation

Meaning and Limitation Partial correlation multiple correlation (Computation of first-partial correlation and multiple correlation)

(b) Special correlation and non-parametric Methods.

Chi-square

Rank – difference method of correlations. Biserial correlation Tethachoric correlation, Phi-coefficient contingency coefficient.

Reference Books:

1. Aggarwal J.C. education Research – An Introduction , new Delhi Arya book Depot , 1966
2. Best john Research in education, new Delhi-prentice hall of india (pvt.) Ltd. 1977
3. Clarke dayid H and Clarke h Harrieson, Research process in physical education recreation and Health, Eaglewood Chiffs New jerney Practice Hall Inc 1984
4. Galfo, Asned Juad Earl, Miller Interpreting Educational Research J.O.W.A.: W.M.Brown co.
5. Moule George j the Science of Educational New Delhi Eurasia Publishing House (PVT) Ltd 1973
6. Huffard A.W. Research Methods in Health-physical Education and Recreation AAHPER Publication, Washington D.C.1973
7. Cohen Louis and Marion Lawrence-research Method in Education Croans Helm Ltd 2-10 john's Road London 1980
8. Best john W and khan V-Research in education , New Delhi Preatice Hall Of India (Pvt) Ltd 1986
9. Sharma R.A.Fundamental of Research International
10. Bloomers paul and Lundguist E.F. Statistical Method In Psychology and education Calcutta Oxford Book co. 1960
11. Clarke David Hand Clarke H Harrison research process in physical education recreation and Health Eaglewood Chaffs New Jeraly Preatice Hall Inc 1984
12. Clarke H H and Clarke D.H. Advanced Statistic with application to Physical Education London Preatree hall Inc
13. Garret H.E. and Woodworth R.S. Statistics in psychology and education-Bombay Allief Pacific Co.Ltd.1966
14. Guiford J.P.Fundamental Statistics in Psychology and education New York MC Graw Hill Book Co 1960
15. Steel Robert G.D. and Torie manes A Principles and Procedures of Statistics New York ;MC Graw HillBook Co.1960

**SYLLABUS DESCRIBED FOR SEMESTER -I
M.Phil. (PHYSICAL EDUCATION)
ECT - 01: Sports Physiology
In force from June -2012**

[Internal =30 Marks]

[External = 70 Marks]

Unit I :BIO-ENGERGETICS :

- a) Definition of energy – Biological energy cycle , ATP –aerobic and anaerobic comparing with energy system – Aerobic and anaerobic d uring rest and exercise.
- b) Recovery from exercise – the oxygen debt – replenishment of energy stores during recovery. Muscle glycogen synthesis –liver glycogen replenishment – restoration of efficiency – cycle ergo meter – mechanical and electrical treadmill –step bench

Unit II :

- a) Skeletal Muscle – structure and function. The motor unit and strength gradation. Muscle force-velocity and power.
- b) Nervous control of muscular movement. Basic structure and function of the nerve, neuro-muscular functions. The nervous system and motor skills.

Unit III :

- a) Pulmonary ventilation – minute ventilation – ventilator mechanics – Pressure change Gas exchange and transport-total oxygen to CO₂ blood Blood flow and gas transports –cardiac output during exercise. Circulating Mechanics –changes in pressure and resistance during exercise.
- b) Cardio –respiratory control at rest and during exercise

Unit IV:PHYSIOLOGICAL EFFECTS OF PHYSICAL TRAINING

- a) Training effects –factors influencing training effects. Exercise and training For health and fitness-causes and risk factors of cardiovascular diseases-The exercise prescription. Environmental aspects, performance at high Altitude.
- b) Heat balance, temperature regulation and heat disorder , physiological responses to cold.

