Revised MPE Two Years Syllabus (Outcome BasedEducation)

LAKSHIMBAI NATIONAL COLLEGEOF PHYSICAL EDUCATION



As approved by the University of Kerala, Thiruvananthapuram



SCHEME FOR MPE TWO YEARS PROGRAMME (OUTCOMEBASED EDUCATION)

		Semester	Semester
Part – I	First Year	Semester I	Semester II
Part – II	Second Year	Semester III	Semester IV

REVISED STRUCTURE: MASTER OF PHYSICAL EDUCATION (Two Year M.P.E)

SEMESTER – WISE DETAILS OF MASTER OF PHYSICAL EDUCATION COURSE (M.P.E)

SEMESTEER I							
Core Courses	CRI	CREDIT IN EACH CORE AND ELECTIVE COURSE					
CODE &COURSE	THEORY	PRACTICAL	TUTORIAL	TOTAL CREDITS			
MPECC 511:	4	1	-	5			
Yogic Science							
MPECC 512:	4	1	-	5			
Health Education and Nutrition							
MPEEC 513:	4	1	-	5			
Subject Specialization *							
MPEEC514:	4	1	-	5			
Sports Specialization**							
TOTAL CREDITS	16	4		20			

* Subject Specialization (Anyone to be selected from the list and to be carried over up-to fourth Semester)

** Game Specialization* (Anyone to be selected from the list and to be carried over up-to second Semester)

SEMESTEER II							
Core Courses	CREDIT IN EACH CORE AND ELECTIVE COURSE						
CODE &COURSE	THEORY	PRACTICAL	TUTORIAL	TOTAL CREDITS			
MPECC 521:	4	1	-	5			
Athletes' Care and Rehabilitation							
MPECC 522:	4	1	-	5			
Measurement and Evaluation in Physical Education							
MPEEC 523:	4	1	-	5			
Subject Specialization *							
MPEEC 524:	4	1	-	5			
Sports Specialization**							
TOTAL CREDITS	16	4		20			

SEMESTER – WISE DETAILS OF MASTER OF PHYSICAL EDUCATION COURSE (M.P.E)

SEMESTEER III						
Core Courses	CREDIT IN EACH CORE AND ELECTIVE COURSE					
CODE &COURSE	THEORY	PRACTICAL	TUTORIAL	Total Credits		
MPECC 531:	4	-		4		
Research Processes						
MPECC 532:	4	1		5		
Applied Statistics						
MPEEC 533:	4	1	-	5		
Subject Specialization *						
MPEEC 534:	4	-	-	8		
Elective Optional Group-I (Any two to be selected from the list other than one's subject specialization) ***						
TOTAL CREDITS	16	2	-	22		

SEMESTER – WISE DETAILS OF MASTER OF PHYSICAL EDUCATION COURSE (M.P.E)

SEMESTER – WISE DETAILS OF MASTER OF PHYSICAL EDUCATION COURSE (M.P.E)

SEMESTEER IV						
Core Courses	CREDIT IN EACH CORE AND ELECTIVE COURSE					
CODE &COURSE	THEORY	PRACTICAL	TUTORIAL	Total Credits		
MPECC 541:	4	1	-	5		
Advanced Statistics						
MPECC 542: Dissertation	4	4	-	8		
MPEEC 543:	4	1	-	5		
Subject Specialization(Same To be continued from Semester I) *						
MPEEC 544: Elective Optional II (Any two to be selected from the list other than one's subject specialization) ****	4	-	-	8		
TOTAL CREDITS	16	6	-	26		

Subject Specialization* (Anyone to be selected from the list and to be carried over up-to fourth Semester)

SCHEME OF EXAMINATION Semester – I

		Semester – I				
Part A: Theoretical Course						
Course code	Title of the papers	Theory hours/Week	Practical	Internal marks	External marks (P+T)	Total marks
Core Course						
MPECC-511	Yogic Science	4	1	25	25+50	100
MPECC-512	Health Education and Nutrition	4	1	25	25+50	100
MPEEC-513	Subject Specialization	4	1	25	25+50	100
MPEEC-514	Sports Specialization	4	1	25	25+50	100
TOTAL CREE	DITS	16	4	100	300	400

Semester – II

Part A: Theoretical Course						
Course code	Title of the papers	Theory hours/Week	Practical	Internal marks	External marks (P+T)	Total marks
Core Course						
MPECC-521	Athletes' Care and Rehabilitation	4	1	25	25+50	100
MPECC-522	Measurement and Evaluation in Physical Education	4	1	25	25+50	100
MPEEC-523	Subject Specialization	4	1	25	25+50	100
MPEEC-524	Sports Specialization	4	1	25	25+50	100
TOTAL CRED	ITS	16	4	100	300	400

Semester - III

Part A: Theoretical Course						
Course code	Title of the papers	Theory hours/Week	Practical	Internal marks	External marks (P+T)	Total marks
Core Course						
MPECC-531	Research Processes	4	-	25	75	100
MPECC-532	Applied Statistics	4	1	25	25+50	100
MPEEC-533	Subject Specialization	4	1	25	25+50	100
MPEEC-534	Elective Optional I A	4	-	25	75	100
MPEEC-535	Elective Optional I B	4	-	25	75	100
TOTAL CREE	DITS	16	2	125	375	500

Semester – IV

Part A: Theoretical Course						
Course code	Title of the papers	Theory	Practical	Internal	External	Total
		hours/Week		marks	marks	marks
					(P+T)/(R+V)	
Core Course						
MPECC-541	Advanced Statistics	4	1	25	25+50	100
MPECC-542	Dissertation	4	4	30	70	100
MPEEC-543	Subject Specialization	4	1	25	25+50	100
MPEEC-544	Elective Optional II A	4	-	25	75	100
MPEEC-545	Elective Optional II B	4	-	25	75	100
TOTAL CREI	DITS	16	6	130	370	500
Total marks fo	r all semesters	-	-	455	1345	1800

Selection of Subject Specialization Course:

A student will have the choice of selecting any one course from Subject Specialization Course code MPEEC 513out of seven subject specialization courses mentioned under this group. Therefore, the Subject Specialization Group contains following seven options and a student can opt for any oneoptions:

- i. Exercise Physiology
- ii. Sports Biomechanics
- iii. Exercise & Sports Psychology
- iv. Sports Sociology
- v. Sports Management
- vi. Kinanthropometry in Sports

vii. Strength, Conditioning and SportsPerformance

A student will be provided with the subject of specialization which shall depend upon the merit position obtained by a student during the admission test of M.P.E programme. The college shall obtain the options from the students, where a student will be asked to provide the option in order of preference for a subject of specialization allotment. **Further, the college reserves the rights to provide the subject of specialization depending upon the availability of the infrastructure and the teaching faculty and the workload of a teacher in accordance with the UGC regulation 2018.** The college shall on yearly basis provide the option form for mentioning the availability of the subject specialization for the student. It should be taken care that the seats availability in each subject specialization is equally divided among the students. The college should provide information about the number of seats in each subject specialization on year to year basis and should be mentioned in the option form. The college reserves the right to adopt any other measures for the allotment of the Subject Specializationoption.

A student may be counseled and advised by teachers to opt for the subject specialization that best suits their future interests, previous training and knowledge.

Selection of Elective Courses out of Optional Group I:

A student will have the choice of selecting any two courses from Elective Optional Group -I Code MPEEC 534& MPEEC 535 out of the four elective courses mentioned under this group.

The two courses selected from the **Elective Optional Group-I** (Code MPEEC 534& MPEEC 535) should be other than the course selected in the Subject Specialization in Semester-I (MPEEC-513).

The Elective Course Optional Group I include the following four options and a student can opt for anytwo:

MPEEC 534: (i) Fundamentals of Sports Biomechanics

MPEEC 534: (ii) Fundamentals of Exercise Physiology

MPEEC 534: (iii) Fundamentals of Kinanthropometry in Sports

MPEEC 534: (iv) Fundamentals of Professional Preparation

A student will be provided with an Elective course option in semester III by the college after checking their option of subject specialization as opted in semester I and display the list on the notice board for the information of the students. Such list shall also be sent to all the teaching faculty of the college. The college reserves the right to adopt any other measures for the allotment of the elective course option. However, a student may be counseled and advised by teachers to opt for the elective course that best suits their subject specialization selected in the first semester, future interests, previous training andknowledge.

Selection of Elective Courses out of Optional Group II:

A student will have the choice of selecting any two courses from Elective Optional Group -II code MPEEC 544& MPEEC 545 out of the four elective courses mentioned under this group.

The courses selected from the **Elective Optional Group-II** (**Code-MPEEC 544**) should be other than the course selected in the subject specialization.

The **Elective Course Optional Group II** includes the following **four** options and a student can opt for any **two**:

MPEEC 544: (i) Fundamentals of Sports SociologyMPEEC 544: (ii) Fundamentals of Sports PsychologyMPEEC 544: (iii) Fundamentals of Sports Management and AdministrationMPEEC 544: (iv) Fundamentals of Training Theory

A student will be provided with an Elective course option in semester IV by the college after checking their option of subject specialization as opted in semester I and display the list on the notice board for the information of the students. Such list shall also be sent to all the teaching faculty members of the college. The college reserves the right to adopt any other measures for the allotment of the elective course option. However, a student may be counseled and advised by teachers to opt for the elective course that best suits their subject specialization selected in the first semester, future interests, previous training and knowledge.

Game of Specialization** (One to be selected from the list and carried up to IInd Semester)

- i. Aquatics (Swimming, Diving &Water-polo)
- ii. Badminton
- iii. Basketball
- iv. Cricket
- v. Football
- vi. Gymnastics
- vii. Handball
- viii. Hockey
- ix. Judo
- x. Kabaddi
- xi. Kho-Kho
- xii. Table Tennis
- xiii. Track and Field
- xiv. Volleyball
- xv. Yoga

LEARNING OUTCOME-BASED APPROACH

In today's scenario the world is facing with the problems of non-communicable diseases such as obesity, type II diabetes, stress, hypertension etc., and one of the major reasons that could be

attributed to such problems is physical inactivity and poor lifestyle.

- ➤ In this course the students will be taught to meet the health, physical fitness and positive life style related challenges faced by the members of thesociety.
- The programme has compulsory learning of foundation and allied sports science courses besides being trained in numeroussports.
- > The element of research shall help the students to learn the technique of data collection, evaluation and interpretation of the results. This will enable to students to provide necessary feedback in the related area of investigation.
- The students are provided with various choices in the skill enhancement course which are directly related to the implementation of knowledge in thesociety.
- This course creates strong foundation for all form of teachers training courses in physical education & sports sciences at variouslevels.

GRADUATE ATTRIBUTES

After successful completion of the course the students are required to have accrued the skills of reasoning. Critical thinking, good levels of communication, research methodology and it's implementation in the society for the all-round and harmonious development of the personality of every member of the society. The attributes expected out of the graduates of M.P.E Two Year are summarized below:

- A strong foundation, knowledge and understanding of the basic concepts in the field of physical education, health education and various sports and their relation and scientific implementation in thesociety.
- To spread the knowledge that Physical education, health education and sports an essential element of lifelong education in the overall educationsystem.
- > The ability to understand, identify and solve problems related to fitness, acquiring sound health and importance of yogic practices and physicalactivity.
- The capacity to develop plan on individualized basis for treatment of various NCD's by providing appropriate load through physicalactivity.
- To acquire the knowledge with respect to information on various postural disorders and their possible correction through appropriate rehabilitative exercises.
- > To develop plans for rural and urban needs in the matter of installations, facilities and equipment for physical education and sports.
- To understand that the Physical education and sportsprogrammes must be designed to suit the requirements and personal characteristics of those practicingthem,
- > To analyze and accord priority to requirements of disadvantaged groups insociety.
- The contribution to the maintenance and improvement of health, provide a wholesome leisure-time occupation and enable man to overcome the drawbacks of modern living through physical education and sportsat the individual level. At the community level, they enrich social relations and develop fair play which is essential not only to sportsitself but also to life insociety.
- To realize and spread that Physical education and sport, as an essential dimension of educationandculture, develop the abilities, will-powerandself-disciplineofeveryhuman

being as a fully integrated member of society.

- To develop clear concept to meet the individual and social needs through Physical education and sportprogrammes.
- To understand that Research and evaluation are indispensable components of the development of physical education and sport. Research and evaluation in physical education and sportsshould make for the progress of all forms of sportsand help to bring about an improvement in the health and safety of participants as well as in training methods and organization and managementprocedures.
- > The research elements of the programme shall help to develop innovative methods of teaching and standards of performance.
- > To educate sports authorities and sportspersons, especially the children, the risk of precocious and inappropriate training and psychological pressures of everykind.
- Able to analyze that top-class sports and sports practiced by all must be protected against any abuse. The serious dangers with which phenomena such as violence, doping and commercial excesses threaten its moral values, image and prestige pervert its very nature and change its educative and health promoting function.
- To highlight the harmful effects of doping, which is both injurious to health and contrary to the sporting ethic, or to protect the physical and mental health of athletes, the virtues of fair play and competition, the integrity of the sporting community and the rights of people participating in it at any levelwhatsoever.
- ➤ The capacity to understand the importance of dissemination of information and documentation on Physical education and sports constitute a major necessity. In particular, there is a need to circulate information on the results of research and evaluation studies concerning programmes, experiments and activities.

QUALIFICATION DESCRIPTION

A student will be conferred with the degree of MPE (Master of Physical Education) after successful completion of the course. The degree provides a student with specialized knowledge in the disciplines of physical education, health education, yoga and allied sports sciences and sports in particular.

PROGRAMME OBJECTIVE

- The Course is so designed that it meets all the demands of the society in disseminating the knowledge of Physical Education & Sports Sciences. The programme will enable the students to propagate the importance of Physical Education at various levels and it's requirement for every individual of the society in order to keep oneself healthy and live a stress free and positivelifestyle.
- To build the capacity of students for dissemination of information and documentation on Physical education and sports on the results of research and evaluation studies concerning programmes, experiments and activities related to diverse fields, society and individual in particular.

- The students are exposed to various organizational tasks both in field and classrooms during their tenure of study and thus, imbibe leadership qualities in them.
- Through the research elements of the programme the students can develop innovative methods of teaching and increase the standards of performance insports.
- The students graduating with this programme is expected to contribute to the maintenance and improvement of health, provide a wholesome leisure-time occupation and enable man to overcome the drawbacks of modern living, develop the abilities, will-power and selfdiscipline of every human being as a fully integrated member of society through physical education and sportsat the individual level. At the community level, they enrich social relations and develop fair play which is essential not only to sportsitself but also to life in society.
- The students are expected to cater to the development of a scientific programme of achieving good health and fitness for the corporate sectors after acquiring knowledge from various allied sciences and foundationcourses.

PROGRAMME LEARNING OUTCOMES

- The programme will be helpful in spreading the need and importance of physical activity, yoga and indulging in sports and the effect it produces on the human body as one of the best source of overcoming variousNCD's.
- After completing the course students will be able to provide knowledge to the public at large about Physical Education, Health Education, and Yoga & Sports Sciences (like-Exercise Physiology, Sports Psychology, Sports Bio-Mechanics, Sports Management, Kinanthropometry in Sports, Professional Preparation in Sports, Theory of Sports Training, Sports Nutrition,) and various SportsSpecialization.
- The students will acquire the aptitude of teaching in Class Room, field and possible Teaching /Coaching Environment (Theory, Practical and Applications) through various assignments.
- The programme caters to the development of Leadership Qualities, Entrepreneurship, Organizational Abilities and Team Work among thestudents.

Teaching:

The college is mainly responsible in organizing and conduct of various teaching lecture for all courses. The faculty members of the college accept the responsibilities of teaching various theory courses and practical teaching with great pride. The college teachers take a lead in counseling the students on every front, especially with respect to selection of subject specialization and research topics for finalization of Dissertation in the fourth semester. The teachers and college provide numerous opportunities to students to explore by means of their involvement in seminars, organization and conduct of competitions, organizing lectures, quiz competitions etc. The teaching faculty supervise the research work of the students and guide them in finalization and presentation of their research title, objectives, methodology of obtaining the data, presentation of findings and interpretation of results, research ethics and plagiarism and compilation of the dissertation. There shall be 90 instructional days excluding examination in a semester.

Eligibility for Admissions:

Candidates who have obtained at least 50% marks in the BPE/B.P. Ed/B. Sc (PE.)/BPES degree from a University---Indian or Foreign---recognized for the purpose by University of Kerala and are below 25 years of age as on 01st July of the year of admission are eligible for admission.

Note (i): Relaxation to the extent of 5% marks in aggregate will be given to outstanding sportspersons who have represented the country in Asian Games/Commonwealth Games/Olympic Games or those who have secured first, second or third place at Senior National/Junior National/National games or at All India Intervarsity Competitions in the sports disciplines recognized by the Indian Olympic Association/Association of Indian Universities in the preceding three academic years.

Note (ii): SC/ST candidates will be given relaxation as per University rules.

Candidates who have appeared for the qualifying examinations, but whose results are awaited may also appear for the admission test. However, they must submit the statement of marks and pass certificates before the date stipulated by the college, failing which their admission will be cancelled.

Note: Candidates who are sure that they fulfill the eligibility conditions may report for the admission tests as per the schedule given by the college. Candidates are advised to look up for the list of eligible candidates on the college website.

Admission Tests

The candidates shall be selected to the MPE course as per merit from the rank list, which will be prepared on the basis of the following three items of the selection criteria which shall be conducted in the same order as given.

Written Test: 100 marks

The entrance test (Theory) will consist of 100 questions. The question paper shall consist of

Multiple Choice Question (MCQ) with four options. Duration of the test will be 2 hours. Each question will carry 1 (one) mark and each question will have only one correct answer as an option. A written test will have 20 questions from General Knowledge: sports and current affairs (20 marks) and theoretical knowledge in the subjects studied at B.P.E/ B.P.Ed/B.Sc (PE) degree levels (80 marks).

Game/SportsProficiency Test: (30 marks)

A test in the skills of one game/sportsof candidate's choice out of the games/sports is included

in the schedule of AIU (Sports Division). However, the college reserves the right to delete any game/sports from the list on administrative consideration.

The list of Games/Sports is:

1.Basketball	2. Boxing	3. Cricket
4.Football	5.Gymnastics	6.Handball
7.Hockey	8. Judo	9.Kabaddi
10. Kho-Kho	11. Shuttle Badminton	12. Softball
13. Swimming	14. Table Tennis	15. Taekwondo
16. Tennis	17. Track & Field	18. Volleyball
19. Wrestling		

Game/Sports Achievement: (20 marks)

Achievement rating in a Game/Sportsas per the Rating Scale which shall be provided by the college from time to time.

Note: Rank list of the candidates will be prepared on the basis of total marks (max 150) obtained in written test (100 marks), Game/Sportsproficiency test (30 marks) and Game/sportsachievement (20 marks).

Number of Seats:

Total number of seats are 25.

Reservations of seats (As per State Government Rules followed by University of Kerala).

ADMISSION PROCEDURE

- > All eligible candidates desirous of seeking admission to MPE Course should apply online before the last date prescribed.
- > The candidates are provisionally called for admission tests on the basis of the documents submitted by them.
- > They have to report to the center opted on the prescribed dates and time given in the test call card
- > The schedule of tests will be notified to the candidates on their arrival at the testing venue.
- > Candidates must be in possession of all original certificates/credentials and other documents for verification by college administration when they report for tests.

WOMEN CANDIDATES

Married women are eligible for admission, but if a woman candidate admitted reaches the stage of expectancy during the course, she may have to discontinue her studies for a minimum period of one year.

NOTES:

1. All admissions are provisional and subject to confirmation of their eligibility by the University of Kerala.

2. The College reserves the right to deny admission to a candidate on disciplinary grounds.

3. The College reserves the right to keep seats vacant if as many candidates as the sanctioned strength of seats do not qualify.

4. Candidates are admitted on their own responsibility and the credentials/ documents furnished by them. If, at any stage, it is found that any document furnished by a candidate is forged, or information contained in it, is false his/her admission will be cancelled forthwith.

ATTENDANCE AND EXAMINATIONS

Regulations regarding Attendance and Examinations established by University of Kerala shall be followed for all courses. As per the rule there shall be 180 teaching days in a year (90 teaching days in a semester). Every student is required to put in 100% attendance (separately in theory and activities). However, leave on account of illness, injury, participation in sports activities and other exigencies may be allowed to the extent of 15 % of the total classes in a semester/year. In case a student exceeds this limit, he/she may take admission in the same class in the next academic year. Sanction of duty leave on account of participation in sports/literary/cultural activities beyond the extent mentioned above is left to the discretion of the Principal.

Note:

Attendance will be counted from the commencement of the session irrespective of the date of admission of an individual.

INTERNAL EXAMINATION

- Students are expected to perform well in sessional/model examinations so as to score good marks in thesessional.
- A student may be detained from appearing for the University Examination if his/her progress in theory/activity is not foundsatisfactory.

CONDUCT AND DISCIPLINE

- > If any incident of ragging comes to the notice of the authority, action will be taken asper the law prohibiting, and directions of the Supreme Court of India and the Central/State Government as well as the UGC regulations on curbing the menace of ragging in educational institutions, 2009.
- > Onadmissionthecandidateandhis/herparent/guardianhavetogiveanundertakingto
- the office that their ward will not indulge in ragging and if found guilty of ragging then they will be punished by the institution as per UGC regulations.

- As per the order of the Supreme Court of India, in case an applicant for admission is found to have indulged in ragging in the past, admission may be refused and, if it is noticed later that he/she has indulged in ragging, he/she shall be expelled from the institution.
- > Studentsarerequiredtomaintainexcellentconductbothinsideandoutsidethecollegecampus and hostels. The College reserves the right to take disciplinary action including expulsion or rustication from college at any time during the course of study if a student violates college rules or acts in a manner which is detrimental to the college discipline.
- > Students are not permitted to use car/motorcycle/scooter, etc. on the campus
- > There are separate rules regarding discipline in the college, on and off the playfields, in the hostels, at assemblies, in the library, etc.
- > Promotion to the second year class can be denied on reasons of indiscipline ormisconduct.
- > Students are not permitted to engage themselves in any activities involving politics/ political parties inside the campus, any violations will attract disciplinary proceedings.
- Smoking, consumption of alcohol and narcotics are prohibited in the hostels and campus.

The college diary containing these rules will be provided to each student at the beginning of the year. A student who violates the provisions in the rules will be dealt with suitably.

College reserves the right to make change(s) in these rules at any time, which will be notified to the students for compliance.

COLLEGE DUES

Students will be required to pay the fee according to the details given in the prospectus

MONTHLY DUES MUST BE CLEARED BY STUDENTS BY THE 10TH OF EVERY MONTH FAILING WHICH FINE WILL BE LEVIED AS GIVEN BELOW:

Upto10th	-	Nofine
Upto15th	-	Rs.50/-
Upto20th	-	Rs.75/-
Last working day ofthemonth	-	Rs. 100/-

If a student does not clear the dues within the period mentioned above, his/her name will be struck off the college rolls and re-admission will be allowed only on clearance of all dues and fine as mentioned above within three days along with a re-admission fee of Rs.150/-.

Note:

If any day specified above is not a working day, fees will be collected on the next working day.

CAUTION MONEY

Caution Money of Rs. 1000/- in case of MPE, shall be realized from each student along with the first installment of fees. The caution money will be refunded to the student only on completion of the course after deducting outstanding dues, if any. However, if any student will fully causes damage to college property, his/her caution money shall not be refunded.

Note:

If the caution money is not claimed within a year of completion of the course, it will be forfeited to the college and credited to the college account.

UNIVERSITY FEE

- **Examination fee** will be collected from the students as prescribed by the UniversityofKerala.
- Students who come from institutions outside the jurisdiction of University of Kerala will have to produce migration certificates from their respective Universities/Boards soon after their admission to college. (*This does not apply to the candidates who have passed Higher Secondary from Kerala EducationBoard.*)
- Matriculation fee will be collected from candidates who come from Universities other than the University of Kerala and variousBoards.
- Recognition of the qualifying examination by the University of Kerala is mandatory for all candidates who have passed their qualifying examination from Universities other than Kerala University and various Boards. However, this does not apply to the candidates from CalicutUniversity.
- Eligibility certificate must be obtained by remitting the feeto University of Kerala by the candidates of other Universities and Boards of Higher Secondary Examinations.

ASSESSMENT OF STUDENTS' PERFORMANCE AND SCHEME OF EXAMINATIONS:

- **1.** English shall be the medium of instruction and examination.
- **2.** Examinations shall be conducted at the end of each Semester to assess students' performance as per the Academic Calendar notified by the college.
- **3.** End semester examinations will be given a weightage of 50 % of the total marksinacoursefortheory,25% willbebasedoninternalassessmentand25% will be based on the practical component in each course having the components of Theory, Practical, and Internal Assessment. However, if a course is having the component of only theory and internal assessment, the end semester examinations will be give a weightage of 75% of total marks for theory and 25% for internal assessment.

4. Assessment of students' performance, based on Learning Outcomes for each course, shall consistof:

Each theory paper in all semesters will carry 100 marks. Of the specified maximum marks, 25 % marks shall be reserved for internal assessment based on presentation, class test, viva, project, assignment, seminar, and attendance. The weightage to be given to each of these components is detailed in the marking scheme described under each course. Any student who fails to participate in the components of internal assessment will be debarred from appearing in the end-semester examination in the specific course and no internal assessment marks will be awarded. His/her internal assessment marks will be awarded as and when he/she attends regular classes in the courses in the next applicable semester. No special classes will be conducted for him/her during other semesters. The duration of written examination for each paper for end semester examination (50% marks) shall bethreehours.

Examinations for practical for various courses in semesters I, II, III, and IV shall comprise of 25 marks for each course. The practical component has to be evaluated jointly by internal and external examiner by considering the components of demonstration and /or test, viva-voce and record file. The weightage to each of these components has been mentioned under eachcourse.

Dissertation work would comprise of research work carried out by each student during the semester IV in the supervision of a particular faculty member. Each student will be assigned to a particular faculty member (mentor) at the beginning of semester III to plan and execute a research project. Towards the end of semester IV, the student will compile the research work including review of literature, aims and objectives, methodology and results and discussion in the form of a dissertation in the supervision of the mentor. At the end of semester IV, students would submit three hard copies of the dissertation and an abstract along with a soft copy in CD for assessment jointly by external and internal examiner out of 50 marks. The internal assessment have to be awarded by the supervisor out of 50marks.

5. Examinations for courses shall be conducted only in the respective odd and evenSemestersaspertheSchemeofExamination.RegularaswellasEx-

Students shall be permitted to appear/reappear/improve in courses of odd semesters, only at the end of odd semesters and for even semester with the even or for all purpose of examination, the rules implemented from time to time by University of Kerala will be applicable.

Pass Percentage & Promotion Criteria:

The minimum marks required to pass any paper in a semester shall be 45% in theory,45% inPractical and 45% in internal assessment taken separately whereas, the aggregate for the end semester should be 50%.

A student must pass all the papers prescribed in the course within the span period to be eligible for M.P.E. degree.

No student will be detained in MPE I or III Semester on the basis of his/her performance in I or III Semester examination; i.e. the student will be promoted automatically from I to II and III to IV semesters.

A student shall be eligible for promotion from 1st year to 2nd year of the course provided he/she has passed 50% papers of I and II semester taken together. However, he/she will have to clear the remaining paper/s while studying in the 2nd year of the program.

Part I to Part II Progression:

- (a) As mentioned above, the progression from Semester I to Semester II and from Semester III to Semester IV will follow a no-detention policy. Students will be promoted automatically in these semesters.
- (b) A student will be eligible for progression from Semester II to Semester III, i.e. from Part I to Part II provided the student has passed 50% papers of Semester I and II combined. However, he/she will have to clear the remaining paper/s while studying in the 2nd year of the programme. To obtain M.P.E. degree, the student must pass all the papers prescribed in the programme within the specified span period.
- (c) Students who do not ful fill the promotion criteria (b) above shall be declared fail in the Part concerned. However, they shall have the option to retain the marks in the papers in which they have secured Pass marks as per Clause for Pass percentage above.
- (d) A student who has to reappear in a paper prescribed for semester I/III may do so only in the odd semester examinations to be held in November / December. A student who has to reappear in a paper prescribed for Semester II/IV may do so only in the even Semester examinations to be held in April/May.

Reappearance in Passed Papers

(a) A student may reappear in any theory paper prescribed for a semester, on foregoing in writing his/her previous performance in the paper/s concerned. This can be done once only in the immediate subsequent semester examination only (for example, a student reappearing in a paper prescribed for Semester I examination, may do so alongwith the immediate next SemesterIII examinations only).

- (b) A candidate who has cleared the papers of Part II (III & IV Semesters) may reappearing any paper of Semester III or IV only once, at the immediate subsequent examination, on foregoing in writing his/her previous performance in the paper/s concerned, within the prescribed span period. (Note: The candidate of this category will not be eligible to join any higher course ofstudy).
- (c) In the case of reappearance in a paper, the result will be prepared on the basis of candidate's current performance in the examination.
- (d) In the case of a candidate, who opts to re-appear in any paper/s under the aforesaid provisions, on surrendering his/her earlier performance but fails to reappear in the paper/s concerned, the marks previously secured by the candidate in the paper/s in which he/she has failed to re-appear shall be taken into account while determining his/her result of the examination held currently.
- (e) Reappearance in Practical examinations and Dissertation shall not be allowed.
- (f) A student who reappears in a paper shall carry forward the internal assessment marks, originallyawarded.

Conversion of Marks into Grades:

As per University Examination rules.

Grade Points:

Grade point table as per University Examination rule

CGPA Calculation:

As per University Examinationrule.

SGPA Calculation:

As per University Examinationrule.

Grand SGPA Calculation:

As per University Examinationrule.

Conversion of Grand CGPA into Marks

As notified by competent authority the formula for conversion of Grand CGPA into marks is: Final %age of marks = CGPA based on all four semesters \times 9.5 or as per the regulations of theUniversity.

Division of Degree into Classes

Post Graduate degree to be classified based on CGPA obtained into various classes as notified into Examination policy as per the University regulations.

Span Period:

No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of **four** years from the date of admission to the Part-I/Semester-I of the M.P.E Programme.

Guidelines for the Award of Internal Assessment Marks for MPE Programme (Semester Wise)

Internal assessment will comprise 25 % of the maximum marks in a specified paper. Internal assessment will have several components like presentation, class test, viva, project, assignment, seminar, and attendance. The weightage to be given to each of these components is detailed in the marking scheme described under each course. Marks for mid-term written test / assignment / seminar and attendance will be discussed with the students and copies for written test / assignment will be returned to students appropriately marked.

Attendance will be marked separately for each theory and practical papers as well as for Dissertation. Attendance marks will be included as part of 25 % internal assessment in each paper and marked in three tiers. A student who attends 91-100% of the classes will be awarded 5 marks (out of 25 in internal assessment), students who attend 81-90% of the classes will be awarded 4 marks, students who attend 75-80% of the classes will be awarded 2 marks and students who attend 70-75 % of the classes will be awarded 1 mark. No attendance marks will be awarded if a student attends less than 70 % of the classes.

NOTE:

The promotion/passing/attendance/other rules are subject to change from time to time by the University, and the rules prevailing at that time will be applicable.

TABLE OF CONTENTS

S. NO.	DETAIL OF CONTENTS	PAGE NO.
1.	Preliminary Matter- Title, Contents, Structure, Marking Scheme, Instructions.	
1	Semester- I. Two Core Paper and Two Elective Paper.	
2	Semester- II. Two Core Paper and Two Elective Paper.	
3	Semester- III. Two Core Paper and Two Elective Paper.	
4	Semester- IV. Two Core Paper and Two Elective Paper.	

General Instructions for the Scheme

Abbreviations: -

\triangleright	EC	=	ELECTIVECOURSE	T =THEORY
\triangleright	CC	=	CORE COURSE	P= PRACTICAL

IMPORTANTINFORMATION

- The MPE TWO YEAR (OUTCOME BASED EDUCATION) contains 8 Core papers placed from Semester – I to Semester – IV of 5 credits each labeled as MPECC- 511, MPECC-512, MPECC-521, MPECC-522, MPECC-531, MPECC-532, MPECC-541 AND MPECC-542. These are listed below:
 - > MPECC-511: Yogic Science :5 Credits (4 Th +1P)
 - > MPECC-512: Health Education and Nutrition:5 Credits (4 Th +1P)
 - > MPECC-521: Athletes' Care and Rehabilitation: 5 Credits (4 Th +1P)
 - > MPECC-522: Measurement and Evaluation in Physical Education :5 Credits (4 Th +1P)
 - MPECC-531: Research Process:5 Credits (4 Th +1P)
 - MPECC-522: Applied Statistics :5 Credits (4 Th +1P)
 - > **MPECC-541:** Applied Statistics:5 Credits (4 Th +1P)
 - > **MPECC-542:** Dissertation:8 Credits (4 Th +4P)
- 2. The MPE TWO YEAR (OUTCOME BASED EDUCATION) contains 8 Elective papers placed from Semester I to Semester IV of 5 credits each labeled asMPEEC-513, MPEEC-523, MPEEC-533 and MPEEC-543), whereas there are 8 credits each in MPEEC-534-Elective Optional Group-I and MPEEC-544-Elctive Optional Group-II. These are listed below:

Subject Specialization (MPEEC-513, MPEEC-523, MPEEC-533 and MPEEC-543):

- i. Exercise Physiology
- ii. SportsBiomechanics
- iii. Exercise & Sports Psychology
- iv. Sports Sociology
- v. Sports Management
- vi. Sports Anthropometry
- vii. Strength, Conditioning and Sports Performance

The Elective Course Optional Group I include the following four options and a student can opt for any two:

- MPEEC 534: (i) Fundamentals of Sports Biomechanics
- > MPEEC 534: (ii) Fundamentals of Exercise Physiology
- MPEEC 534: (iii) Fundamentals of Kinanthropometry in Sports
- MPEEC 534: (iv) Fundamentals of Professional Preparation

The Elective Course Optional Group II includes the following four options and a student can opt for any two:

- MPEEC 544: (i) Fundamentals of Sports Sociology
- > MPEEC 544: (ii) Fundamentals of Sports Psychology
- MPEEC 544: (iii) Fundamentals of Sports ManagementandAdministration
- MPEEC 544: (iv) Fundamentals of Training Theory

Semester-I

			Credit	
S.No.	Paper No.	Title	Theory/	
			Practical/Tutorial	
1	MPECC-511	Yogic Science	5 (4 Th + 1 P)	
2	MPECC-512	Health Education and Nutrition	5 (4 Th + 1 P)	
3	MPEEC-513	Subject Specialization	5 (4 Th + 1 P)	
4	MPEEC-514	Sports Specialization	5 (4 Th + 1 P)	
		Total Credits	20	

Note:

Th	=	Theory
Р	=	Practical

DETAILS OF COURSE OF MPE TWO YEARS (OUTCOME BASED EDUCATION) PROGRAMME

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

COURSE CODE- MPECC-511 COURSE NAME- YOGIC SCIENCE

Max.Marks=100

Time: 3Hrs

(Theory = 50 Marks + Practical = 25 Marks + Internal Assessment = 25 Mark)

<u>Objective</u>: To provide the knowledge of Yoga including the various Asanas and pranayama and their effects. Student will also be given the knowledge about the yogic diet.

Learning Outcome: - The students will learn about various Yoga Asanas, Satkarmas, Pranayams, Bandhas and yogic diet. This will help the students to lead a happy and satisfied life.

Unit-I Learning Outcomes:

The Students will develop the understanding and knowledge of Origin, definition and scope of yoga, limitations and misconceptions related to yoga, importance of yoga in physical education and other fields, Historical development of yoga in India, Types of Yoga.

The Student will learn and Practice of some part of the Shatkarma: Neti, Dhauti, Nauli, Basti

Unit-II Learning Outcomes:

The Students will develop the understanding and knowledge of Patanjali yoga sutras- Yama, Niyama, Asana, Pranayama, Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharna, dhyan, Samadhi & their psychological impact. Shatkarm/cleansing process/ yogic methods and personal hygiene. The student will learn and Practice of some part of the Shatkarma:kunjal, kapalbhati, shankhprakshalana

Unit-III Learning Outcomes:

The Students will gain knowledge of the Asanas: Types, importance of asanas in special reference to Physical Education & Sports. Differentiate between asanas and exercise. Pranayama and importance of pranayama in special reference to its Physiological effects. The Student will learn and skillful in all the aspects of Pranayam: Anulom-Vilom, Bhastrika, NaddiShodhan, Sheetali, Sheetkari, Bhramari, Ujjayi.

Unit-IV Learning Outcomes:

The Students will gain knowledge of the Importance of vegetarianism in yogic diet. Bandhas and mudras and its Physiological effects. The Student will learn the Practice of Bandhas: Jalandhar, Uddyana, Mool Bandha

THEORY SYLLABUS

UNIT-I 15 hrs Origin of yoga, definition and scope of yoga \triangleright Limitations and misconceptions \geqslant ۶ Importance of yoga in physical education and other fields **UNIT-II** 15 hrs \geqslant Historical development of yoga in India. \triangleright Types of Yoga: -Hatha yoga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, rajyoga **UNIT-III**

- Patanjali yoga sutras- Yama, Niyama, Asana, Pranayama >
- Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, Dharna, \triangleright Dhyan, Samadhi & their psychological impact.
- \triangleright Shatkarm/cleansing process/ yogic methods and personal hygiene.

UNIT-IV

- Asanas: Types, importance of Asanas in special reference to Physical Education & Sports. \geq
- ۶ Differentiate between Asanas, pranayama and exercise.
- \geqslant Pranayama and importance of pranayama in special reference to Physiological effects.
- ۶ Importance of vegetarianism in vogic diet. Bandhas, mudras and their physiological effects.
- \triangleright Asanas, Pranayama, Kriya and Meditation impacts on Physical, Physiological, Psychological and social aspect of human

PRACTICAL

- 1. Practice of Shatkriva: Neti, Dhauti, Nauli, Basti, Kunjal, andKapalBhati.
- 2. Practice of Pranayam: Anulom-Vilom, Bhastrika, NaddiShodhan, Sheetali, Sheetkari, Bhramari, Ujjavi
- 3. Practice of Bandhas: Jalandhar, Uddyana, Mool Bandha, mudras
- 4. Practice of Asanas

Note:

(a) One Theory period is equal to 1 credit of 1 hour duration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstration and/or test	-10 marks
Viva-voce	-10marks
Record file	- 05marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva -10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

15 hrs

30 hrs

15 hrs

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from each unit.
- > The students have to answer any five questions out of the total of eight questions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

- 1. Day P.(1986). Yoga Illustrated Dictionary. Jaico Pub. House. New Delhi.
- 2. DebnathM (2007). Basic Core Fitness through Yoga and Naturopathy. Sports Publication. New Delhi.
- 3. Kumar ER (1988). Heal Yourself With Yoga: Specific Disease. Taraporevala. Bombay.
- 4. Sharma Jai Prakash and RathoreBhupender Singh (2007). Yoga KeTatva. Friends Publication.Delhi
- 5. Shanti KY (1987). The Science of Yogic Breuthiay (Pranayana). D.B. Bombay.
- 6. Sharma JP and Ganesh S(2007). Yog Kala EkPrichya. Friends Publication. NewDelhi
- 7. Sharma JP (2007). Manavjeevanevam yoga. Friends Publication.NewDelhi.
- 8. Sharma Jai Prakash And Sehgal Madhu (2006). Yog-Shiksha. FriendsPublication.Delhi.
- 9. Singh MK and Jain P (2008). Yoga aurmanoranjan. Khel Sahitya Kendra. NewDelhi.
- 10. Vyas SK (2005). YogShiksha KhelSahityaKendra.Delhi.

Facilitation to the Achievement of Course Learning Outcomes

Month Wise and unit wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge of Origin, definition and scope of yoga, limitations and misconceptions related to yoga, importance of yoga in physical education and other fields, Historical development of yoga in India, Types of Yoga. The Student will learn the Practice of some part of the Shatkarma: Neti, Dhauti, Nauli, Basti,	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Unit-II	The Students will develop the understanding and knowledge of Patanjali yoga sutras- Yama, Niyama, Asana, pranayama, Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, Dharna, Dhyan, Samadhi & their psychological impact., Shatkarm/cleansing process/ yogic methods and personal hygiene. The Student will learn the Practice of some part of the Shatkarma: kunjal, kapalbhati, shankhprakshalana	 Lecture Methods Demonstrati on Methods Assessment Methods Presentation 	 Evaluation of Presentatio n Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will gain knowledge of the Asanas: Types, importance of Asanas in special reference to Physical Education & Sports. Differentiate between asanas and exercise. Pranayama and importance of pranayama in special reference to Physiological effects. The Student will learn to practice all aspects of Pranayam: Anulom-Vilom, Bhastrika, NaddiShodhan, Sheetali, Sheetkari, Bhramari, Ujjayi	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentatio n Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will gain knowledge of the Importance of vegetarianism inyogic diet. Bandhas, mudras and their physiological effects. The Student will learn the Practice of Bandhas: Jalandhar, Uddyana, Mool Bandha	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION)

SEMESTER – I

COURSE CODE- MPECC-512 COURSE NAME- HEALTH EDUCATION AND NUTRITION

Max.Marks=100

Time: 3Hrs.