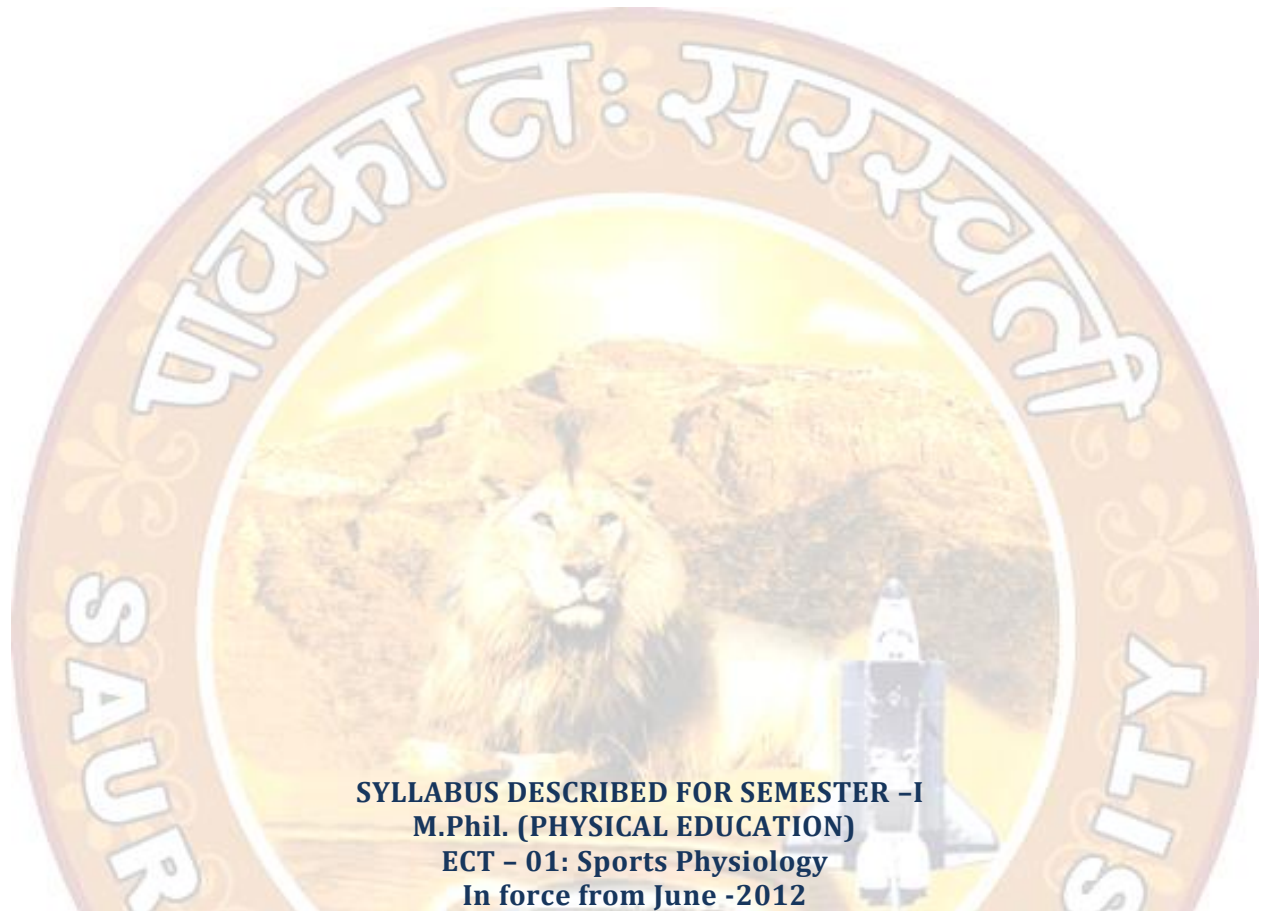
Unit V: Nutrition and exercise performance

- a) 5.1 Diet before activity, during activity, following activity , exercise and weight control. Exercise and acid balance : acid base balance following Heavy exercise. Exercise and endocrine system : characters and mechanism of hormones action, hormonal responses to exercise and training.
- b) Effects of age and gender. Age and athletic performance , age and menstrual – exercise during pregnancy

Reference books:

- 1) Pox ,Edward L and Mathews Donal K “The Physiological basis of physical education and athletics, New York : Sander College Publishing 1982.
- 2) Mcardle. Williams D et al: Exercise physiology-energy nutrition and human Performance ,Ed.2. Philadelphia, Lea and Febiger 1986
- 3) Karpouch and sinning “physiology of muscular activity” W.B.Seunders company ,Philadelphia,London ,Toronto.
- 4) William D.Mcardle,frank I katch, Victor L Katch,victor “Exercise Physiology” Lea & Febigen Philadelphia.
- 5) A Kapandji “The Physiology of the joints” Churchill Livingstone,Edinburgh London Melbourne and New York.
- 6) David H Clarke, “Exercise Physiology” Prentice Hall Inc, Englewood cliffs, New Jersey.

- 7) Morehouse and miller “physiology and exercise” The C.V. Mosley company.
- 8) Larry O Bhaver “Essential or curriculum Physiology” Surjest Publication Post Box No.2157, Delhi 110 007 India.



**SYLLABUS DESCRIBED FOR SEMESTER -I
M.Phil. (PHYSICAL EDUCATION)
ECT - 01: Sports Physiology
In force from June -2012**

[Internal =30 Marks]

[External = 70 Marks]

Unit I : The Nature of Learning :

- a) Motor learning – co-ordination of motion, Theories of learning ,Kinesthesia Proprioception and labyrinthine, receptors, reflex action and the automatizing motor skills. Feedback servomechanism and knowledge or results – reinforcement and readings retention and forgetting.
- b) Factors and conditions affecting motor learning :speed of perception – attention and concentration .The learning curve ,imitation and learning – self activity and mental practices, trial and continuous revision learning - the whole and part learning autogenic technique, ergogenic effects.

Unit II : The Role Of Emotion In Sports Performance

- a) Motivation and arousal – theories .patronage and political support in development of sports
- b) Stress and competition

- c) Aggression
- d) Anxiety-anxiety and all round performance.fears of athletes-re indicting anxiety

Unit III :- Evaluation of the superior athlete

- a) A typology of athletics activities based upon their pshychological demands
- b) Pshychological preparation of the superior athlete pre during and post competition pshychologica preparation
- c) Model training intellectual training of the athlete-social- pshychologica preparation of the athlets conceptualizing automation imaginary

Unit IV :-

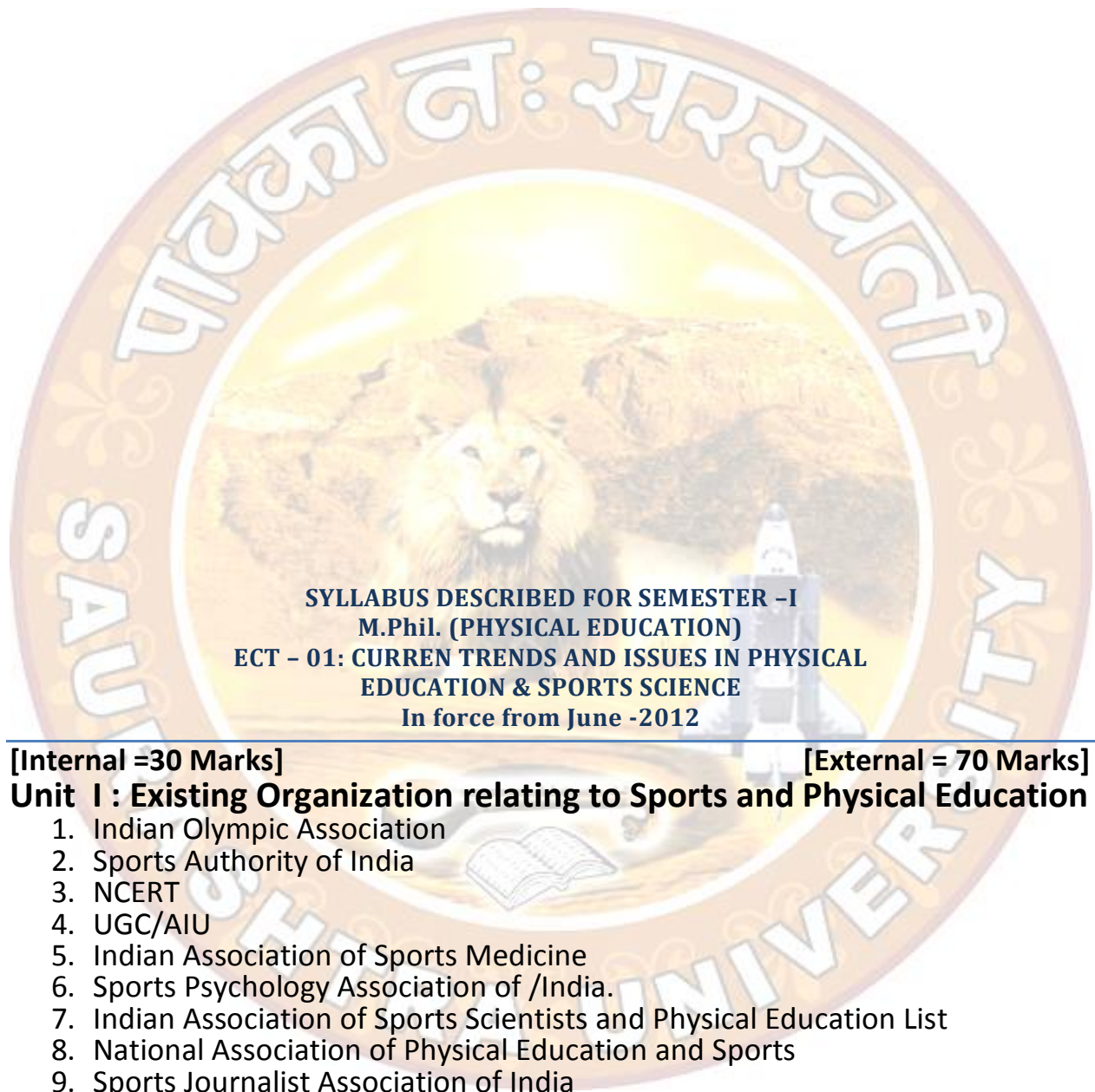
- a) Motivational techniques role of motivation in building confidence dedication prides discipline motivation during training and comoitition
- b) Situational motivation forging positive attitudes and relationship Handling the self motivated athlete, Motivating the self motivated athlete, motivating the “Problem” athletic Handling the “superstar” athlete, motivating girls and women