(Theory = 50 Marks + Practical = 25 Marks + Internal Assessment = 25 Mark)

Objective: -To provide the knowledge of health education and nutrition.

Learning Outcomes:

- > The Students will be able to understand the concept of fundamental health education.
- > The students will be able to get the knowledge about health problems in India.
- > The student will be able to know about hygiene and health.
- > The student will be able to understand the concept of nutrition and BMI.

Unit-I Learning Outcomes:

The Students will develop the understanding and knowledge regarding Definition of Health, Health Education, Health Instruction, and Health Supervision Aim, objective and Principles of Health Education Health Service and guidance instruction in personal hygiene

Unit-II Learning Outcomes:

The Students will develop the understanding about Communicable and Non-Communicable Diseases, Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care.

Unit-III Learning Outcomes:

The Students will understand about Meaning of Hygiene, Type of Hygiene, and dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, and Management of Obesity.

Unit-IV Learning Outcomes:

The Students will understand about Sports Nutrition, Role of nutrition in sports, Concept of BMI (Body mass index), Obesity and its hazard, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss.

THEORY SYLLABUS:

Unit-I

- > 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

- > Communicable and Non-Communicable Diseases
- > Obesity, Diabetes, Malnutrition, Management of Obesity, Management of Stress and

15hrs

15hrs

diabetes,

- Adulteration in food, Environmental sanitation, Population Explosion
- > Personal and Environmental Hygiene in 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.

Unit-III

15hrs

- > Meaning of Hygiene, Type of Hygiene, dental Hygiene
- > Effect of Alcohol on Health, Effect of Tobacco on Health
- Life Style Management, Management of Hypertension, Weight management program for sporty child, Role of diet and exercise in weight management

Unit-IV

15hrs

- Meaning and Definition of Sports Nutrition
- > Role of nutrition in sports, Basic Nutrition guidelines
- > Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat)
- > Role of carbohydrates, Fat and protein during exercise
- > Concept of BMI (Body mass index)
- > Role of diet and exercise in weight management
- > Design diet plan and exercise schedule for weight gain and loss.

PRACTICAL

- ✓ Develop a checklist for good hygiene practices
- ✓ Planning and preparation of diets and dishes for
 - I Young adult
 - IPregnant and Lactating woman
- ✓ Develop a food pyramid
- ✓ Develop a chart of status of communicable and non-communicable disease in India.
- ✓ Measurement of Height
- ✓ Measurement of Weight
- ✓ Measurement of BMI (Body Mass Index)
- ✓ Measurement of BMR (Basal Metabolic Rate)
- ✓ Determination of Caloric Value of Food

Note:

(a) One Theory period is equal to 1 credit of 1 hour duration.(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstration and/or test	-10	0 mai	rks
Viva-voce	-10	Omark	KS
Record file	-	05	marks

Internal Assessment (Maximum Marks -25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

- 1. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as NatureIntended. Angus andRobertson.
- 2. Bucher, C. A. Administration of Health and Physical Education, C. V. Mosby Co. USA.2.
- 3. Dheer S. (1989). Introduction to health Education. A P Pubishers, Jalandhar.
- 4. Johnson W R. (1977). Health in Action.Printed in United States of America.
- 5. Moss and et. At. "Health Education" (National Education Association of U.T.A.)
- 6. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
First Month	The Students will developthe understanding and knowledge regarding Definition of Health, Health Education, Health Instruction, and Health Supervision Aim, objective and Principles of Health Education HealthService and guidance instruction in personal hygiene	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Second Month	The Students will developthe understanding about Communicable and Non Communicable Diseases, Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Third Month	The Students will understand about Meaning of Hygiene, Type of Hygiene, and dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, and Management of Obesity.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Fourth Month	The Students will gain knowledge of Sports Nutrition, Role of nutrition in sports, Concept of BMI (Body mass index), Obesity and its hazard, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

SUBJECT CODE – MPEEC 513 (i) SUBJECT NAME –Subject Specialization (EXERCISE PHYSIOLOGY)

MODULE 1- PHYSIOLOGY OF MUSCULAR ACTIVITY

Marks:100

Duration:03hours

(Theory = 50 Marks + Practical = 25 Marks + Internal Assessment = 25 Mark)

Objective: -To provide an understanding about the physiological basis of muscular activity and how sports and exercise affect various bodily functions.

Learning Outcome:

- > To introduce the subject matter to thestudents.
- > To enable the students to understand the impact of exercise on different bodysystems.
- > To make the students learn the bioenergetics in physicalactivity.
- > To impart knowledge for enabling students to develop an idea regarding physiological basis of muscular activity.

1. After the Completion of FirstMonth:

The Students will develop a general idea about sports and exercise physiology along with its definition and explanation. In addition, students will develop an understanding of the need and importance of exercise physiology in the field of physical education. The students would also explore various allied areas of exercisephysiology.

2. After the Completion of SecondMonth:

The Students will develop the understanding and knowledge of acute and chronic effect of exercises on different systems of body.

3. After the Completion of ThirdMonth:

The Students will gain knowledge of Laws of thermodynamics, structure and function of ATP and different energy pathways. The students would learn integrated functioning of energy systems in the body during rest and exercise.

4. After the Completion of FourthMonth:

At the end of this semester students will develop an understanding of the physiological basis of the muscular activity. Students will develop an understanding of the microscopic and chemical structure of skeletal muscle fibre.

THEORYSYLLABUS:

UNIT-1 Introduction

- > Meaning and definition of exercisephysiology.
- > Need and importance of exercise physiology in the field of physicaleducation.
- Scope of exercise physiology

UNIT2

Effect of Exercise and Training onVarious Systems

Acute and chronic responses to trainingon:

CardiovascularSystem

60Credits

15hrs

15 hrs

- RespiratorySystem
- NeuromuscularSystem
- Endocrine System

UNIT3

BioenergeticsofExercise

- Laws of thermodynamics (Conservation of energy and directionality of reactions)
- Structure and Function of ATP
- Energy pathways (Phosphagen System, Anaerobic Glycolysis, Krebs Cycle)
- Integrated functioning of EnergySystems
- Effects of Training on Energy Systems (Short Term- High Intensity and Prolonged Submaximal Training)

UNIT 4

Physiological Basis of Muscle Contraction

- Structural and architectural organization of SkeletalMuscle.
- Microscopic Structure of skeletal muscle fiber (sarcoplasmic reticulum, transverse tubule, myofibrils, sarcomere)
- Molecular structure of Myofilaments (Thick filaments, thinfilaments)
- Sliding filament theory of MuscleContraction
- Muscle fibre Types (contractile and metabolic characteristics of Type I, Type IIa and IIb fibres)
- > Types of Muscle contractions (Isometric, concentric, eccentric, isokinetic)

PRACTICAL

- 1. Identifying major muscles of the body (Using diagrams and onbody).
- 2. Identifying the muscles involved in fundamentalmovements.
- 3. Identifying the types of contraction onexercises.
- 4. Assessing physiological parameters during and post toexercises.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

30 hours

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

15 hrs

15hrs

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

Suggested Readings

- 1. Dey, S. K. (2012). A Text Book of Sports and Exercise Physiology. New Delhi: Jaypee Brothers MedicalPublishers.
- 2. Haff, G.G., &Dumke, C. (2012). *Laboratory Manual for Exercise Physiology*. USA: Human Kinetics.
- 3. Maud, P.J., & Foster, C. (eds.) (2006). *Physiological Assessment of HumanFitness*(2nded.). USA: HumanKinetics.

Reference

- 1. Kenney, W. L., Wilmore, J. H., &Costill, D. L. (2012). *Physiology of Sportsand Exercise* (5thed.). USA: HumanKinetics.
- 2. Plowman, S. A., & Smith, D. L. (2017). *Exercise Physiology for Health, Fitness and Performance (5thedn)*. Philadelphia: WoltersKluwer.
- 3. Porcari, J., Bryant, C., & Comana, F. (2015). Exercise Physiology. USA: F ADavis.
- 4. Silverthorn, D. U. (2009). *Human Physiology: An Integrated Approach (4thed.)* Pearson education, USA.
- 5. Tanner, R.K., & Gore, C.J. (eds.) (2013). *Physiological tests for elite athletes (2nded.)*. USA: Human Kinetics.
- 6. Wingerd, B. (2014). *The Human Body: Concepts of Anatomy and Physiology (3rded.)*. Lippincott Williams & Wilkins.

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
First Month- UNIT-I	The Students will develop a general idea about sports and exercise physiology along with its definition and explanation. In addition, students will develop an understanding of the need and importance of exercise physiology in the field of physical education. The students would also explore various allied areas of exercise physiology.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test <i>iva/seminar</i>
Second	The Students will develop the understanding and knowledge of acute and chronic effect of exercises on	 Lecture Methods Demonstration Methods Assessment 	 Evaluation of Presentation Evaluation of Assignment

Month– UNIT-II Third Month Unit-III	different systems of body. The Students will gain knowledge of Laws of thermodynamics, structure and function of ATP anddifferent energy pathways. The students would learn integrated functioning of energy systems in the body during rest and exercise.	Methods Presentation Lecture Methods Demonstration Methods Assessment Methods Presentation 	MCQ/Class-test / viva/ seminar Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
4 th Month Unit-IV	At the end of this semester students will develop an understanding of the physiological basis of the muscular activity. Students will develop an understanding of the microscopic and chemical structure of skeletal muscle fiber.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER - I

COURSE CODE – MPEEC 513 (ii) COURSE NAME – Subject Specialization (SPORTS BIOMECHANICS)

MODULE-1 (BASIC BIOMECHANICS)

Marks:100

Duration: 03hours

(Theory-50+Practical-25+Internal Assessment -25)

Objective: -To provide understanding about the subject biomechanics and how forces influence the characteristics of motion.

Learning Outcome:

- > To understand the area of application of biomechanics in physical education and sports.
- > To enable the students to understand the distinguished areas of mechanics that influence humanperformance.
- > To familiarize students with the procedures used in biomechanics to investigate human movement.
- > To equip students to understand the fundamental measuring units used in biomechanics researches.
- To enable students to understand linear kinematics by learning the stuffing of linear kinematics
- To provide an insight on angular kinematics by learning different aspects involved in angular kinematics

After the Completion of First Month:

The Students will develop insight about biomechanics and related terminologies, concepts and means used in biomechanics to analyze human motion. Students will also understand the significance of biomechanics and its area of application in sports and physical education.

After the Completion of Second Month:

The Students will attain the required knowledge in trigonometry which is used in biomechanics. They would learn the standard units used to measure the components with the aim of using it in biomechanical investigations.

After the Completion of Third Month:

The definitions, concepts and perceptions about the ultimate contents of linear kinematics will be taught to the students during this month. They will also accomplish knowledge about projectile and the characteristics of trajectory of objects projected in different conditions.

After the Completion of Fourth Month:

The students would attain facts on the stuffing in angular kinematics. They will also acquire knowledge on the differences between the contents of and their measuring units. At the end of this unit they would be capable of understanding the relationships between area of knowledge in linear kinematics and angular kinematics.

THEORY SYLLABUS:

UNIT 1

Introduction

- > Need and scope of biomechanics in physical education insports.
- > Definition and meaning of terms mechanics, biomechanics, kinetics andkinematics
- Meaning of the terms kinesiological analysis, mechanical analysis and biomechanical analysis.

UNIT 2

Trigonometry and UnitsofMeasurement 15 hrs Elementary trigonometric concepts. \geq Significantfigures, \geqslant \triangleright International units, fundamental and derivedunits Concept of vectors and scalars \triangleright Parallelogram law of force. Vector components > UNIT 3 **Linear Kinematics** 15 hrs \geqslant Forms of motion Distance and displacement, speed and velocity Acceleration, acceleration due togravity Projectile, trajectory of projectile **UNIT4** AngularKinematics 15 hrs \geqslant Angular distance and angulardisplacement \geqslant Angular speed and angularvelocity \geqslant Angular acceleration Relationship of linear kinematics to angularkinematics \triangleright PRACTICAL 1. Identification of mechanical axes of importantjoints. 2. Goniometry Note: (a) One Theory period is equal to 1 credit of 1-hourduration. (b) One practical period is equal to 1 credit of 2-hour duration. 30 hours **Marking Scheme:**

MaximumMarks	- 100 marks
Theory Examination	- 50Marks
Practical	- 25Marks
InternalAssessment	- 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks

Recordfile

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10 Marks
Project/Assignment/Seminar	- 10 Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

-5marks

- I The examiners are required to set eight questions taking at least two questions from eachunit.
- The students have to answer any five questions out of the total of eightquestions.
- E Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

Bartlett, R. (1997). Introduction to Sports Biomechanics. New York: E & FNspon.

REFERENCES

- 1. Hall, J. S. (1991). Basic Biomechanics. USA: Mosby YearBook.
- 2. Miller, R. (1990). Biomechanics (3rd Ed.). New York: Macmillan.
- 3. John W., B. (1979). Principles of coaching. Englewood Cliffs, N.J.: Prentice HallInc.
- 4. Hay, J., & Reid J, G. (1998). Mechanics of human motion (2nd Ed.). Englewood Cliffs, N.J.: Prrentice Hallinc.
- 1. Broer, M, R., &Zemicke. (1979). Efficiency of human movements. Philadelphia: W.B. Saunder Co

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progressio n	Course Learning Outcomes	Teaching an d Learning Activity	Assessment Task
First Month- UNIT-I	The students will develop a precise insight about the field of study i.e. Biomechanics. In addition, they accomplish knowledge about the need and importance of biomechanics inthe sports and physical education. The definitions, meanings and explanations of means used in biomechanics will also be learnt by thestudents.	Methods Demonstrati on Methods Assessment Methods	Evaluation of Presentation Evaluation of Evaluation of Assignment MCQ/Class- test/ viva/seminar

Second Month – UNIT-II	The students will achieve the essential understanding and knowledge in trigonometry which is used in biomechanics. The student will be well-versed with the international units and derived units which are used in measuring and recording data used in biomechanical investigations.	 Lecture Methods Demonstrati on Methods Assessment Methods Presentation 	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
Гhird Month Unit-III	The students will gain concept about linear kinematics and the areas of mechanics that encompasses. They learn the definitions, meaning and units of those areas of mechanics that comes under liner kinematics.	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
4 th Month Unit-IV	The students will acquire knowledge about the angular kinematics. The definitions, meaning, units and the contents that comes under angular kinematics will be learnt by the students. At the end they will also be capable of understanding the relationship between linear kinematics and angular kinematics	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

SUBJECT CODE – MPEEC 513 (iii) SUBJECT NAME – Subject Specialization (EXERCISE AND SPORTS PSYCHOLOGY)

MODULE-1 (SPORTS PSYCHOLOGY CONCEPTS)

Max.Marks=100

Time: 3Hrs

(Theory=50 Marks+ Practical=25, Internal Assessment=25 Marks)

Objectives: - To provide the foundation for Sports Psychology and to give a firsthand insight into the development and evolution of Psychology in the context of Exercise and Sport.

Learning Outcome: -Students will acquire the basic knowledge about Psychology of Exercise and Sports& about a few important aspects of Human mind which has a direct impact on Sportsparticipation & competition.

Unit-I Learning Outcome: -

The Students will develop the knowledge & understanding regarding Definition, Dimension Psychology in Exercise & sport, the importance of Psychology in Sports, Complexity of Behavior in Sports& Exercise.

Unit-II Learning Outcome: -

The Students will get an insight into how Mental Health, Emotions, Depression, Anxiety, Stress and Tension effect Sports Performance and about the Methods of Sports Psychology.

Unit-III Learning Outcome: -

The Students will gain an insight into Motivation, types of Motivation, Guidelines for building motivation and about Goal setting and its principles.

Unit-IV Learning Outcome: -

The Students will gain knowledge about Personality, how to measure personality and about different Personality types.

UNIT-I

- > Introduction to Sports and ExercisePsychology.
- > Definition of sports and exercisepsychology?
- Sports psychologySpecialties
- > The history of sports and exercisepsychology.
- Importance of sports psychology.

UNIT-II

- > Psychological effects of Exercise.
- Mental Health, Emotion, Mood,
- > Depression, Anxiety, Stress and Tension.

15hrs

UNIT-III

- Methods of sportspsychology.
- > Introspection, observation, clinicalprocedures,
- > surveymethods,
- > Psycho analysis, Interview.

UNIT-IV

- Motivation-Definemotivation,
- > Intrinsic and extrinsicmotivation,
- > Guidelines for buildingmotivation.
- > Goal setting-Types of goals, Goal setting principles

PRACTICALS.

Designing of a Goal setting programme.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks).

SUGGESTED READING:

- 1. Cox, Richard H. (1985) SportsPsychology Concepts and Application, Wm C Brown Publishers.
- Gill, Diane L, Willams Lavon (2008), Psychological Dynamics of Sportsand Exercise, 3rd Edition, Human Kinetics, USA.
- 3. Weinberg Robert, Gould Daniel (2014), Foundation of Sports& Exercise Psychology, 6th Edition, Human Kinetics, USA.

15hrs

15hrs

30Hrs

REFERENCE

- 1. Gill, Diane L. (1986), Psychological Dynamics of Sport. Human Kinetics Publishers, USA.
- 2. Kmalesh. M.L (2014) Psychology in Physical Education and Sport, Khel SahityaKhendra, NewDelhi.
- 3. Martens Raine (1987) Coaching Guide to SportsPsychology, Human Kinetics Publishers, USA.
- 4. Orlick Terry (1986) Psyching For SportsMental Training For Athletes, Leisure Presss, USA.
- 5. Shaw. D F, Corban R M (2005) Sportsand Exercise Psychology, IndiAN Edition, BIOS Scientific Publishers, USA.
- 6. Singer, Robert N (1975) Motor Learning and Human Performance, Macmillan Publishing co. NewYork.

Facilitation to the Achievement of Course Learning Outcomes

Month wise and Unit wise Progression	Course Learning Outcomes	Teaching andAssessmentlearning ActivityTasks
Unit-I	The Students will develop the knowledge & understanding regarding Definition, Dimension Psychology in Exercise & sport, the importance of Psychology in Sports, Complexity of Behavior in Sports & Exercise	Image:
Unit-II	The Students will get an insight into how Mental Health, Emotions, Depression, Anxiety, Stress and Tension effect Sports Performance and about the Methods of Sports Psychology.	MethodsIEvaluation ofIAssessmentAssignmentMethodsIMCO
Unit-III	The Students will gain an insight into Motivation, types of Motivation, Guidelines for building motivation and about Goal setting and its principles.	Image: Demonstration MethodsPresentation Evaluation of Assignment Image: PresentationImage: Demonstration MethodsImage: Presentation Image: PresentationImage: Demonstration MethodsImage: Presentation I
Unit-IV	The Students will gain knowledge about Personality, how to measure personality and about different Personalitytypes.	

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

SUBJECT CODE – MPEEC 513 (iv) SUBJECT NAME – Subject Specialization (SPORTS SOCIOLOGY)

MODULE-1 (SOCIOLOGICAL ASPECTS OF SPORTS)

Marks:100

Duration: 03Hours

(Theory=50 Marks + Practical=25, Internal Assessment=25 Marks)

Objective: -To provide the knowledge and understanding of Sports Sociology.

Learning Outcome:

- > The Students will be able to know and develop a sociological perspective on sportby learning basic sociological theories, concepts, and researchmethods.
- > The students will be equipped with the knowledge and importance of social development throughsports
- To understand the Sports as a social phenomenon and Demonstrate how sports influences our values, attitudes, beliefs, perceptions, behavior, culture, and society.
- > To guide the development of cultural aspects through sports and Apply the basic principles and theories of sociology to analyze the role of sports in our everyday sociallives.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Sociological Aspects: Sociology - Meaning and Definition, Society and Social Group – Primary, Secondary and Remote Groups. Culture: Features, Importance, Cultural Values of Games and Sports.