Unit V :-Psychological assessment of testing:

- a. Assessing intelligence
- b. Testing for special aptitude
- c. Personality assessment
- d. Behavioral assessment

REFERENCE BOOKS:

01. L.L.E. William jack judy A Blucher, Psychology of Coaching theory and application subjects Publication , Delhi 1982
02. Morgan William P. contemporary Readings in sports psychology Spring Field. Minois ,USA 1970
03. John D Lauther : Sports Psychology , Prentice Hall Inc. Englewood



**SYLLABUS DESCRIBED FOR SEMESTER -I
M.Phil. (PHYSICAL EDUCATION)
ECT - 01: CURREN TRENDS AND ISSUES IN PHYSICAL
EDUCATION & SPORTS SCIENCE
In force from June -2012**

[Internal =30 Marks]

[External = 70 Marks]

Unit I : Existing Organization relating to Sports and Physical Education

1. Indian Olympic Association
2. Sports Authority of India
3. NCERT
4. UGC/AIU
5. Indian Association of Sports Medicine
6. Sports Psychology Association of /India.
7. Indian Association of Sports Scientists and Physical Education List
8. National Association of Physical Education and Sports
9. Sports Journalist Association of India

Unit II : Current Problems

1. Students Unrest
2. Teachers discontent
3. Examination systems
4. Physical Education as Examination subject
5. National Physical Fitness Programme

Unit III : Special Top

1. Professionalism in sports
2. National Youth Policy
3. Sports and Legislations
4. Sports and Media
5. Women and Sports

Unit IV : Academic Enhancement

1. Seminars and Conferences in Physical Education & Sports Science
2. Scientific Research in Sports and Physical Education
3. Text-books and periodicals in Physical Education & Sports their recommendation
4. Standard Norms & criteria for the training college of Physical Education

Unit V : Issues

1. Issues dealing with Health and fitness
2. Issues dealing with Philosophy and purposes of physical Education and Sports
3. Issues dealing with Profession of Physical Education
4. Issues dealing with professionalism and amateurism
5. Issues dealing with Sports coaches and Physical Education teachers

BOOKS RECOMMENDED :

1. Marionalies Sanborn Betty G Hartman Issues in Physical Education

REFERENCES :

1. Indian Daily News Papers
2. Indian Weeklies
3. Indian Periodical Fortnight, monthly, quarterly, biannually
4. Yoga
5. Journal of Yoga
6. University News
7. University Sports
8. Bulletin of Sports (H V P M)
9. Sports week
10. Sports star
11. Snipes
12. Bulletin of Aurobics
13. Yoga-mimansa
14. Vyayam Vidnyan
15. Balwan
16. Kustigir
17. Krida-Vishwa
18. Kridangan
19. Yograrakash
20. Education Quarterly
21. Yoga-vidya

22. Khelkhailadi
23. Athletic journal
24. American Journal of Health Phy Edu & Recreation
25. Bulletin of Physical Education
26. AAPHER
27. FLE Bulletin
28. Gymnastic (International journal of Physical Education)
29. ICHPER
30. International gymnast
31. Journal of Sports medicine and Physical Education
32. Medicine and Science in sports and Exercise
33. Olympic Review
34. Scholastic Coach
35. Swimming Times
36. Sports and Recreation
37. Track Technique
38. Sports in U.S.S.R
39. Research Quarterly
40. Table tennis
41. Squash
42. Badminton
43. JOHPER