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of Social control: Meaning and need of social control, Sports as a Social Phenomenon, Social factors & its influence on Participation and performance in sports, Main Features of Indian Society: Religious pluralism (Hinduism, Islam and Christianity), Linguistic pluralism, Indian policy- secularism, democracy, social justice

Unit-III Learning Outcome:

The Students will gain knowledge of Introduction to sports sociology: Meaning, concept and definitions of sports sociology, Objectives, Role and importance of Sports in society, Sports as a social phenomenon, Socialization through sports and games, Current status of sports sociology in India and world, Sports as man's cultured heritage, Relationship of culture to sports

Unit-IV Learning Outcome:

The Students will gain knowledge of Sports sociology theories: Theories in sports sociology, Sports sociology as a science of social relationships. (Structural and functional, conflict, critical, interaction theories), Implications of social theories in sports, Comparative analysis of different theories of sports sociology

THEORY SYLLABUS:

Unit-I

- Sociological Aspects: Sociology Meaning andDefinition
- Society and Social Group Primary, Secondary and RemoteGroups.

ote questions (Each Carrying 5 marks).

Culture: Features, Importance, Cultural Values of Games and Sports.

Unit-II

- > Social control: Meaning and need of socialcontrol
- > Sports as a SocialPhenomenon
- Social factors & its influence on Participation and performance insports
- Main Features of Indian Society: Religious pluralism (Hinduism, Islam and Christianity), Linguistic pluralism
- > Indian policy- secularism, democracy, socialjustice

Unit-III

- > Introduction to sports sociology: Meaning, concept and definitions of sportsociology
- > Objectives, Role and importance of Sports insociety
- > Sports as a social phenomenon, Socialization through sports and games
- > Current status of sports sociology in India andworld
- > Sports as man's culturedheritage
- Relationship of culture tosports

Unit-IV

- > Sports sociology theories: Theories in sportssociology
- Sports sociology as a science of social relationships (Structural and functional, conflict, critical, interactiontheories)
- Implications of social theories insports
- > Comparative analysis of different theories of sportsociology

PRACTICAL

- 1. Social loafingscale
- 2. Socio-economic statusscale

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- \blacktriangleright The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- > Outofeightquestionsonequestionshouldbeofshortnoteswhereastudenthastoattempt

15hrs

15hrs

15hrs

SUGGESTED READINGS

- 1. Maguire, J. and Young JAI, K., (2005). Theory, Sportsand Society, ElsevierLtd.
- 2. Jain, Rachna, (2005). Sports Sociology, New Delhi: Khel SahitayaKendra,
- 3. Singh, Bhupinder, (2004). Sports Sociology, New Delhi: Friends.
- 4. KamleshM L, (2002), Sociological Foundation in Physical education (Delhi, Metroplitan book Co PvtLtd,)
- 5. Coaplay, Joy. J., (1997). SportsIn Society, Issues And Controversies, Mcgraw Hill International edition
- 6. Sachdeva and Gupta, (1985-86) A simple study of sociology, Ajanta Prakashan Delhi

Month wise and Unit wise Progressi on UNIT-I	Course Learning Outcomes The Students will develop the understanding and knowledge	Teaching and Learning Activity I Lecture Methods I DemonstrationM	Assessment Task Base Evaluation Of Presentation Of Of
	regarding Sociological Aspects: Sociology - Meaning and Definition, Society and Social Group – Primary, Secondary and Remote Groups. Culture: Features, Importance, Cultural Values of Games and Sports.	 ethods Assessment Methods Presentation 	 Evaluation Evaluation ofAssignment MCQ/Class-test / viva/seminar
UNIT-II	The Students will develop the understanding and knowledge of Social control: Meaning and need of social control, Sports as aSocial Phenomenon, Social factors & its influence on Participation and performance in sports, Main Features of Indian Society: Religious pluralism (Hinduism, Islam and Christianity), Linguistic pluralism, Indian policy- secularism, democracy, social justice	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
UNIT-III	The Students will gain knowledge of Introduction to sports sociology: Meaning, concept and definitions of sports sociology, Objectives, Role and importance of Sports in society,	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar

Facilitation to the Achievement of Course LearningOutcomes

	Sports as a social phenomenon, Socialization through sports and games, Current status of sports sociology in India and world, Sports as man's cultured heritage, Relationship of culture tosports			
UNIT-IV	The Students will gain knowledge of Sports sociology theories: Theories in sports sociology, Sports sociology as a science of social relationships. (Structural and functional, conflict, critical, interaction theories), Implications of social theories in sports, Comparative analysis of different theories of sports sociology	Lecture Methods DemonstrationM ethods Assessment Methods Presentation	0	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

SUBJECT CODE – MPEEC 513 (v) SUBJECT NAME – Subject Specialization (SPORTS MANAGEMENT) MODULE-1 (BASICS OF SPORTS MANAGEMENT)

Max.Marks-100

Time: 3Hrs.

Theory=75, Internal +Assessment=25 Marks

Objective: -To provide basic knowledge of sports management.

Learning Outcome:

- > The Students will be able to understand the concept of sportsmanagement.
- > The students will be able to get the knowledge about leadership and roles of amanager.
- > The students will get basic information about planning and its importance in sports management.
- > The student will be able to understand different styles of administrators.
- > The students will have brief awareness about Career avenues and professional preparation in sportsmanagement.

After the Completion of First Month:

The Students will start developing knowledge about meaning, definition, objectives and importance of management. Students will be able to understand about features and functions of management. Students also get a basic awareness about Scope of Management in Physical Education and Sports

After the Completion of Second Month:

The Students will start developing knowledge regarding various principles of management and leadership in management. The students will get a basic idea about how to identify the resources in management. Students will start recognizing the roles of manager.

After the Completion of Third Month:

The students will start to improve their knowledge about definition, meaning, need and importance of planning. The students will get information regarding various principal of planning and steps involved in it.

After the Completion of Fourth Month:

The students will start developing awareness about different philosophies of administration and various styles of administrators. The students will start learning about career avenues and professional preparation. They will also learn about coordination and its essence in management.

THEORY SYLLABUS:

UNIT –I

- Meaning of sportsmanagement
- Objectives and importance of Management
- Features and functions of management
- Scope of Management in Physical Education and Sport

UNIT-II

> Guiding principle of sportsmanagement

hrs

- Leaderships
- Identification of resources
- Roles of aManager

UNIT-III

- Definition and meaning ofplanning
- Need and importance of planning
- Principal ofplanning
- Steps involved in planning

UNIT-IV

- Philosophy of Administration
- Styles of Administrators
- Career avenues and professional preparation
- Coordination the essences of Management

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks Theory Examination - 75 Marks Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of five short note questions (Each Carrying 5marks).

SUGGESTED READINGS

- AlkaDhawan. Arya (2019). Case Studies Mentor in Business Studies. Publishing Company, IV Edition Printed at Prince Print Process, G.T. Karnal Road, Delhi. ISBN: 978-81-8296-672-7
- 2. Bucher, C.H.(1983).AdministrationofPhysicalEducationandAthleticProgrammes,The C.V. Mosby Company, London,
- Larry Horine, 2ND Edition, (1991). Administration of Physical Education and SportsPrograms Wim. C. BrownPublishers
- 4. Marcia L Walker & David K Stotlar (1997). SportsFacility Management. John and Bartlett Publisher Inc.LondonU. K
- 5. M.L. Kamlesh, II updated Edition (2016). Management Concepts in Physical Education and Sport. KhelSahitya Kendra, NewDelhi.
- 6. Voltmar, B.P. et. al. (1979). The Organization and Administration of Physical Education., Prentice Hall Inc., NewJersey,
- 7. Zeigler, E.M. and Dewie, G.W. (1983). Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia,

20hrs

20hrs

47

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
First Month	The Students will develop knowledge regarding meaning, definition, objectives and importance of management. Students will emerge the information about Features and functions of management. Students get a basic awareness about Scope of Management in Physical Education and Sports	Methods	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Second Month	The Students will develop knowledge regarding various principles of managementand leadership in management. The students will understandabout how to identify the resourcesin management. Students will be identifying the roles of manager.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Third Month	The students will improve their knowledge about definition, meaning, need andimportance of planning. The students will get information regarding various principal of planning and steps involved in it	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Fourth Month	The students will develop awareness about different philosophies of administration and various styles of administrators. The students will learn about career avenuesand professional preparation. They will know about coordination and its essence in management.	 Lecture Methods Demonstration Methods 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

COURSE CODE – MPEEC 513 (vi) COURSE NAME – Subject Specialization (KINANTHROPOMETRY IN SPORTS)

MODULE-I (INTRODUCTION OF KINANTHROPOMETRY)

Max.Marks-100

Time: 3Hrs.

(Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks)

Objective: -To provide the knowledge of introduction of Anthropometry and Kinanthropometry.

Learning Outcome:

- > The Students will be able to understand the concept and history of anthropometry andits application in the field of sports.
- > The students will be able to get the knowledge about musculoskeletal anatomy of anthropometry and tools and techniques of anthropometricmeasurement.
- > The Students will be able to understand the concept and history of Kinanthropometry and its application in the field ofsports.
- Students will be able to know about the physique and the role of physique in different games and sports.

After the Completion of First Month:

The Students will develop the understanding and knowledge regarding History, Meaning & definition of Anthropometry. Importance, Characteristics and Principles of Anthropometry, Application of Anthropometry in sports.

After the Completion of Second Month:

Musculo-skeletal Anatomy in Kianthropometry, Indices and Customization of Kinanthropometry, Anthropometric Instruments: Tools and General Techniques, Techniques for Assessing Body Composition.

After the Completion of Third Month:

The Students will develop the understanding and knowledge regarding Meaning & definition of Kinanthropometry, importance and scope of Kinanthropometry. Role of Kinanthropometry in the field of sports. Role of Kinanthropometry for the identification of talent

After the Completion of Fourth Month:

The Students will develop the understanding and knowledge regarding Meaning and Concept of physique in sports, Role of Physique in Sports and Selected Clinical Conditions Affecting Physique. Physique in Different Sports Activities, Contemporary Issues in Kinanthropometry.

THEORY SYLLABUS:

Unit-I

- > History, Meaning & definition of Anthropometry.
- > Importance, Characteristics and Principles of Anthropometry,
- > Application of Anthropometry insports.

Unit-II

> Musculo-skeletal Anatomy inKinanthropometry,

15hrs

- \triangleright Indices and Customization of Kinanthropometry,
- ۶ Anthropometric Instruments: Tools and GeneralTechniques,
- \geqslant Techniques for Assessing BodyComposition.

Unit-III 15hrs \geqslant

- Meaning & definition of Kinanthropometry,
- \triangleright Importance and scope of Kinanthropometry.
- \geqslant Role of Kinanthropometry in the field ofsports.
- Role of Kinanthropometry for the identification oftalent. ۶

Unit-IV

15hrs

- \geqslant Meaning and Concept of Physique insports,
- Role of Physique in Sports and Selected Clinical Conditions AffectingPhysique. \geqslant
- \geqslant Physique in Different SportsActivities,
- \geqslant Contemporary Issues inKinanthropometry.

Practical

- ✓ Application of Kinanthropometry insports.
- ✓ Techniques of handling various anthropometric equipment's

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

30hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ۶ The examiners are required to set eight questions taking at least two questions from eachunit.
- ۶ The students have to answer any five questions out of the total of eightquestions.
- ۶ Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt ۶ any two questions out of total of four short note questions (Each Carrying 5marks).

SUGGESTED READINGS

1. Frincisco Esparza-Ros, Raquel Vaquero- Cristobal and Michael Marfell-Jones (2019). International Standards for Anthropometric Assessment, International Society for the

Advancement of Kinanthropometry.

- 2. H.S. Sodhi and L.S. Sidhu (1984) Physique and Selection of Sportsmen byPunjab Publishing House.
- 3. J.E.L. Carter (2002)the Heath-Carter Anthropometric Somatotype InstructionManual.
- 4. Norton, K. & Olds, T. (1996). Anthropometrica. Sydney: University of New SouthWales Press, Australia.
- 5. Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach), Mohali: ANOVAPublications.

Facilitation to the Achievement of Course Learning Outcome

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
First Month	The Students will develop the understanding and knowledge regarding History, Meaning & definition of Anthropometry. Importance, Characteristics and Principles of Anthropometry, Application of Anthropometry in sports.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Second Month	Musculo-skeletal Anatomy in Kinanthropometry, Indices and Customization of Kinanthropometry, Anthropometric Instruments: Tools and General Techniques, Techniques for Assessing Body Composition.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Third Month	The Students will develop the understanding and knowledge regarding Meaning & definition of Kinanthropometry, importance and scope of Kinanthropometry. Role of Kinanthropometry in the field of sports. Role of Kinanthropometry for the identification of talent	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Fourth Month	The Students will develop the understanding and knowledge regarding Meaning and Concept of physique in sports, Role of Physique in Sports and Selected Clinical ConditionsAffecting Physique. Physique in Different SportsActivities,Contemporary Issues inKinanthropometry.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION (OUTCOME BASED EDUCATION) SEMESTER – I

COURSE CODE – MPEEC 513(vii) SUBJECT NAME – Subject Specialization (vii. STRENGTH, CONDITIONING AND SPORTS

PERFORMANCE)

MODULE-1(TRAININGTHEORY)

Max.Marks=100

Time: 3Hrs.

Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks

Objective: To provide the knowledge of implementation of sports training modules and talent identification procedure.

Learning outcome:

- 1. The students will able to understand and to imply the sports training principles in various sports andgames.
- 2. The students will be equipped with the knowledge of various motor qualities and also to gain the improvement of the saidqualities.
- 3. To formulate the periodization for various sports and games on itsdemand.
- 4. To guide for the development of general fitness and conditioning for sedentary and elites.

After the completion of Firstmonth:

The students will develop to understand the knowledge regarding the importance and basis of sports training, system of sports training and classification of skill and its importance.

After the completion of Second month:

The student will able to understand the concepts and importance of principles of sports training and development of training model and progression.

After the completion of Third month:

The student will able to explain regarding the training load, rest and recovery, various means of recovery and gain the concepts of over training overreaching, monitoring, treating and preventing over training

After the completion of Fourth month:

The student will gain the knowledge of definition of talent identification and its importance in sports and games, key stage in talent identification and development process, role of nature and nurture in the development of elite players, potential predictors of performance, influences on sports talent, talent identification in individual and team sport

THEORY SYLLABUS: UNIT-1

15hrs

Basis For Training: Definition, aims, Scope and Objectives of training, skills, classification of

skills, system of training, Training adaptation, Super Compensation cycle, Detraining, biological energysystem.

Principles of Sports training: Development of training model, multilateral development Vs specialization, principle progression of load, sequence and integration of training process, principle of overload, principle of reversibility, principles of specificity, principle of individualization, principle of variety, principles of active participation, principles of continuity.

UNIT-III

UNIT-II

Training load, rest and recovery: Training load, variables of training, Volume, intensity, density, Complexity Natural means of recovery, physiotherapic means of recovery, psychological means of recovery, sports specific recovery, recovery from exercise, recovery from training and competition, Permanent means of recovery, over training and overreaching, monitoring, treating and preventing over training.

UNIT-IV

Talent identification: Definition of talent identification and its importance in sports and games, key stage in talent identification and development process, role of nature and nurture in the development of elite players, potential predictors of performance, influences on sports talent, talent identification in individual and team sports, structure of talent identification, development of templates of talent identification in differentsports.

PRACTICAL:

Functional structure of general warming up & limbering down,, sauna, Jacuzzi, steam bath, whirlpool bath, swimming and stretching exercises.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/or test	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.

15hrs

15hrs

15hrs

- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS:

- 1. Tudor O.Bompa, (2017) Periodization: Theory and methodology of training, Sixth edition, Humankinetics
- 2. Tudor O.Bompa ,(2015) Periodization training for sports, Third edition , HumanKinetics.
- 3. Jay R. Hoffman, (2012) NSCA'S Guide to Program Design, Human Kinetics,
- 4. Michael Kellmann, (2002) Enhancing recovery, preventing underperformance in athletes, human kinetics
- 5. Collins and Dave, (2018) Talent development, Rutledge, London.
- 6. Baker Joseph, (2017) Handbook of Talent Identification, HumanKinetics.
- 7. Brown Tim, (2011) Sports Talent, HumanKinetics.
- 8. Thomas Reilly and Mark William, (2003) Science and Soccer, Second edition, Rutledge, London.

Month wise and Unit Wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding Definition, aims, Scope and Objectives of training, skills, classification of skills, system of training, Training adaptation, Super Compensation cycle, Detraining, biological energy system.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The students will understand about the concepts of Principles of Sports training, Development of training model, multilateral development Vs specialization, and principle progression of load, sequence and integration of training process, principle of overload, principle of reversibility, and principles of specificity.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Facilitation to the Achievement of Course Learning Outcome

Unit-III	The Students will develop the understanding and knowledge of Training load, variables of training, Volume, intensity, density, Complexity Natural means of recovery, sports specific recovery, recovery from exercise, recovery from training and competition, Permanent means of recovery, over training and overreaching, monitoring, treating and preventing over training		Lecture Methods Demonstration Methods Assessment Methods Presentation	0	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will develop Definition of talent identification an d its importance in sports and games, key stage in talent identification and development process, role of nature and nurture in the development of elite players, potential predictors of performance, influences on sports talent, talent identification in individual and team sport	0	Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION

SEMESTER - I

COURSE CODE – MPEEC 514 COURSE NAME – SPORTS SPECIALISATION

Marks: 100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: - The Students will acquire knowledge and understanding of a specific sports in which an individual wish to excel.

Learning Outcome: -The student attains knowledge, understanding, interpreting and analysing proficiency in a game of his choice.

After the Completion of First Month:

A student will be able to gain knowledge with respect to Historical Development, Organisational Structure and Playfield Technology of a Sport/Game.

After the Completion of Second Month:

A student will be able to understand and interpret the rules of game as well as game knowledge in the areas of physiological basis of Warming up and technical aspects of coaching.

After the Completion of Third Month:

A student will be able to learn and acquire various skills of sports/game, gain knowledge about different techniques evaluation as well as the evaluation of player's performance.

After the Completion of Fourth Month:

A student will be learning about various fitness components and its forms. Further, the student will be able to practice and improve performance on the basis of knowledge gained in understanding various fitness components and it's testing.

THEORY SYLLABUS

Unit-I

- Historical Development and Modern Trends (National and International Level)
- > Organisational Structure (State, National and InternationalLevel)
- > Playfield Technology Marking and Construction of the playfields.

Unit-II

- > Rules and theirinterpretation.
- > Warming up and physiological basis of Warming up and its effect onperformance.
- Cooling down and itseffect.
- > Techniques of Coaching Pep talk, Pre, during and Post matchcoaching.

Unit-III

- > Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- > Evaluation of Player'sPerformance.

15 lectures

(15 lectures)

15hours

56

Unit-IV

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative
- Abilities and Flexibility.
- > Motor Fitness Components Testing of abovecomponents.

Practical-

- > Learning and demonstrating various skills/techniques ofsports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

Note

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 50)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- > Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notesquestions.

SUGGESTED READINGS:

(i) Aquatics

- a. Jain, R., Play and Learn Swimming, New Delhi, Khel Sahitya Kendra, 2003.
- b. Kumar, Naveen., Coaching Successfully, Sports Publication, Delhi2002.
- c. Nelson, R., Macnee, M.J.Ed., Olympic Fact book: A Spectator's Guide to the Summer games, New York Visible,1996.
- d. Thani, Lokesh., Skill & Tactics Swimming" Delhi, Sports Publication, 1995.
- e. Thani, Lokesh., Swimming, Delhi, Sports Publisher, 2000.

(ii) Badminton

- a. Ashok Kumar, Badminton, New Delhi Discovery, 2003..
- b. Narang, P., Play and Learn Badminton, Khel Sahitaya Kendra, 2005.

(15 lectures)

- c. Singh, M.K., A to Z Badminton, New Delhi, Friends Pub., 2006.
- d. Singh, M.K., Comprehensive Badminton, N.D. Friends Pub., 2007.
- e. Talbot, Derlk, Top Coach Badminton, Britain: Q.A. Press, 1989.