LIST OF REFERENCE BOOKS:

1. HALSEY ELIZABETH "INQUIRY AND INVENTION IN PHYSICAL EDUCATION LEA & FEBIOER PHILADELPHIA" 1964
2. BUCHER CHARLES A DIMENSION OF PHYSICAL EDUCATION 2ND Edition THE C.V MUSBY COMPANY Saint Louis 1974
3. Lockhart, Aileen S and Slusher, Howard S Contemporary Reading in physical Education third Edition WM C Brown Company Publishers Dubuque Iowa 1975
4. Sanbron, Murion Aliea & Hariman Betty G Issues in physical Education 2nd Edition Lea & Febiger, Philadelphia 1970
5. MORGAN R.E. concerns and values in physical education G Bell & Sons Ltd London 1974
6. Cooper Kenneth H 'the new Acrtries' M. Evans and company inc new York 1970
7. Zeigler Earbf 'physical Education and sports Philosphy Prentice Hall Inc. Englewood Chiffs N.J. 1977
8. Miller Donna, MAE & Russell kuthry R.E. Sports A Contemporary view Lea & Bebiger Philadelphia 1971
9. Ogleshy carole a women and Sports from myth to reality Lea & Febiger Philadelphia 1978
10. Gerberman partrcral I Equality in Sports for Women AAPHER PUBLICATION Washington 1977
11. Gerber Ellen w Sports and the Body A Philoshical Symposium Lea & Febiger Philadenphia 1974 (Repunled)
12. William Morgan and Klaus V Mefer (Editors) Philosophical inquiry in Sports Human kinetics publishers Inc Champaign 1988.

13. John D Massengale (Editor) 'Trends towards the future' in Physical Education 'Human kinetics Publishers Inc Champaign Illinois 1987
14. Curry Timothy J & Jioobu Robert M sports A Social Perspective Prectice Hall Inc Englewood chffs N.J 184
15. Donald chu Jeffrey o segrave and Beverly J Becker (Editors) Sports and Higher Education Human Kinetics Publishers Inc Champaign 1985
16. Hemery David 'Sporting Excellence A study of sports highest Achivers Willow Books Collins & gration Street London WI 1986
17. Bruca Davies and geoffrey thomas (Editors) Science and Sporting Performance management or manipulation clarendon press oxford 1982
18. Best david 'Expression in movement & The Arts A Philosophical Enquiry Lepus Book 205 Gt Portland St. London W. 6LR 1974

SYLLABUS DESCRIBED FOR SEMESTER -I
M.Phil. (PHYSICAL EDUCATION)
ECT - 02 : Sports Medicine
In force from June -2012

[Internal =30 Marks]

[External = 70 Marks]

UNIT -I :

A brief, history of sports Medicine –definition –meaning , preventive and rehabilitation aspects – The participation, physical examination, Type of sorts injuries – general principles of injury management – Management of soft-tissue injuries , bony injuries ,never injuries.

UNIT-II :

Regional Athletic injuries and management – head injuries –shoulder injuries –arm and elbow joint injuries –thigh and knee injuries –lower leg ankle and foot injuries ,Evaluation and management of specific disorders –traumatic lesion of the spinal cord after care of fracture – treatment of back disorder and deformities – low back pain and soliosis.

UNIT-III :

Applied sports medicine: Role of exercise in the prevention of various diseases : cardio- vascular – disorders – Asthma – diabetes – obesity

UNIT-IV :

Importance of sports nutrition. Exercise and food intake-before during and after activity computerized meal and exercise plan – role of carbohydrate in prolonged and servers training ,Diet prescription for football , basketball , volleyball and tennis players and athletes

UNIT-V :

Therapeutic modalities and procedure – principles of therapeutic modalities and procedures hydrotherapy -Diathermy – electrical muscle stimulation – transculanor electrical nerve stimulation(TENS) cry kinetic (cold and

therapeutic exercises) cold spray – paraffin bath ultraviolet- therapeutic exercises cold spray –massage meaning and definition of physical rehabilitation . Rehabilitation – goal of rehabilitation , rehabilitation programme – types of exercises isometric – isotonic –isokinetic –manual resistance proprioceptive neuromuscular facilitation programme for neck shoulder , shoulder joint ,arm and elbow joint wrist and hand lower back hip joint thigh knee lower leg ankle and foot.