(iii) Basketball

- a. Jain, Naveen Play and Learn Basket Ball, Khel Sahitya Kendra, NewDelhi-2003
- b. Sharma O.P. Basket Ball Skills and Rules, Khel Sahitya KendraDelhi-2003
- c. Thani, Lokesh, Skills & Tactics of Basket Ball, ND: SportsPub., 1995.
- d. Thani, Yograj, Coaching Successfully Basket Ball, Sports Publisher, Delhi-2002

(iv) Cricket

- a. Jain, R., Play and Learn Cricket, New Delhi: K.S.K,2003.
- b. Kutty, S. K., Fielding Drills in Cricket, New Delhi: K.S.K,2003.
- c. Rachna, Coaching Successfully: Cricket, Delhi: Sports, 2002.
- d. Rachna, Jain, Play & Learn Cricket, Khel Sahitaya Kendra, 2005.

(v) Football

- a. N. Kumar, Play and Learn Football, New Delhi : K.S.K,2003.
- b. Reilly, T., Science and Football, London: E.N. SportsLtd., 1988.
- c. Sharma, O.P., Teaching and Coaching –Football, Delhi : Khel S.K., 2001.
- d. Thani, Yograj, Coaching Successfully Football, NewDelhi:K.S.K, 2002.

(vi) Gymnastics

- a. Code of Points Trampoline Gymnastics, Federation Int. De Gymnasics, 2005.
- b. Federation Internationale Gymnastics, Federation Int. De Gymnasics, 2006.
- c. Jain, R., Play and Learn Gymnastics, Khel Sahitaya Kendra, 2005.
- d. Jain, R., Play and Learn Gymnastics, New Delhi: Khel Sahitaya Kendra, 2003.

(vii) Handball

- a. Jain, D., Play & Learn Handball, New Delhi, Khel Sahitya Kendra, 2003.
- b. KumarAshok, Handball, NewDelhi, DiscoveryPublishingHouse, 1999.
- c. Lohar, A.R., Handball Basic Technology Bombay, The Marine Sports Publishing Division, 1998.
- d. Schmottlach, N., Mcmanama, J., Physical Education Handbook. 9th Edition, London, Allyn & Bacon, 1997.

(viii) Hockey

- a. International Hockey Federation, Rules of the Game of Hockey with Guidance for Players and Umpires. India, International Hockey Federation, 2003.
- b. Jain, D., Hockey Skills & Rules New Delhi, khel Sahitya Kendra, 2003.
- c. Narang, P., Play & Learn Hockey, Khel Sahitya Kendra, New Delhi, 2003
- d. Thani Yograj., Coaching Successfully Hockey, Delhi, Sports Publication, 2002.

(ix) Judo

- a. Harrison, E.J., Coaching Successfully Judo, Delhi: Sports, 2002.
- b. Jain, D., Play and Learn Judo, New Delhi: Khel Sahitaya Kendra, 2003.

(x) Kabaddi

- a. Rao, C. V., Kabaddi, New Delhi: Oxford Press, 1982.
- b. Rao, E.P., Modern Coaching in Kabaddi, D.V.S.Pub, 1994.
- c. Rao, C.V., Kabaddi; Native Indian Sports, Patiala Nis Publisher, 1983.

(xi) Kho-Kho

- a. Chakrabarty, G., Kho Kho Aveloken, Delhi, Khel Sahitya Kendra, 2002.
- b. Panday, L., Kho Kho Sarvaswa, New Delhi Metropolitan, 1982.

(xii) Table Tennis

- a. Jain, Deepak, Teaching and Coaching -Table Tennis, Delhi : Khel Sahitaya Kendra, 2001.
- b. Narang, P., Play & Learn Table Tennis, Khel Sahitaya Kendra, 2005.

(xiii) Volleyball

- a. American.... Program, Coaching Youth Volley Ball, Campaigon, H.K., 1996.
- b. FIVB, Backcourt Spiking in Modern Volley Ball, Chennai : FIVB, 1996.
- c. Saggar, S.K., Cosco Skills Stactics Volley Ball, Delhi : SportsPublication, 1994.

(xiv) Yoga

- a. Anand, Omprarkash. Yog Dawra Kaya Kalp, Kanpur, Sewasth Sahitya Perkashan, 2001.
- b. Sarin, N., Yoga Dawara Ragoon Ka Upchhar, Khel Sahitya Kendra, 2003.
- c. Sri, Swami Rama, Breathing, Rishikesh, Sadhana Mandir Trust, 2001.

MASTER OF PHYSICAL EDUCATION

SEMESTER - I

COURSE CODE – MPEEC 514

COURSE NAME – SPORTS SPECIALISATION (GYMNASTICS)

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective:- The Students will acquire knowledge and understanding of a specific sportsin which an individual wishes to excel.

Learning Outcome:-The student attains knowledge, understanding, interpreting and analysing proficiency in a game of one's choice.

Unit-I Learning Outcome:

A student will be able to gain knowledge with respect to Historical Development, Organizational Structure and Playfield Technology of Gymnastics.

Unit-II Learning outcome:

A student will be able to understand and interpret the rules of game as well as game knowledge in the areas of physiological basis of Warming up and technical aspects of coaching.

Unit-III Learning Outcome:

A student will be able to learn and acquire various skills of Gymnastics, gain knowledge about different tests of fitness and skill evaluation as well as the evaluation of player's performance.

Unit-IV Learning Outcome:

A student will be learning about various fitness components and its forms. Further, the student will be able to practice and improve performance on the basis of knowledge gained in understanding various fitness components.

THEORY SYLLABUS

Unit-I

- Historical Development and Modern Trends (National and International Level)
- > Organisational Structure (State, National and InternatinalLevel)
- Playfield Technology Marking and Construction of theplayfields.

Unit-II

> Rules and their interpretation of thesport.

> Warming up and psychological basis of Warmingup.

- Cooling down and its effect.
- > Techniques of Coaching Peptalk, Pre, During and PostmatchCoaching.

Unit-III

- Basic skills and techniques of the Artistic Gymnastics, trampoline, parko and hythmic.
- Motor Fitness ComponentsTesting
- Skill/Technique Evaluation

15hrs

15hrs

> Evaluation of Player'sPerformance.

Unit-IV

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinatives Abilities and Flexibility.

PRACTICAL-

30hrs

15hrs

- Learning and demonstrating various skills/techniques of Artistic Gymnastics, trampoline, parko and rhythmic.
- > Learning to demonstrate various tests to evaluate motor components as listed in unit IVabove.

Note

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 50)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ^I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- ^I Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notesquestions

Facilitation the Achievement of Course Learning Outcomes

Month wise	Course Learning Outcomes	Teaching and	Assessment Tasks
Progression		learning Activity	
T ¹ 4		Lastana Mathada	Eveluation of
First	A student will be able to	Lecture Methods	Evaluationof
	gain knowledge with respect to	Demonstration	Presentation
Month	Historical Development,	Methods	Evaluation of
	Organisational Structure and	Assessment Methods	Assignment
	Playfield Technology of a	Presentation	MCQ
	sport/game.		Class-test / viva/
			seminar

Second Month	A student will be able to understand and interpret the rules of game as well as game knowledge in the areas of physiological basis of Warming up and technical aspects of coaching.	Demonstration Methods	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Third Month	A student will be able to learn and acquire various skills of sports, gain knowledge about different tests of fitness and skill evaluation as well as the evaluation of player's performance.	Demonstration Methods	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Fourth Month	A student will be learning about various fitness components and its forms. Further, the student will be able to practice and improve performance on the basis of knowledge gained in understanding various fitness components.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION

SEMESTER - I

COURSE CODE – MPEEC 514

COURSE NAME – SPORTS SPECIALISATION (YOGA)

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective:- The Students will acquire knowledge and understanding of a specific sportsin which an individual wishes to excel.

Learning Outcome:-The student will attain knowledge, understanding, interpreting and analysing proficiency in a game of one's choice.

After the Completion of First Month:

The Students will develop the understanding and knowledge of Origin of yoga, definition and scope of yoga, limitations and misconceptions, importance of yoga in physical education and other fields, Yoga asana completion at:- State, National, International, SGFI, AIU etc. Philosophical aspects of yog. Pre-vedic, Vedic period; Buddism, upnishada period, Jainism & tantra, qualifications, qualities and responsibilities of a coach, Duties/responsibilities of technical official, Scoring system and judgment criteria, Protocols for referees, judges andofficials.

The student will learn about the prayer.

After the Completion of Second Month:

The Students will develop the understanding and knowledge of Meaning, techniques, precautions & effects of the following:-Asanas : padmasana, vajrasana, sidhasana, paschimottanasa, halasana, sarvangasana, shalabhasana, ardh-matsyendrasana, bhujangasana, tadasana, vrikshasana, matsyasana, gomukhasana, ushtrasana, shavasana, makarasana, vrishchikasana, dhanurasana, purna matsyendrasana, chakrasana, ek pad sikandasana, bakasana, mayurasana, shirshasanaPranayama : anulom-vilom, bhastrika, suryabhedhen pranayama, sheetali, sheetkari, bhramari, ujjayiShatkarma : neti, dhauti, nauli, basti, kunjal, kapal bhati, shankh prakshalanaBandhas : jalandhar, uddyana, mool bandha.

The student will be able to perform Asanas, pranayama, shatkarma, bandha.

After the Completion of Third Month:

The Students will gain knowledge of Disease wise treatment through yoga therapy- Asthma, high & low B.P, diabetes, obesity, heart disease, insomania, arthritis, backache & female disease.

The student will learn Yoga-nidra/relaxation techniques

After the Completion of Fourth Month:

The Students will gain knowledge of Diet & constitution, components of nutrition, water, natural diet, balanced diet, fasting-its benefits, types & preparation. Importance of vegetarianism in yogic diet.

The student will learn Visit to yoga centers/institutes

THEORY SYLLABUS

UNIT-I

15hrs

Origin of yoga, definition and scope of yoga, limitations and misconceptions, importance of yoga in physical education and other fields

Yoga asana competition at:- State, National, International, SGFI, AIU etc.

UNIT-II

Philosophical aspects of yoga-Pre-vedic, Vedic period; Buddism, upnishada period, Jainism & tantra Qualifications, qualities and responsibilities of a coach, Duties/responsibilities of technical official, Scoring system and judgment criteria, Protocols for referees, judges and officials

UNIT-III

Meaning, techniques, precautions & effects of the following:-

Asanas : padmasana, vajrasana, sidhasana, paschimottanasa, halasana, sarvangasana, shalabhasana, ardh-matsyendrasana, bhujangasana, tadasana, vrikshasana, matsyasana, gomukhasana, ushtrasana, shavasana, makarasana, vrishchikasana, dhanurasana, purna matsyendrasana, chakrasana, ek pad sikandasana, bakasana, mayurasana, shirshasana

Pranayama : anulom-vilom, bhastrika, suryabhedhen pranayama, sheetali, sheetkari, bhramari, ujjayi Shatkarma : neti, dhauti, nauli, basti, kunjal, kapal bhati, shankh prakshalana Bandhas : jalandhar, uddyana, mool bandha

UNIT-IV

Disease wise treatment through yoga therapy- Asthma, high & low B.P, diabetes, obesity, heart disease, insomania, arthritis, backache & female disease, diet & constitution, components of nutrition, water, natural diet, balanced diet, fasting-its benefits, types & preparation, importance of vegetarianism in yogic diet.

PRACTICALS

- 1. Prayer
- 2. Asanas, pranayama, shatkarma, bandha (as mentioned intheory)
- 3. Yoga-nidra/relaxationtechniques
- 4. Visit to yogacenters/institutes

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notesquestions

15hrs

15hrs

15hrs

SUGGESTED READINGS

Facilitation the Achievement of Course Learning Outcomes

Month Wise	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Progressi		learning Activity	
on			
First Month	The Students will develop the understanding and knowledge of Origin of yoga, definition and scope of yoga,	Lecture Methods Demonstration Methods	Evaluationof Presentation Evaluation of
	limitations and misconceptions, importance of yoga in physical education and other fields, Yoga asana completion at:- State, National, International, SGFI, AIU etc. Philosophical aspects of yog. Pre-vedic, Vedic period; Buddism, upnishada period, Jainism & tantra, qualifications, qualities and responsibilities of a coach, Duties/responsibilities of technical official, Scoring system and judgment criteria, Protocols for referees, judges and officials. The student will learn about the prayer.	Assessment Methods Presentation	Assignment MCQ Class-test / viva/ seminar
Second	The Students will develop the understanding and knowledge of	Lecture Methods Demonstration	Evaluation of Presentation
Month	Meaning, techniques, precautions & effects of the following:-Asanas : padmasana, vajrasana, sidhasana, paschimottanasa, halasana, sarvangasana, shalabhasana, ardh-matsyendrasana, bhujangasana, tadasana, vrikshasana, matsyasana, gomukhasana, ushtrasana, shavasana, makarasana, vrishchikasana, dhanurasana, purna matsyendrasana, chakrasana, ek pad sikandasana, bakasana, mayurasana, shirshasanaPranayama : anulom-vilom, bhastrika, suryabhedhen pranayama, sheetali, sheetkari, bhramari, ujjayiShatkarma : neti, dhauti, nauli, basti, kunjal, kapal bhati, shankh prakshalanaBandhas : jalandhar,uddyana,	Methods Assessment Methods Presentation	Evaluation of Assignment MCQ Class-test / viva/ seminar

	mool bandha.		
	The student will be able to perform learn Asanas, pranayama, shatkarma, bandha.		
Third	The Students will gain knowledge	Lecture Methods	Evaluationof
Month	of Disease wise treatment through yoga therapy- Asthma, high & low B.P, diabetes, obesity, heart disease,	Methods	Presentation Evaluation of Assignment
	insomania, arthritis, backache & female	Methods	MCQ
	disease.	Presentation	Class-test / viva/
	The student will learn Yoga- nidra/relaxation techniques.		seminar
Fourth	The Students will gain knowledge	Lecture Methods	Evaluationof
Month	of Diet & constitution, components of nutrition, water, natural diet, balanced diet, fasting-its benefits, types &preparation. Importance of vegetarianism in yogic diet.	Methods Assessment	Presentation Evaluation of Assignment MCQ Class-test / viva/
	The student will Visit yoga centers /institutes.		seminar

MASTER OF PHYSICAL EDUCATION

SEMESTER - I

COURSE CODE – MPEEC 514

COURSE NAME – SPORTS SPECIALISATION (TRACK AND FIELD)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: - The Students will acquire knowledge and understanding of a specific sportsin which an individual wishes to excel.

Learning Outcome:-The student will attain knowledge, understanding, interpreting and analysing proficiency in a game of one's choice.

After the Completion of First Month:

The student will be able to gain knowledge with respect to Historical Development, Organisational Structure and Playfield Technology of the respective sport/game.

After the Completion of Second Month:

A student will be able to understand and interpret the rules of game as well as game knowledge in the areas of psychological basis of Warming up and technical aspects of coaching.

After the Completion of Third Month:

A student will be able to learn and acquire various skills of sports, gain knowledge about different tests of fitness and skill evaluation as well as the evaluation of player's performance. The technical practice of sprint races-, middle- and long-distance races, hurldes races, jumping event- long jump, throwing events- shot put, hammer throw.

After the Completion of Fourth Month:

A student will be learning about various fitness components and its forms. Further, the student will be able to practice and improve performance on the basis of knowledge gained in understanding various fitness components. Track marking and marking of different areana for selected events inunit-III.

THEORY SYLLABUS

Unit-I

- Historical Development and Modern Trends (National and InternationalLevel)
- > Organisational Structure (State, National and InternatinalLevel)
- > Playfield Technology Marking and Construction of theplayfields.

Unit-II

- > Rules and their interpretation of thesport.
- > Warming up and psychological basis of Warmingup.
- Cooling down and itseffect.
- > Techniques of Coaching Pep talk, Pre, During and Post match competitionCoaching.

Unit-III

Basic skills and techniques of the Sports/Game- – sprint races-, middle- and long-distance races, hurdles races, jumping event- long jump, throwing events- shot put, hammerthrow.

15hrs

15hrs

- Motor Fitness ComponentsTesting
- Skill/Technique Evaluation
- > Evaluation of Player'sPerformance.

Unit-IV

15hrs

- Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- > Track marking and marking of different arena for selected events inunit-III.

Practical-

30 hrs

- 1. Learning and demonstrating various skills/techniques of sports- sprint races-, middle- and long-distance races, hurldes races, jumping event- long jump, throwing events- shotput.
- 2. Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.
- 3. Track marking and marking of different arena for selected events inunit-III.

Note

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notesquestions

Month wise	Course Learning Outcomes	,	Teaching and	I	Assessment Tasks
and Unit		lea	arning Activity		
wise			0 1		
Progression					
Unit-I	A student will be able to gain knowledge	0	Lecture		Evaluation of
	with respect to Historical Development,		Methods		Presentation
	Organisational Structure and Playfield	0	Demonstration	۵	Evaluation of
	Technology of a sport/game.		Methods		Assignment
		0	Assessment	۵	MCQ
			Methods	۵	Class-test / viva/
		0	Presentation		seminar
Unit-II	A student will be able to understand and	0	Lecture		Evaluation of
	interpret the rules of game as well as		Methods		Presentation
	game knowledge in the areas of	۵	Demonstration	۵	Evaluation of
	psychological basis of Warming up and		Methods		Assignment
	technical aspects of coaching.	0	Assessment	۵	MCQ
			Methods	۵	Class-test / viva/
		۵	Presentation		seminar
Unit-III	A student will be able to learn and		Lecture		Evaluation of
	acquire various skills of sports, gain		Methods		Presentation
	knowledge about different tests of	0	Demonstration	۵	Evaluation of
	fitness and skill evaluation as well as the		Methods		Assignment
	evaluation of player's performance. The	0	Assessment	۵	MCQ
	technical practice of sprint races, middle		Methods	۵	Class-test / viva/
	and long distance races, hurldesraces,	0	Presentation		seminar
	jumping event- long jump, throwing				
T T •4 T T 7	events- shot put, hammer throw.	_	T .	_	
Unit-IV	A student will be learning about various	٥	Lecture	۵	Evaluation of
	fitness components and its forms.	_	Methods	_	Presentation
	Further, the student will be able to		Demonstration		Evaluation of
	practice and improve performance on the basis of knowledge gained in		Methods		Assignment
	basis of knowledge gained in understanding various fitness		Assessment		MCQ
	components. Track marking and	_	Methods	۵	Class-test / viva/
	marking of different areana forselected		Presentation		seminar
	events in unit-III.				
				I	

Semester-II

			Credit		
S.No.	Paper No.	Title	Theory/		
			Practical/Tutorial		
1	MPECC-521	Athletes' Care and Rehabilitation	5 (4 Th + 1 P)		
2	MPECC-522	Measurement and Evaluation in Physical Education	5 (4 Th + 1 P)		
3	MPEEC-523	Subject Specialization	5 (4 Th + 1 P)		
4	MPEEC-524	Sports Specialization	5 (4 Th + 1 P)		
		Total Credits	20		

Note:

110			
	Th	=	Theory
	Р	=	Practical

MASTER OF PHYSICAL EDUCATION

SEMESTER - II

COURSE CODE – MPECC 521 COURSE NAME – ATHLETES' CARE AND REHABILITATION

Marks:100

Duration: 03hours

(Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks)

Objective: - To provide basic knowledge of the types of sports injuries, on-field evaluation, principles of care and rehabilitation. The student also will gain knowledge of heat illnesses, doping and special medical problems of the female athlete. They will also be equipped with basic techniques of rehabilitation exercises and sportsmassage.

Learning Outcome: - Students are expected to become competent in making a quick assessment of the injury on-field before shifting the athlete for appropriate medical care. Students will also be able to provide sports massage and assist the medical team by supervising specific exercises for rehabilitation of sports injuries. The students should be able to recognize heat-related illnesses before serious damage occurs and also should be able to take all steps to prevent doping in sports. Students should also acquire basic knowledge of other issues that can affect the health of an athlete viz, nutritional aspects and menstrual disorders in the femaleathlete.

Unit-I Learning Outcome:

The student will learn about the basic types of sports injuries of the limbs and the principles of managing such injuries. The student would also acquire basic first aid skills during thismonth.

Unit-II Learning Outcome:

The student will acquire basic knowledge of injuries of the head and trunk. The student would be able to carry out a quick evaluation of the injured athlete on the field before shifting the athlete to a hospital. The student also would be able to shift and transports the athlete without worsening theinjury.

Unit-III Learning Outcome:

The student will gain knowledge of the basic therapeutic modalities used for treatment of sports injuries and also about the principles of exercise therapy and rehabilitation. They will acquire skills and knowledge of sports massage techniques.