Reference Book :

1. Edward L For Donald K Mathews The Physiological basic of physical education and athletic Baundura college publishing.
2. Anthony P Millar sports Injuries and their management Williams & Witkins and Associates Pvt Limited Australia.
3. Krusen Kottke Ellwood physical medicine and Rehabilitation W.B. Saunders company Philadelphia London Trnota.
4. James A could III geroge I Davies Orthopaedic and sports physical therapy The C.V Mosby company St Locus –Toronoto Precetion
5. Richards Schrefier john C Kennedy Marcus 1. Plant sports injuries Mechanism prevention and Treatment Williams & Wilkins Baltimore London Losangele Sydney
6. Rohert N Swinger : Motor learning and human performance the Macmillian co New York
7. Miroslav Vanke and Bryant ‘ J Cratty : Psychology and the Athlete Macmillan co... London

**SYLLABUS DESCRIBED FOR SEMESTER –I
M.Phil. (PHYSICAL EDUCATION)
ECT – 02 : Sports Medicine
In force from June -2012**

[Internal =30 Marks]

[External = 70 Marks]

UNIT-I :

1.
 - Meaning of measurement and Evaluation
 - Inter relationship of Measurement and Evaluation
 - Basic principles of Measurement and Evaluation
 - Modern Trends in Measurement and Evaluation
2.
 - Need for selecting appropriate measurement and Evaluation in Physical Education and Sports
 - Criteria for selecting Evaluation and Measurement.
 - Technical Standards : Objectivity ,Reliability , Validity , Norms.
 - Administrative consideration : Equipment , Time ,Monday , Utility , Facility , Feasibility

UNIT-II :

1. **Test of physical performance.**
Speed , Ability, balance, Strength Endurance, Flexibility, California Perceptual Motor abilities, and Generality of components
2. Test of physical fitness :
 - Basic fitness test AAHPER youth fitness test.
 - Physical fitness index
 - Sargent test
 - National physical efficiency tests.
 - Indian motor fitness test
 - Test for High School and college men
 - Krauswerber Test

UNIT-III :

1. Motor fitness tests:
 - J.C.R Test

- Oregon motor fitness test
 - California Motor fitness test
2. Motor ability test :
- Barrow motor ability test
 - Carpender motor ability test
 - Scott motor ability test
 - Latchaw motor ability test

UNIT-III :

1. Motor Educability Test :

- OPNA Brane motor educability test
- Johnson Metheny motor ability test
- Carfio – Vascular Test:
- Callagher & brouha Harvard Step for Secondary Boys.
- Tuttle Pulse ratio test
- Schneider Cardio – Vascular test

**SYLLABUS DESCRIBED FOR SEMESTER – I
M.Phil. (PHYSICAL EDUCATION)
ECT – 02 : Sports Medicine
In force from June -2012**

[Internal =30 Marks]

[External = 70 Marks]

UNIT-I :

Meaning – need – importance of historical background of yoga types of yoga
Bhakti yoga, Karma yoga, Gnana yoga, Raja yoga

UNIT-II :

Effects of yoga on different systems of human body impact of yoga on daily
life, Scientific effects of yogasanas . pranayama – Kriyas : Therapeutic uses of yoga
yoga and dietary principles.

UNIT-II :

Definition – meaning of physical fitness –its need and importance ,meaning
of wellness differences between physical fitness and wellness – the relationship
between /wellness and health –components of physical fitness and their
meaning and importance

UNIT-IV :

Assessment of physical fitness – Athletic related fitness and health fitness
.Problems associated with measurement of physical education Strength and
endurance, assessment and prescription .problems associated with measurement
of cardio-vascular endurance.

UNIT- V :

Body composition – techniques for assessing body composition Nutrition
for weight control and wellness Effects of exercises on physical fitness –
preventive and curative exercise for cardiovascular disease –chronic obstructive
pulmonary diseases – diabetes – back pain,

Reference Books:

01. Swami Digamberji Yoga and Physical Education Kavalyadhama Konavla India.
02. Yogamimamsa, Quarterly publication Kaivalyadhama Lonavla ,India
03. Dr.M.L.Garota Science of Yoga, Kaivalayadhama ,Lonavla . India
04. Dr.Karambalkar Therapeutic value of yoga Kaivalyadhama ,Lonavla India
05. Barry L.Johanson and jack K Nelson Practical Measurements for evaluation in Physical Education Burguss Publishing Company University of Minnesota.
06. Werner W.K.Hoeger and Sharon A Hdger Fitness and wellness Morton publishing company Englewood
07. Resthowel and A.K Uppal Foundation of Physical Education ,Friends Publication New Delhi.