Unit-IV Learning Outcome:

The student will acquire basic knowledge of issues other than injuries which can affect the health of the athlete viz, heat illness, nutritional issues and medical problems of the female athlete. They would also gain knowledge of the latest doping regulations and also the harmful effects of some major bannedsubstances.

THEORYSYLLABUS:

- Skin injuries- Abrasion, Laceration, Incision, Sunburn- first aid for theseinjuries
- Muscle injuries- Strains and Contusions Features and principles of rehabilitation
- Ligament injuries- Sprains- Features and principles of rehabilitation

- Fractures- basic types of fractures- principles ofsplinting
- > Overuse injuries principles of rehabilitation
- Stressfractures
- First aid- CPR, Recovery position, controlling bleeding from skin wounds, Controlling bleeding from the nose, first aid for near- drowning, first aid forfits.

Unit-2

Injuries of the HeadandTrunk

- Concussion insports.
- > Injuries to the nose, ear andeye.
- Evaluation of an athlete with headinjury
- > Evaluation of an athlete with a spinalinjury.
- > Shifting and transporting a seriously injuredathlete.
- > Chest and abdominal injuries- Closed vs Openinjuries
- Solar plexus injuries

Unit-3

BasicTherapeutic Modalities

- > Effects of heating modalities on the body
- Effects of cryotherapy on thebody
- Heating modalities- Infrared, Contrast bath, Whirlpool bath, Ultrasound, Short wave diathermy
- Cryotherapy techniques- Ice packs, Ice bag, Ice massage, Cryokinetics
- Principles of exercisetherapy
- Basic techniques and therapeutic effects of Stroking, Kneading, Percussion, Vibration and Shaking.

Unit-4

Health of the Athlete

- > Pregame meal and postgame nutrition for theathlete
- > Effects of dehydration, fluid and sugarreplacement.
- Heat illnesses insport
- Female athletetriad
- Doping in sport- Doping as defined by WADA, Classification of doping substances and methods, Harmful effects of Anabolic Steroids, Stimulants, Narcotics and Diuretics. Responsibilities of the coach and athlete in preventingdoping.

PRACTICAL

- First aid CPR, Recovery position, Log roll technique of shifting injured athletes, stopping external bleeding.
- Evaluation of seriously injuredathlete
- Sports massagetechniques
- Swiss ball exercises for thetrunk
- > Elastic band exercises for the shoulder andhip.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(**b**) One practical period is equal to 1 credit of 2hour duration.

30 hrs

15 hrs

15 hrs

Marking Scheme: Maximum Marks- 100 marks Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/or test	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS:

- 1. Steven Roy (1983) Sports Medicine- Prevention , Evaluation, Management and Rehabilitation
- 2. William E. Prentice (2015)-Rehabilitation Technique for Sports Medicine and Rehabilitation
- 3. Marcia K. Anderson (1994)- Foundations of Athletic Training- Prevention, Assessment and Rehabilitation
- 4. St. John Ambulance (2006)- First Aid manual(British RedCross)
- 5. Brad Walker(2011)- The Anatomy of Stretching
- 6. Tim Paine (2015)- Complete Guide to Sportsmassage

Month wise and Unit wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The student will learn about the basic types of sports injuries of the limbs and the principles of managing such injuries. The student would also acquire basic first aid skills during thismonth.	Methods Demonstration Methods	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test /

Unit-II	The student will acquire basic knowledge of injuries of the head and trunk. The student would be able to carry out a quick evaluation of the injured athlete on the field before shifting the athlete to a hospital. The student also would be able to shift and transportsthe athlete without worsening theinjury.	0	Lecture Methods Demonstration Methods Assessment Methods Presentation	0	viva/ seminar Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The student will gain knowledge of the basic therapeutic modalities used for treatment of sports injuries and also about the principles of exercise therapy and rehabilitation. They will acquire skills and knowledge of sports massage techniques.		Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The student will acquire basic knowledge of issues other than injuries which can affect the health of the athlete viz, heat illness, nutritional issues and medical problems of the female athlete. They would also gain knowledge of the latest doping regulations and also the harmful effects of some major bannedsubstances.		Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION

SEMESTER - II

COURSE CODE – MPECC 522

COURSE NAME – MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Marks:100

Duration: 03hours

Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks

Objective: -To understand the contents and its utility in the profession. To keep a uniform format of measuring and evaluating procedure.

Learning Outcome:

- The students willunderstand the contents and its application in the field ofsports.
- The students will put to use on an even format the procedure and techniques of administering tests, deriving measurement and logical application of results.
 The students will be better teachers when they understand the correct, best and recent trends of evaluation in physical education.
- The students can take the profession forwardsmartly.

After the Completion of First Month:

The students will be introduced to the terms Test, Measurement and Evaluation, Functions and Principles of Evaluation.

After the Completion of Second Month:

They will learn the types of tests, construction of knowledge tests, fitness tests, sports specific skill tests and steps in the construction of questionnaires. They will be introduced to the PACER Test and MART Test.

After the Completion of Third Month:

They will understand the term Posture and will be introduced to New York State Posture Rating Test. They would have studied what a sportsspecific test is all about and master the Lockhart McPherson's Badminton Test, Johnson's Basketball Test,SAI Volleyball Test, SAI Hockey Test, McDonald's Soccer Test,and the Broer Miller Tennis Test.

After the Completion of Fourth Month:

They will be familiar with the equipment and selected evaluating techniques and be introduced to Stadiometer, Weighing scales and use of a Stop watch. Areas in anthropometry for skin fold dimensions Body dimensions, Body Composition, Physique and its types will be introduced. In Physiology readings like Bodytemperature Pulse rate, Blood Pressure, and Vital Capacity will be taught.In Psychology administration and evaluation of Questionnaires on Anxietv Motivation, Reaction time And Mental Toughness will be the areas cleared to students. Finally in Sociology, Cowell's Personal Distance Scale to measure Social Efficiency. They will be taught to collect data on the said areas from each area of mention.

THEORY SYLLABUS:

Unit-I

- > Understanding of terms Tests, Measurement and Evaluation.
- Functions of Evaluation.
- Principles of Evaluation.

Unit-II

- > Types of tests.
- Construction of KnowledgeTests
- Construction of FitnessTests.
- > Construction of Sports Specific SkillTests.
- > Construction of Questionnaire.

Unit-III

- > Testing of Aerobic Fitness.PACERTEST.
- > Testing of Maximal Anaerobic Running Test. MARTTest.
- > Testing Posture; New York State Posture RatingTest.
- > Testing of SportsSpecific SkillTests.
 - 1. Badminton-Lockhart McPhersons BadmintonTest.
 - 2. Basketball- Johnson's BasketballTest.
 - 3. Volleyball-SAI VolleyballTest.
 - 4. Hockey-SAI HockeyTest
 - 5. Football- McDonald's SoccerTest.
 - 6. Tennis-Broer-Miller TennisTest.

Unit-IV

- > Equipment and Evaluating Techniques.
 - 1. Stadiometer.
 - 2. Weighing Scale
 - 3. Stop Watch.
- > Anthropometry:
 - 1. Skinfolddimensions
 - 2. BodyDimensions
 - 3. BodyComposition.
 - 4. Physique and itstypes.
- Physiology:
 - 1. BodyTemperature
 - 2. Pulse Rate.
 - 3. BloodPressure
 - 4. VitalCapacity
- > Psychology: Administration procedure and evaluation of questionnaires.
 - 1. Anxiety
 - 2. Motivation
 - 3. ReactionTime.
 - 4. Mentaltoughness.

PRACTICAL

Introducing anthropometric, physiological, psychological and sociological gadgets and equipment.

- ✓ Testingof:
- ✓ Skinfoldmeasurements
- ✓ Bodydimensions
- ✓ Bodycomposition
- ✓ Physique and itstypes.
- ✓ Bodytemperature

76

15hrs

15hrs

- ✓ Pulse rate
- ✓ Bloodpressure
- ✓ Vitalcapacity
- ✓ Psychological and sociological Questionnaire administrationprocedures
- ✓ Anxiety, Motivation, Reaction time, Mental Toughness.
- ✓ Social Efficiency-Cowell's Personal DistanceScale.
- ✓ Evaluation of traits collected fromquestionnaires.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.	
(b) One practical period is equal to 1 credit of 2hour duration.	30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva	- 1	0 Marks
Project/Assignment/Seminar -	10) Marks
Attendance	- 5	Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ^I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

- 1. ACSM (2001). Guidelines for Exercise Testing and Prescription by American College of Sports Medicine Human kineticsUSA.
- 2. Balyan Sunita (2006). Sharirk Shiksha main Parikshan evmn maapan. Khel Sahitya.Delhi.
- 3. Barrow H.M. and McGee R. (1979). A Practical Approach to Measurement in Physical Education. Lea & Febiger, Philadelphia.U.S.A.
- 4. Baumgartner TA Jackson AS Mahar MT and Rowe DA (2007). Measurement for Evaluation in Physical Education. The McGraw Hill Companies. Inc. New York.USA.
- 5. Kansal DK (2012). A practical approach to Measurement Evaluation in Physical Education & Sports selection. Sports & Spiritual Science Publications, NewDelhi.
- 6. Miller David K (2006). Measurement by the Physical Educator: Why and How. Mcgraw-Hill. Boston, U.S.A.
- 7. Mishra Sharad Chandra (2005). Tests And Measurement in physical education. Sports.Delhi
- 8. Sharma JP (2006). Test and measurements in physical education. khel sahitya. Delhi

Month Wise and Unit wise Progressi on Unit-I	Course Learning Outcomes The students will be introduced to the	Teaching and learning Activity I Lecture Methods	Assessment Tasks
	terms Test, Measurement and Evaluation, Functions and Principles of Evaluation.	 Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	They will learn the types of tests, construction of knowledge tests, fitness tests, sports specific skill tests and steps in the construction of questionnaires. They will be introduced to the PACER Test and MARTTest.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	They will understand the term Posture and will be introduced to New York State Posture Rating Test. They would have studied what a sportsspecific test is all about and master the Lockhart McPherson's Badminton Test, Johnson's Basketball Test, SAI Volleyball Test, SAI Hockey Test, McDonald's Soccer Test, and the Broer Miller Tennis Test.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	They will be familiar with the equipment and selected evaluating techniques and be introduced to Stadiometer, Weighing scales and use of a Stop watch. Areas in anthropometry for skin fold dimensions Body dimensions, Body Composition, Physique and its types will be introduced. In Physiology readings like Bodytemperature Pulse rate, Blood Pressure, and Vital Capacity will be taught. In Psychology administration and evaluation of Questionnaires on Anxiety Motivation, Reaction time And Mental Toughness will be the areas cleared to students. Finally in Sociology, Cowell's Personal Distance Scale to measure Social Efficiency. They will be taught to collectdataonthesaidareasfromeach area of mention.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MPEEC SUBJECT SPECIALIZATION

MASTER OF PHYSICAL EDUCATION

SEMESTER - II

COURSE CODE – MPEEC 523 (i) COURSE NAME – Subject Specialization (EXERCISE PHYSIOLOGY) MODULE-II (EXERCISE AND CARDIORESPIRATORY CONTROL)

Marks:100

Duration: 03hours

Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks

Objective: - To provide an understanding about how the cardiovascular, respiratory and nervous system functions and how nutrition affects performance.

Learning Outcome:

- > To familiarise students with physiological basis of cardiovascularsystem.
- > To enable the students to understand the respiratory capacities and mechanism.
- > To give an insight regarding the nutritional application for physicalactivity.
- > To give an understanding about neural control of movements.

i. After the Completion of FirstMonth:

The Students will develop a general idea about exercise and cardiovascular system, the phases of cardiac cycle, regulation of stroke volume, neural control of cardiovascular system, hemodynamics, and measurement of cardiovascularvariables.

ii. After the Completion of SecondMonth:

The students will develop the understanding and knowledge about the effect of exercise on respiratory system; further going deeply the student will gain knowledge about lung capacity, mechanical inspiration, and transportation of O2 & CO2 and will learn the techniques to measure lung volume.

iii. After the Completion of ThirdMonth:

The students will gain knowledge about the importance of nutrition in training, how to classify nutrients, importance of carbohydrates in exercise, pre, during and post-game meals and fluid intake importance and techniques and about eating disorders.

iv. After the Completion of FourthMonth:

At last the students would be taught about neural control of exercise, how central nervous system and peripheral nervous system work, how impulses are transferred and controls the movement execution.

THEORY SYLLABUS:

UNIT-I

Exercise and Cardiovascular System

- Phases of cardiac cycle (Ventricular filling, isovolumetric contraction, ventricular ejection, is volumetric ejection)
- Regulation of stroke volume (venous return, plasma volume, ventricular filling time, ventricular chamber size, afterload)
- Neural control of cardiovascular system (cardiovascular control center, autonomic nervous system, peripheralcontrol)
- > Hemodynamics (blood, relation among pressure, cardiac output and vascularresistance)
- Measurement of cardiovascular variables (cardiac output, stroke volume, heart rate, maximal oxygen consumption, bloodpressure)

UNIT-II

Respiratory system and exercise

- Lung volumes and capacities (Tidal Volume, Inspiratory Reserve Volume, Expiratory Reserve Volume, Residual Volume, Vital Capacity, Inspiratory Capacity, Functional Residual Capacity, Total LungCapacity)
- > Mechanics of inspiration and expiration at rest and muscles of ventilation duringexercise.
- > Transportsof Oxygen and Carbon dioxide in theblood
- Measurement of lung volumes (Static Lung Volumes, Dynamic Lung Volumes, Spirometry, GasDilution)

UNIT-II

Nutrition for Training

- Classification of nutrients (carbohydrate, fat, protein, vitamins and minerals)
- > Carbohydrate loading (Glycogen Supercompensation)
- > Pre-event meals and feeding duringexercise
- > Fluid ingestion during and afterexercise.
- > Eating disorders : Types, risk factors and prevention

UNIT-IV

Neural control of Exercise

- > Neural organization: (Central Nervous System and Peripheral nervoussystem)
- Transmission of nerveimpulse
- Neuromuscularjunction
- Reflex control ofmovement

PRACTICALS

- 1. Measurements of Aerobic fitness test (One mile walk test, YO-YO test, BeepTest)
- 2. Measurements of Anaerobic fitness test (Running based Anaerobic Sprint Test (RAST), Margaria Step Test, De Bruyn prevost test)

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 50 Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ^I The examiners are required to set eight questions taking at least two questions from eachunit.
- \mathbb{I} The students have to answer any five questions out of the total of eightquestions.

15 hrs

15 hrs

15 hrs

30 hrs

80

- Each question shall be of a maximum of 10marks.
- ^I Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

RecommendedReadings

- 1. Kenney, W. L., Wilmore, J. H., & Costill, D. L. (2012). *Physiology of sportsand exercise* (5thed.). USA: HumanKinetics.
- 2. Plowman, S. A., & Smith, D. L. (2017). *Exercise physiology for health, fitness and performance (5thedn)*. Philadelphia: WoltersKluwer.
- 3. Porcari, J., Bryant, C., & Comana, F. (2015). *Exercise physiology*. USA: F ADavis.

Suggested Readings

- 1. Dey, S. K. (2012). *A Text Book of Sports and Exercise Physiology*. New Delhi: Jaypee Brothers MedicalPublishers.
- 2. Haff, G.G., & Dumke, C. (2012). *Laboratory Manual for Exercise Physiology*. USA: Human Kinetics.
- 3. Maud, P.J., & Foster, C. (eds.) (2006). *Physiological Assessment Of HumanFitnessm*(2nd *Ed.*). USA: HumanKinetics.
- 4. Silverthorn, D. U. (2009). *Human Physiology: An Integrated Approach (4thed.)* Pearson education, USA.
- 5. Tanner, R.K., & Gore, C.J. (eds.) (2013). *Physiological Tests For Elite Athletes (2nded.)*. USA: HumanKinetics.
- 6. Wingerd, B. (2014). *The Human Body: Concepts Of Anatomy And Physiology (3rded.)*. Lippincott Williams & Wilkins.

Month wise and unit wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	The Students will develop a general idea about exercise and cardiovascular system, the phases of cardiac cycle, regulation of stroke volume, neural control of cardiovascular system, hemodynamic, and measurement of cardiovascular variables.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/seminar
UNIT-II	The students will develop the understanding and knowledge about the effect of exercise on respiratory system; further going deeply the student will gain knowledge about lung capacity, mechanical inspiration, and transportation of O2 & CO2 and will learn the	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar

Unit-III	techniques to measure lung volume. The students will gain knowledge about the importance of nutrition in training, how to classify nutrients, importance of carbohydrates in exercise, pre, during and post-game meals and fluid intake importance and techniques and about eating disorders.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-IV	At last the students would be taught about neural control of exercise, how central nervous system and peripheral nervous system work, how impulses are transferred and controls the movement execution.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

COURSE CODE – MPEEC 523 (ii) COURSE NAME – SUBJECT SPECIALIZATION (SPORTS BIOMECHANICS) MODULE-II (KINETICS AND FLUID MECHANICS)

Marks:100

Duration: 03hours

(Theory-50+Practical-25+Internal Assessment -25)

Objective: -To provide understanding about the linear kinetics, angular kinetics, fluid mechanics and mechanical analysis of fundamental techniques.

Learning Outcome:

- > To enable students to understand linear kinetics by learning the contents of linearkinetics
- > To provide insight on angular kinetics by learning different aspects involved in angular kinetics
- To impart knowledge about the mechanics involved in movements throughfluid.
- > To deliver the mechanical features of fundamentaltechniques.

After the Completion of First Month:

The students will learn the definitions, concepts, insights about the contents of linear kinetics. They will also be taught, Newton's Laws of motion and its application in sports. They will learn about how the spin is imparted on an object and the influence of spin in the trajectory of the object moving through air.

After the Completion of Second Month:

The students would achieve knowledge on the field of study that encompasses angular kinetics. They will also learn the definitions, meaning, and measuring units and their influence in human performance. In addition they learn about Centre of gravity, stability and equilibrium and the factors influencing them.

After the Completion of Third Month:

During this month students would be taught about fluid mechanics which include floatation and buoyancy. They will be able to understand the how the fluids offer resistance on the objects when the objects passing through air and water. They will also learn about the components of air resistance.

After the Completion of Fourth Month:

After completion of this unit the students would learn to analyze the fundamental techniques like walking, running jumping, throwing and catching. In addition, they will be well-versed with the mechanical principles involved in the performance of these techniques.

THEORY SYLLABUS:

UNIT 1

LinearKinetics

- Inertia, mass, momentum
- Newton's laws of motion
- > Weight, friction, impulse
- Conservation of momentum,

15 hr

- > Impact, elasticity, obliqueimpact
- > Spin, pressure, work, power, energy

UNIT2

AngularKinetics

- Eccentric force, couple, moment
- > Centre of gravity, equilibrium, stability
- Levers,
- > Angular momentum, Transfer of momentum.
- UNIT 3

Fluid Mechanics

- Floatation, buoyancy,
- > Fluid resistance, airresistance
- Lift and dragcomponents
- Water resistance

UNIT4

Mechanical Principles

- > Walking,
- Running
- Jumping
- Throwing
- Catching

PRACTICALS

- 1. Assessment of Centre of gravity and line of gravity in the humanbody.
- 2. Free bodydiagram

Note:

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination	- 50Marks
Practical	- 25Marks
InternalAssessment	- 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva	- 1	0	Marks
Project/Assignment/Seminar -	1	0	Marks
Attendance	- 1	5N	Iarks

15hrs

15 hrs

15 hrs

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

Hay, J., & Reid J, Gaving (1998) : Anatomy and Mechanics of Human Motion(2nd ed) Englewood Cliffs, N.J.: Prentice Hallinc.

REFERENCES

- 1. Miller, R. (1990). *Biomechanics(3rd ed.)*. New York:Macmillan.
- 2. Bartlett, R. (1997). Introduction to Sports Biomechanics. New York: E & FNspon.
- 3. Chapman, A. E. (2008). *Biomechanical Analysis of Fundamental Human Movements*. USA: Human Kinetic.
- 4. Siamonian, & Charles. (1981). *Fundamentals of Sports Biomechanics*. Englewood Cliffs, NJ: : Prentice hallInc.
- 5. Hall, J. S. (1991). *Basic Biomechanics*. USA: Mosby YearBook.
- 6. Hay, J. (1985). *The Biomechanics of Sports Technique*, *3rd Ed.* Englewood Cliffs;NJ: Prentice Hall:Inc.

Month wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	The students will develop a clear concept through the definitions explanations about the contents of linear kinetics. They will understand the Newton's laws of motion andhow these laws are applied in sports performance. They wouldlearn about the spin and how the spin is imparted on an object. In addition, they understand how spin influence the trajectory of the object moving through air.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/seminar

UNIT-II	The students will develop the understanding and knowledge on the field of study that encompasses angular kinetics by learning the definitions, meaning, and measuring units. Furthe rmore they will understand about centre of gravity, stability and equilibrium and the factors influencing them.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test/ viva/ seminar
Unit-III	The students will learn about fluid mechanicsin detail. Theywill develop the concepts about how the objects are float in water andthe phenomena called as buoyancy. The will be able to realize the fluids offer resistance on the objects that passing through air and water.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/ seminar
Unit-IV	The students will learn to systematically analyse the fundamental techniques like walking, running jumping throwing and catching. Additionally, they willbe able to understand the mechanical principles involved in the performance of these techniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/ seminar

COURSE CODE – MPEEC 523 (iii) COURSE NAME – Subject Specialization (EXERCISE AND SPORTS PSYCHOLOGY) MODULE-II (LEARNING ABOUT PARTICIPANTS)

Max.Marks=100

Time: 3Hrs

(Theory=75 Marks + Practical=50, Internal Assessment=25 Marks)

Objectives: - To provide the knowledge about Personality, Cognition, Group Cohesion and Team Dynamics.

Learning Outcome:

- Students will acquire the in depth knowledge aboutPersonality
- Students will acquire theCognition
- Students will acquire the GroupCohesion
- Students will acquire the TeamDynamics

After Completion of First Month: -

The Students will develop the knowledge & understanding regarding Definition, Dimension Personality, its structure and its application in Sports.

After Completion of Second Month: -

The Students will get an insight into the meaning of Cognition, Attention, Concentration and its varied effect on SportsPerformance.

After Completion of Third Month: -

The Students will gain an insight into Group and Team Dynamics, the difference between Group and Team, how a group is formed.

After Completion of Fourth Month: -

The Students will gain knowledge about Group Cohesion, the relationship between Cohesion and Performance and guidelines for Building Cohesion.

THEORY SYLLABUS

UNIT-I

- Personality-Definepersonality,
- Structure of Personality
- > Why study personalitystructure,
- > Understanding personality insports.
- Measurement of Personality

UNIT-II

- Cognition.
- Meaning of cognition, Characteristics of Cognitive process, dimensions of thought, peripheral and mentalcognition.

15 hrs

Concentration and performance, attentional focus, types of attentional focus, Tips for improving attention and concentration.

UNIT-III

- > Group and TeamDynamics.
- > Define group, Difference between Group and Team,
- Structure of a group,
- > Individual and team performance insports.

UNIT-IV

- GroupCohesion.
- Defining Cohesion, MeasuringCohesion,
- > The relationship Between Cohesion and Performance,
- > Enhancing Cohesion, Guidelines for BuildingCohesion.

PRACTICALS

- > Learning operation of Neurotracker.
- Assessment of personality.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination	- 50Marks
Practical	- 25Marks
InternalAssessment	- 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READING:

1. Cox, Richard H. (1985) SportsPsychology Concepts and Application, Wm C Brown Publishers.

15 hrs

15hrs

- 2. Gill, Diane L, Willams Lavon (2008), Psychological Dynamics of Sportsand Exercise, 3rdEdition, Human Kinetics, USA.
- 3. Weinberg Robert, Gould Daniel (2014), Foundation of Sports& Exercise Psychology, 6thEdition, Human Kinetics, USA.

REFRENCE

- 1. Gill, Diane L. (1986), Psychological Dynamics of Sport. Human Kinetics Publishers, USA.
- 2. Kmalesh. M.L (2014) Psychology in Physical Education and Sport, Khel Sahitya Khendra, NewDelhi.
- 3. Martens Raine (1987) Coaching Guide to SportsPsychology, Human Kinetics Publishers, USA.
- 4. Orlick Terry (1986) Psyching For SportsMental Training For Athletes, Leisure Presss, USA.
- 5. Shaw .D F, Corban R M (2005)Sportsand Exercise Psychology, IndiAN Edition, BIOS Scientific Publishers, USA.
- 6. Singer, Robert N (1975) Motor Learning and Human Performance, Macmillan Publishing co. NewYork.
- 7. Silva. M John, Weinberg .S Robert (1984), Psychological Foundation of Sport. Human Kinetics, USA.

Month wise and unit wise Progression	Course Learning Outcomes	1	Teaching and earning Activity	Assessment Tasks
Unit-I Unit-II	The Students will develop the knowledge & understanding regarding Definition, Dimension Personality, its structure and its application in Sports. The Students will get an insight into the meaning of Cognition,		Lecture Methods Demonstration Methods Assessment Methods Presentation Lecture Methods Demonstration	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar Evaluation of Presentation Evaluation of
	Attention, Concentration and its varied effect on Sports Performance.	0	Methods Assessment Methods Presentation	Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will gain an insight into Group and Team Dynamics, the difference between Group and Team, how a group is formed.		Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment Practical's Class-test / viva/ seminar

Unit-IV	The Students will gain		Lecture Methods	Evaluation of
	knowledge about Group Cohesion, the relationship between Cohesion and Performance and guidelines for Building Cohesion.	۵	Demonstration Methods Assessment Methods Presentation	Presentation Evaluation of Assignment Practical's Class-test / viva/seminar

COURSE CODE – MPEEC 523 (iv) COURSE NAME – Subject Specialization (SPORTS SOCIOLOGY) MODULE-II (SOCIOLOGICAL PERSPECTIVE IN SPORTS)

Max. Marks=100

Time: 3hrs

(Theory=75 Marks + Practicals=50, Internal Assessment=25 Marks)

Objective: -To provide the knowledge and understanding of Sports Sociology.

Learning Outcome:

- The Students will be able to know and develop a sociological perspective In sportsby learning basic sociological theories, concepts, and researchmethods.
- ^I The students will be equipped with the knowledge and importance of social development throughsports
- ^I To understand the Sports as a social phenomenon and Demonstrate how sportsinfluences our values, attitudes, beliefs, perceptions, behavior, culture, and society.
- To guide the development of cultural aspects through sports and apply the basic principles and theories of sociology to analyze the role of sports in our everyday sociallives.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Sports and Micro Social Systems: Sports groups, Group interaction, competition & co-operation, Behaviour Characteristics, Qualities.Role of Sportsleaders: Leadership: Meaning, Definition and Types. Leadership and Sports Performance, Leadership, Physical Education and Sports.

Unit-II Learning Objective

The Students will develop the understanding and knowledge of Sports and Macro Social Systems: Relationship between sports socializing Institutions (Family, School etc) Inter-relationship between regulating Institutions (Politics & Economics), Sports Cultural Institutions (Religion & Art), Socialization through Games & Sports

Unit-III Learning Objective:

The Students will gain knowledge of Introduction to Sports Related Social Issues: Empowerment, Gender Discrimination, Women and Sport, Sportsand Children & Adults, Role of family, Institution and peer group in sportssocialization, Socio-economic Status and Sports Participation, Sports in Modern Society.

Unit-IV Learning Objective:

The Students will gain knowledge ofSocial roots, changes in sportsin ancient, modernsociety: Sportsin ancient times - Greece andRome, Spectacles and gladiatorcontests, Sports among various classes of differentcivilizations, Sportsin modern times- Professional ethics-ethics and values related to sports, sportsmanship, Emergence of modernsport, Traditional recreation to rational recreation, Industrial Revolution and changes in sportdynamics, Professionalism versus a mateurism insport, Commercialism insport, Sports and mass media, Sports and politics

THEORY SYLLABUS:

Unit-I

- Sports and Micro Social Systems: Sports groups, Group interaction, competition & cooperation, BehaviourCharacteristics,
- > Leadership: Meaning, Definition and Types. Leadership and Sports Performance, Leadership,
- > Qualities.Role of Sportsleaders: Physical Education and Sports.

Unit-II

- Sports and Macro Social Systems: Relationship between sports socializing Institutions (Family, Schooletc)
- > Inter-relationship between regulating Institutions (Politics &Economics)
- > Sports& Cultural Institutions (Religion & Art), Socialization through Games & Sports

Unit-III

- Sports Related Social Issues: Empowerment, Gender Discrimination, Women and Sport, Sportsand Children & Adults,
- > Role of family, Institution and peer group in sportsocialization
- Socio-economic Status and Sports Participation, Sports in ModernSociety.

Unit-IV

- Social roots, changes in sportsin ancient, modernsociety: Sportsin ancient times Greece andRome, Spectacles andgladiatorcontests
- > Sports among various classes of different civilizations
- > Sportsin modern times- Professional ethics-ethics and values related to sports, sportsmanship,
- > Emergence of modernsport, Traditional recreation torationalrecreation
- Industrial Revolution and changes insportdynamics
- Professionalism versus amateurism insport, Commercialism insport, Sports and mass media, Sports andpolitics

PRACTICALS AND ASSIGNMENTS

- Analyze the significant sports events in view of phenomenology, hermeneutics, and semiotics.
- > Assessment of Group-cohesion and SocialDevelopment.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination	- 50Marks
Practical	- 25Marks
InternalAssessment	- 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 05marks

15hrs

15hrs

15hrs

15hrs

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of four short note questions (Each Carrying 5marks)

SUGGESTED READINGS

- 1. Maguire, J. and Young JAI, K., (2005). Theory, Sportsand Society, ElsevierLtd.
- 2. Jain, Rachna, (2005). Sports Sociology, New Delhi: Khel SahitayaKendra,
- 3. Singh, Bhupinder, (2004). Sports Sociology, New Delhi:Friends.
- 4. Hosue, J., Tomlinson, A., Whannel, G., (1999). Undertaking Sports– An Introduction To The Sociology And Cultural Analysis of Sport, Routbdge, NewYork.
- 5. Coaplay, Joy. J., (1997). SportsIn Society, Issues And Controversies, Mcgraw Hill International edition
- 6. Mukherjee D.P (1979), Sociology of Indian Culture, Rawa publications, Jaipur

Month wise	Course Learning Outcomes	Teaching and	Assessment Task
and Unit wise Progression		Learning Activity	
UNIT-I	The Students will develop the understanding and knowledge regarding Sports and Micro Social Systems: Sports groups, Group interaction, competition & co- operation, Behaviour Characteristics, Qualities. Role of Sportsleaders: Leadership: Meaning, Definition and Types. Leadership and Sports Performance, Leadership, Physical Education and Sports.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/ seminar
UNIT-II	The Students will develop the understanding and knowledge of Sports and Macro Social Systems: Relationship between sport & socializing Institutions (Family, School etc.)Inter-relationship between regulating Institutions (Politics & Economics), Sports&	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/ seminar

UNIT-III	Cultural Institutions (Religion &Art), Socialization through Games & Sports The Students will gain knowledge of Introduction to Sports Related Social Issues: Empowerment, Gender Discrimination, Women andSport, Sportsand Children & Adults, Roleof family, Institution and peer group in sportssocialization, Socio-economic Status and Sports Participation, Sports in Modern Society.	0	Lecture Methods Demonstration Methods Assessment Methods Presentation	0	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/ seminar
UNIT-IV	The Students will gain knowledge of Social roots, changes in sportsin ancient, modern society: Sportsin ancient times - Greece and Rome, Spectacles and gladiator contests, Sports among various classes of different civilizations, Sport in modern times- Professional ethics- ethics and values related to sports, sportsmanship, Emergence of modern sport, Traditional recreation to rational recreation, Industrial Revolution and changes in sport dynamics, Professionalism versus amateurism in sport, Commercialism in sport, Sports and mass media, Sports and politics		Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/ seminar

COURSE CODE – MPEEC 523 (v) COURSE NAME – Subject Specialization (SPORTS MANAGEMENT) MODULE-II- (HUMAN RESOURCE MANAGEMENT)

Max.Marks-100

Time: 3Hrs.

(Theory=75 Marks, Internal Assessment=25 Marks)

Objective: -To provide basic knowledge of human resource management.

Learning Outcome:

- > The Students will be able to understand the about human resource management in the field of physical education and sport.
- > The students will be able to get the information about basics of staffing and different training methods instaffing.
- > The students will get basic information about significance of leadership, traits and types of leaderships.
- > The student will be able to understand different changing concept of leadership insports.
- > The students will have broad awareness about communication and elements involved in communication.

Unit-I Learning Outcome:

The Students will start developing knowledge about meaning and concepts of public relation. Students will gain knowledge regarding principles of public relation in physical education and sports. Students will start evolving the information about mass media communication and publicity. Students will also get a basic awareness about qualification of public relation officer.

Unit-II Learning Outcome:

The Students will start developing knowledge regarding meaning and importance of staffing. The students will get a basic idea about recruitment and selection process. They will start recognizing different training methods. They also start learning about appraisal and career advancement.

Unit-III Learning Outcome:

The Students will start developing knowledge about meaning and changing concepts of leadership in sports. The students will start to improve their knowledge regarding the significance of planning. The students will get information regarding leadership trait and types. They also will learn about Opportunities for inculcation of leadership skills and traits.

Unit-IV Learning Outcome:

The students will start developing knowledge about meaning and importance of communication. The students will start learning about Elements involves in communication. They will also initiate to know about various types and tools of communication and information about effective communication.

THEORY SYLLABUS:

Unit-I:Pu	blicRelation	20hrs
\rightarrow	Meaning and concepts of PublicRelation	
\triangleright	Principles of public relations in physical education and sports	
\diamond	Mass Media – communication and publicity	
\mathbf{b}	Qualification of \public RelationOfficer.	
Unit-Ii:Sta	affing	20hrs
\diamond	Meaning and Importance of Staffing	
\triangleright	Recruitment and Selectionprocess	
\checkmark	Training methods	
\triangleright	Appraisal and careeradvancement	
UNIT-III:	Leadership	20hrs
\triangleright	Meaning and changing concept of leadership insports	
\checkmark	Need and significance of leadership insports	
\checkmark	Leadership traits and types ofleadership	
\triangleright	Opportunities for inculcation of leadership skills andtraits	
UNIT-IV:	Communication	20hrs
\triangleright	Meaning and important of communication	
4	Elements involves in communication	
\triangleright	Types and tools of communication	
\triangleright	Communication effectively	

Note:

One Theory period is equal to 1 credit of 1-hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 75 Marks Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- > Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions.

SUGGESTED READINGS

 Alka Dhawan. Arya 2019. Case Studies Mentor in Business Studies. Publishing Company, IV Edition Printed at Prince Print Process, G.T. Karnal Road, Delhi. ISBN: 978-81-8296-672-7

- 2. Bucher, C.H. 1983. Administration of Physical Education and Athletic Programmes, The C.V. Mosby Company, London,
- Larry Horine, 2ND Edition, 1991. Administration of Physical Education and SportsPrograms Wim. C. BrownPublishers
- 4. M.L. Kamlesh, II updated Edition 2016. Management Concepts in Physical Education and Sport. KhelSahitya Kendra, NewDelhi.
- 5. Voltmar, B.P. et. al. 1979. The Organization and Administration of Physical Education., Prentice Hall Inc., NewJersey,
- 6. Zeigler, E.M. and Dewie, G.W. 1983. Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia,

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
First Month	The Students will develop knowledge about meaning and concepts of public relation. Students gain knowledge regarding principles of public relation in physical education and sports. Students will develop the information about mass media communication and publicity. Students will also get a basic awareness about qualification of public relation officer.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Second Month	The Students will develop knowledge regarding meaning and importance of staffing. The students get a basic idea about recruitment and selection process. They will recognize different training methods. They learn about appraisal and career advancement.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Third Month	The Students will develop knowledge about meaning and changing concepts of leadership in sports. The students improve their knowledge regarding the significance of planning. The students will get information regarding leadership trait and types. They learn about Opportunities for inculcation of leadership skills and traits.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Fourth	The students will develop awareness	Lecture Methods	Evaluationof
	about different philosophies of	Demonstration	Presentation
Month	administration and various styles of	Methods	Evaluation of
	administrators. The students will learn	Assessment Methods	Assignment
	about career avenues and professional	Presentation	MCQ
	preparation. They will know about		Class-test / viva/
	coordination and its essence		seminar
	inmanagement.		

COURSE CODE – MPEEC 523 (vi) COURSE NAME – SUBJECT SPECIALIZATION (KINANTHROPOMETRY IN SPORTS)

MODULE-II- (GROWTH AND DEVELOPMENT)

Max.Marks-100

Time: 3Hrs.

((Theory=75 Marks + Practical=50, Internal Assessment=25 Marks)

Objective: -To provide the knowledge of growth and development in Kinanthropometry

Learning Outcome:

- The students will be able to understand the stages of growth and development and role of growth and development to for the identification oftalent.
- > The students will be able to get the knowledge about aging and maturation and its application in the field ofsports.
- Students can assess a person based on maturity to give the proper direction for particular games.
- > The students will be able to get the knowledge about geriatricrehabilitation.

After the Completion of First Month:

Meaning, definition and importance of Growth and Development, Application of Growth and Development in the field of Sports, Stages of Human growth, Difference between human growth and development, Distance Curve and Velocity, Determination of velocity and distance curve

After the Completion of Second Month:

The Students will develop the understanding of Concept of Aging, Physiological Maturation: Decimal Age and concept of Physiological maturity in sports. Assessment of skeletal maturity of athletes, chronological age, biological age, dental age.

After the Completion of Third Month:

Concept of maturity, Relationship of Physical Activity to Growth and Maturation., Prediction of Adult Height; Growth Curve; Peak Height Velocity; and Determination of Velocity Curve, Application of Anthropometry to Health & Body CompositionBody.

After the Completion of Fourth Month:

The Students will develop the understanding of definition and the importance of Geriatric Rehabilitation, Biological Factors Governing Rehabilitation in Old Age, and Indications for Rehabilitation in Old Age, Resources and Method of Geriatric Rehabilitation.

THEORY SYLLABUS:

UNIT-I

- > Meaning, definition and importance of Growth andDevelopment
- > Application of Growth and Development in the field of Sports
- Stages of Humangrowth
- > Difference between human growth and development
- Distance Curve and Velocity,
- > Determination of velocity and distancecurve.

UNIT-II

- Concept of Aging
- > Physiological Maturation: Decimal Age and concept of Physiological maturity insports.
- > Assessment of skeletal maturity of athletes
- > Chronological age, biological age, dentalage.

UNIT-III

- Concept of maturity
- Relationship of Physical Activity to Growth and Maturation
- Prediction of Adult Height; Growth Curve; Peak Height Velocity; and Determination of VelocityCurve
- > Application of Anthropometry to Health & BodyComposition
- Body Changes withAge

UNIT-IV

- > Definition and the importance of GeriatricRehabilitation
- Biological Factors Governing Rehabilitation in OldAge
- > Indications for Rehabilitation in OldAge
- > Resources and Method of GeriatricRehabilitation.

Practical

- \checkmark Analysis of growthchart
- ✓ Analysis of growth curve and velocitycurve
- ✓ Techniques of handling various anthropometric equipment's
- ✓ Techniques of taking Gross bodymeasurements.

Note:

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/	Class	Test/Viv	a	-	10	Marks
Project/Assign	nment/S	Seminar	-		10	Marks
Attendance			-	5]	Mark	S

. ___

15hrs

30 hrs

15hrs

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Frincisco Esparza-Ros, Raquel Vaquero- Cristobal and Michael Marfell-Jones (2019).International Standards for Anthropometric Assessment, International Society for the Advancement of Kinanthropometry.
- 2. H.S. Sodhi and L.S. Sidhu. (1984) Physique and Selection of Sportsmen byPunjab Publishing House.
- 3. J.E.L. Carter. (2002)the Heath-Carter Anthropometric Somatotype InstructionManual.
- 4. Marry Ann Forciea: Geriatric Secret: Han by Belfusinc.Sydney.
- 5. McArdle, W.D., Katch, F.I., and Katch, V.L. (2010). Exercise Physiology: Energy, nutrition, and human performance (7th edition). Lippincot Williams & Wilkins. Baltimore, MD,USA.
- 6. Norton, K. & Olds, T. (1996). Anthropometrica. Sydney: University of New SouthWales Press, Australia.
- 7. S.P. Singh, L.S. Sidhu, and J. Singh (1992), Skeletal Maturity by Human Biology Publication Society, Punjabi University, Patiala.
- 8. Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach). Mohali: ANOVAPublications.

Month wise	Course Learning Outcomes	Teaching and	Assessment Tasks
Progression		learning Activity	
First	Meaning, definition and importance of	Lecture Methods	Evaluationof
Month	Growth and Development, Application of Growth and Development in the	Demonstration Methods	Presentation Evaluation of
	field of Sports, Stages of Human	Assessment	Assignment
	growth, Difference between human	Methods	MCQ
	growth and development, Distance	Presentation	Class-test / viva/
	Curve and Velocity, Determination of velocity and distancecurve		seminar
	velocity and distance dive		
Second	The Students will develop the	Lecture Methods	Evaluationof
M	understanding of Concept of Aging,	Demonstration	Presentation
Month	Physiological Maturation: Decimal Age	Methods	Evaluation of
	and concept of Physiological maturity	Assessment	Assignment
	in sports. Assessment of skeletal	Methods	MCQ
	maturity of athletes, chronological age, biological age, dentalage	Presentation	Class-test / viva/ seminar
Third	Concept of maturity, Relationship of	Lecture Methods	Evaluationof
	Physical Activity to Growth and	Demonstration	Presentation
Month	Maturation., Prediction of Adult	Methods	Evaluation of
	Height; Growth Curve; Peak Height	Assessment	Assignment
	Velocity; and Determination of	Methods	MCQ
	Velocity Curve, Application of	Presentation	Class-test / viva/
	Anthropometry to Health & Body CompositionBody Changes withAge.		seminar
Fourth	The Students will develop the	Lecture Methods	Evaluationof
Month	understanding of definition and the	Demonstration	Presentation
Month	importance of Geriatric Rehabilitation,	Methods	Evaluation of
	Biological Factors Governing	Assessment	Assignment
	Rehabilitation in Old Age, and	Methods	MCQ
	Indications for Rehabilitation in Old	Presentation	Class-test / viva/
	Age, Resources and Method of Geriatric Rehabilitation.		seminar

COURSE CODE – MPEEC 523 (vi) COURSE NAME – Subject Specialization (STRENGTH, CONDITIONING AND SPORTS PERFORMANCE)

MODULE-II- (STRENGTH AND CONDITIONING)

Max.Marks-100

Time: 3Hrs.

((Theory=75 Marks + Practical=50+ Internal Assessment=25 Marks)

Objective: To provide the knowledge of resistance training and methods to develop motor qualities

Learning outcome:

- 1. The students will able to understand and to imply the importance of resistance training
- 2. The students will be equipped with the knowledge of various motor qualities and also to gain the improvement of the saidqualities.
- 3. To formulate the periodization for various sports and games on its demand.

After the completion of Firstmonth:

The students will develop to understand the knowledge regarding the importance and basis of resistance and plyometric training, Safety considerations, core training, core testing and program design, assessment of strength.

After the completion of Second month:

The student will able to understand the concepts and importance of speed and means and methods to develop speed.

After the completion of Third month:

The student will able to understand the concepts and importance of endurance and means and methods to develop endurance.

After the completion of Fourth month:

The student will able to understand the concepts and importance of flexibility and means and methods to develop flexibility.

THEORY SYLLABUS:

Unit-I

Resistance training: Definition, types and factors determining strength program design: need analysis, exercise selection, training, and frequency, exercise order, training load and repetitions, volume, and Rest periods. Plyometric Training: Plyometric mechanics and physiology, plyometric program design, plyometric and other form of exercise, Safety considerations and assessment of strength.

UNIT-II

15hrs

Speed training: Definition, Characteristics, forms, importance and technical models of speed, speed training, factors affecting speed, methods to develop speed, assessment of speed.

UNIT-IIII

Endurance training: Definition, Types of endurance, factors related to aerobic endurance performance, training parameters for aerobic endurance, training parameters for anaerobic endurance, designing an aerobic endurance training , methods to develop endurance, methods to develop high intensity aerobic exercise and assessment of endurance.

UNIT-IV

Flexibility training: Definition, characteristics, types and importance of flexibility, factors affecting flexibility, principles of stretching, need and importance of dynamic stretching, special factors in flexibility, methods of flexibility development, and assessment of flexibility.

PRACTICAL:

Exercise analysis, weight training, plyometric, speed training, , flexibility exercises, MHR, the calculation of intensity in speed , endurance and flexibility, Static & dynamic flexibility exercises, calculation of IRM (One Repetition Maximum).

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

Reference:

- 1. Ian Jeffreys, Developing speed, NSCA, Sports performances series, Human kinetics2013
- 2. Ben Reuter, Developing endurance, NSCA, Sports performance series, Human kinetics, 2012.
- 3. Jay R. Hoffman, NSCA'S Guide To Program Design, Human Kinetics, 2012.
- 4. Mickal A Clarke and et al, NASM 'S Essentials of sports performance training, National Academy of sports Medicine,2015.

15hrs

- 5. Steven J.Fleck and William J Kraemer, Designing resistance training program third edition, Humankinetics,2004.
- 6. Donald A.Chu and Gregory D.Myer, Plyometrics, Dynamic strength and explosive power, Human Kinetics, 2013.
- 7. Michael H Stone Meg Stone and Willam A Sands, Principles and practice of Resistance training, Human kinetics, 2007.
- 8. David Joyce and Daniel Lewindon, High performance training for sports, Human kinetics, 2014.
- 9. Todd Miller, NSCA'S guide to tests and assessment, NSCA,2012.
- 10. Physiological tests of elites and athletes, Australian Institute of sports, Human kinetics, second edition,2013.

Month wise	Course Learning Outcomes	Teaching and	Assessment
AND Unit		learning Activity	Tasks
wise			
Progression			
Unit-I	The Students will develop the understanding and knowledge regarding: Definition, types and factors determining strength program design: need analysis, exercise selection, training, frequency, exercise order, training load and repetitions, volume, Rest periods. Plyometric Training: Plyometric mechanics and physiology, plyometric program design, plyometric and other form of exercise, Safety considerations and assessment of strength.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The students will understand the concepts of speed and its forms, importance and technical models of speed, speed training, factors affecting speed, methods to develop speed, assessment of speed.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding and knowledge of Endurance training: Definition, Types of endurance, factors related to aerobic endurance performance, training parameters for aerobic endurance, training parameters for anaerobic endurance, designing an aerobic endurance training, methods todevelop endurance, methods to develop high	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

	intensity aerobic exercise and assessment of endurance.		
Unit-IV	The Students will develop Concept of flexibility, Definition, characteristics, types and importance of flexibility, factors affecting flexibility, principles of stretching, need and importance of dynamic stretching, special factors in flexibility, methods of flexibility development, and assessment of flexibility.	Demonstration Methods Assessment Methods	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

SEMESTER - II

COURSE CODE – MPEEC 524

COURSE NAME – SPORTS SPECIALISATION

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective-The Students will acquire knowledge and understanding of a specific sportsin which an individual wish to excel.

Learning Outcome: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

After the Completion of First Month:

A student will be able to gain knowledge with respect to Common injuries related to sports and Rehabilitation of injured player/athletes.

After the Completion of Second Month:

A student will be able to understand and gain knowledge about various Training Means and Methods for development of motor components, identifying and development of talent in sports

After the Completion of Third Month:

A student will be able to understand and gain knowledge about Anatomical, Physiological, Biomechanical and Psychological basis to performance.

After the Completion of Fourth Month:

A student will be learn and gain proficiency in officiating, organizing, planning and conducting of sportscompetitions.

THEORY SYLLABUS

Unit-I

- > Common injuries related tosports.
- > Sprain, Strain, Contusion, Abrasion and Dislocation
- > Rehabilitation of injuredplayer/athletes.

Unit-II

- > Training Means and Methods for development of motorcomponents.
- Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training,
- > plyometric Training, Sand Training, hilltraining.
- > Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and SaunaBath.
- > Talent Identification and Development insports.

Unit-III

- Anatomical Consideration in aSport.
- > Physiological basis to performance in aSport.
- Biomechanical analysis ofskills/techniques.
- > Psychological basis toperformance.

(15 lectures)

(15 lectures)

(15 lectures)

Unit-IV

(15hours)

- > Duties and responsibilities of Technical Officials in theSports.
- > Qualification of Officials, Score sheet and RecordKeeping.
- > Organisational aspects insport:
 - 1. Selection of Team
 - 2. Conduct of CoachingCamps
 - 3. Planning and Organisation forCompetitions
 - 4. Report Writing of aCompetition/Tournament.
- > Development drills/supplementaryexercises.
- > Drills for perfection of skills/techniques of thesport.
- Tactical Aspect ofsports.

Practical – 30 hours

1. Officiating amatch/event/competition.

- 2. Learning and perfecting drills for variousskill/tech.
- 3. Learning and demonstrating the rehabilitation process of injuredplayer.
- 4. Learning and demonstrating the process of scoring and recording competitionresult.
- 5. Demonstration and practice of TacticalPattern.

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- > Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notesquestions.

SUGGESTED READINGS

(xv) ForAquatics

- a. Jain, R., Play and Learn Swimming, New Delhi, Khel Sahitya Kendra, 2003.
- b. Kumar, Naveen., Coaching Successfully, Sports Publication, Delhi2002.
- c. Nelson, R., Macnee, M.J.Ed., Olympic Fact book: A Spectator's Guide to the Summer games, New York Visible,1996.

- d. Thani, Lokesh., Skill & Tactics Swimming" Delhi, Sports Publication, 1995.
- e. Thani, Lokesh., Swimming, Delhi, Sports Publisher, 2000.

(xvi) ForBadminton

- a. Ashok Kumar, Badminton, New Delhi Discovery, 2003..
- b. Narang, P., Play and Learn Badminton, Khel Sahitaya Kendra, 2005.
- c. Singh, M.K., A to Z Badminton, New Delhi, Friends Pub., 2006.
- d. Singh, M.K., Comprehensive Badminton, N.D. Friends Pub., 2007.
- e. Talbot, Derlk, Top Coach Badminton, Britain: Q.A. Press, 1989.

(xvii) Basketball

- a. Jain, Naveen Play and Learn Basket Ball, Khel Sahitya Kendra, NewDelhi-2003
- b. Sharma O.P. Basket Ball Skills and Rules, Khel Sahitya KendraDelhi-2003
- c. Thani, Lokesh, Skills & Tactics of Basket Ball, ND: SportsPub., 1995.
- d. Thani, Yograj, Coaching Successfully Basket Ball, Sports Publisher, Delhi-2002

(xviii) Cricket

- a. Jain, R., Play and Learn Cricket, New Delhi: K.S.K,2003.
- b. Kutty, S. K., Fielding Drills in Cricket, New Delhi: K.S.K,2003.
- c. Rachna, Coaching Successfully: Cricket, Delhi: Sports, 2002.
- d. Rachna, Jain, Play & Learn Cricket, Khel Sahitaya Kendra, 2005.

(xix) Football

- e. N. Kumar, Play and Learn Football, New Delhi : K.S.K,2003.
- f. Reilly, T., Science and Football, London: E.N. SportsLtd., 1988.
- g. Sharma, O.P., Teaching and Coaching -Football, Delhi : Khel S.K., 2001.
- h. Thani,Yograj,CoachingSuccessfullyFootball,NewDelhi:K.S.K,2002.

(xx) Gymnastics

- a. Code of Points Trampoline Gymnastics, Federation Int. De Gymnasics, 2005.
- b. Federation Internationale Gymnastics, Federation Int. De Gymnasics, 2006.
 - c. Jain, R., Play and Learn Gymnastics, Khel Sahitaya Kendra, 2005.
 - d. Jain, R., Play and Learn Gymnastics, New Delhi: Khel Sahitaya Kendra, 2003.

(xxi) Handball

- a. Jain, D., Play & Learn Handball, New Delhi, Khel Sahitya Kendra, 2003.
- b. KumarAshok, Handball, NewDelhi, DiscoveryPublishingHouse, 1999.
- c. Lohar, A.R., Handball Basic Technology Bombay, The Marine Sports Publishing Division, 1998.
- d. Schmottlach, N., Mcmanama, J., Physical Education Handbook. 9th Edition, London, Allyn & Bacon, 1997.

(xxii) Hockey

- a. International Hockey Federation, Rules of the Game of Hockey with Guidance for Players and Umpires. India, International Hockey Federation, 2003.
- b. Jain, D., Hockey Skills & Rules New Delhi, khel Sahitya Kendra, 2003.
- c. Narang, P., Play & Learn Hockey, Khel Sahitya Kendra, New Delhi, 2003
- d. Thani Yograj., Coaching Successfully Hockey, Delhi, Sports Publication, 2002.

(xxiii) Judo

- a. Harrison, E.J., Coaching Successfully Judo, Delhi: Sports, 2002.
- b. Jain, D., Play and Learn Judo, New Delhi: Khel Sahitaya Kendra, 2003.

(xxiv) Kabaddi

- a. Rao, C. V., Kabaddi, New Delhi: Oxford Press, 1982.
- b. Rao, E.P., Modern Coaching in Kabaddi, D.V.S.Pub, 1994.
- c. Rao, C.V., Kabaddi; Native Indian Sports, Patiala Nis Publisher, 1983.

(xxv) Kho-Kho

- a. Chakrabarty, G., Kho Kho Aveloken, Delhi, Khel Sahitya Kendra, 2002.
- b. Panday, L., Kho Kho Sarvaswa, New Delhi Metropolitan, 1982.

(xxvi) Table Tennis

- a. Jain, Deepak, Teaching and Coaching -Table Tennis, Delhi : Khel Sahitaya Kendra, 2001.
- b. Narang, P., Play & Learn Table Tennis, Khel Sahitaya Kendra, 2005.

(xxvii) Volleyball

- a. American.... Program, Coaching Youth Volley Ball, Campaigon, H.K., 1996.
- b. FIVB, Backcourt Spiking in Modern Volley Ball, Chennai : FIVB, 1996.
- c. Saggar, S.K., Cosco Skills Stactics Volley Ball, Delhi : SportsPublication, 1994.

(xxviii) Yoga

- a. Anand, Omprarkash. Yog Dawra Kaya Kalp, Kanpur, Sewasth Sahitya Perkashan, 2001.
- b. Sarin, N., Yoga Dawara Ragoon Ka Upchhar, Khel Sahitya Kendra, 2003.
- c. Sri, Swami Rama, Breathing, Rishikesh, Sadhana Mandir Trust, 2001.

SEMESTER - II

COURSE CODE – MPEEC 524

COURSE NAME – SPORTS SPECIALISATION (GYMNASTICS)

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective:- The Students will acquire knowledge and understanding of a specific sportsin which an individual wishes to excel.

Learning Outcome:-The student attains knowledge, understanding, interpreting and analysing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

After the Completion of First Month:

A student will be able to gain knowledge with respect to Common injuries related to sports and Rehabilition of injured player/athletes.

After the Completion of Second Month:

A student will be able to understand and gain knowledge about various Training Means and Methods for development of motor components, identifying and development of talent in sports

After the Completion of Third Month:

A student will be able to understand and gain knowledge about Anatomical, Physiological, Biomechanical and Psychological basis to performance.

After the Completion of Fourth Month:

A student will be learn and gain proficiency in officiating, organizing, planning and conducting of sportscompetitons.

THEORY SYLLABUS

Unit-I

- Common injuries related tosports.
 Sprain, Strain, Contusion, Abrasion and Dislocation
- > Rehabilition of injured player/athletes.

Unit-II

- > Training Means and Methods for development of motorcomponents.
- Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hilltraining.
- > Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and SaunaBath.
- > Talent Identification and Development insports.

Unit-III

- > Anatomical Consideration in aSport.
- > Physiological basis to performance in aSport.
- Biomechanical analysis ofskills/techniques.
- > Psychological basis toperformance.

Unit-IV

> Duties and responsibilities of Technical Officials in theSports.

15hrs

15hrs

15hrs

- > Qualification of Officials, Scoresheet and RecordKeeping.
- > Organisational aspects insport:
 - i. Selection of Team
 - ii. Conduct of CoachingCamps
 - iii. Planning and Organisation forCompetitions
 - iv. Report Writing of aCompetition/Tournament.
- > Development drills/supplementaryexercises.
- > Drills for perfection of skills/techniques of thesport.
- Tactical Aspect ofsports.

Practical-

- 1. Officating amatch/event/competition.
- 2. Learning and perfecting drills for variousskill/tech.
- 3. Learning and demonstrating the rehabilition process of injured player.
- 4. Learning and demonstrating the process of scoring and recording competitionresult.
- 5. Demonstration and practice of TacticalPattern.

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 50)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions

Month wise	Course Learning Outcomes	Teaching and learning Assessment Tasks
Progression		Activity
First Month Second Month	A student will be able to gain knowledge with respect to Common injuries related to sports and Rehabilitation of injured player/athletes. A student will be able to understand and gain knowledge about various Training Means and Methods for development of motor components, identifying and development of talent insports.	Image: Demonstration Presentation Image: Demonstration Presentation Image: Demonstration Image: Demonstration Image: Demonstration
Third Month	A student will be able to understand and gain knowledge about Anatomical, Physiological, Biomechanical and Psychological basis toperformance.	IDemonstrationPresentationMethodsIEvaluation of
Fourth Month	A student will be learn and gain proficiency in officiating, organizing, planning and conducting of sportscompetitions.	IDemonstrationPresentation

SEMESTER - II

COURSE CODE – MPEEC 524

COURSE NAME – SPORTS SPECIALISATION (YOGA)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective:- The Students will acquire knowledge and understanding of a specific sportsin which an individual wishes to excel.

Learning outcome:-Students become proficient in the knowledge, skill and practical of Games/Sports of his choice in terms of technical and tactical efficiency, rules of the game and training related to their games, officiating and coaching

After the Completion of First Month:

The Students will understand the Types of Yoga:- Hatha yaga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, raj yoga, Patanjali yoga sutras- yama, niyama, asana, pranayama, Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharna, dhyan, Samadhi & their psychologicalimpact.

The Student will learn to Repetition of syllabus of Semester-I, Tests of flexibility, concentration, VO_2 max., balance.

After the Completion of Second Month:

The Students will develop the According to yoga concept of normality, according to modern psychology, concept of personality & its development, yogic management of psycho-somatic ailments: frustration, anxiety, depression, Structure and organisation of yoga competition, Preparation, execution and closing of the competition, Protocols and ceremonies

The Student will able to learn the Observing and assessing the video/tournament recording/movie and preparing a report, teaching lessons.

After the Completion of Third Month:

The Students will gain knowledge of Corporate yoga, Yoga for healthy lifestyle, yoga & sports, education value of yoga, relevance of yoga in 21st century, Different techniques of meditation and their practice prekha, vipashyana and different chakras

The Student will able to learn the Planning for a Yoga competition, Organisation of a Yoga competition.

After the Completion of Fourth Month:

The Students will gain knowledge of Yoga – teaching methodology, Teaching practice, techniques and modules, Preparing teaching lessons in yoga, Guidelines for preparing coaching lessons in Yoga, Preparation of coaching lesson-plans, Use of teaching aids.

The Student will able to learn the Project on researches in Yoga, Officiating in Yoga competitions, Coaching lessons.

THEORY SYLLABUS:

UNIT-I

Types of Yoga:- Hatha yoga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, raj yoga

UNIT-II

Patanjali yoga sutras- yama, niyama, asana, pranayama

Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharna, dhyan, Samadhi & their psychological impact.

UNIT-III

According to yoga concept of normality, according to modern psychology, concept of personality & its development, yogic management of psycho-somatic ailments: frustration, anxiety, depression Structure and organisation of yoga competition, Preparation, execution and closing of the competition, Protocols and ceremonies

UNIT-IV

Corporate yoga, Yoga for healthy lifestyle, yoga & sports, education value of yoga, relevance of yoga in 21st centuryDifferent techniques of meditation and their practice prekha, vipashyana and different chakras

Yoga – teaching methodology, Teaching practice, techniques and modules, preparing teaching lessons in yoga, Guidelines for preparing coaching lessons in Yoga, Preparation of coaching lesson-plans, Use of teaching aids.

PRACTICALS

- 1. Tests of flexibility, concentration, VO₂ max., balance
- 2. Observing and assessing the video/tournament recording/movie and preparing areport
- 3. Planning for a Yogacompetition
- 4. Organisation of a Yogacompetition
- 5. Project in Yoga
- 6. Officiating in Yogacompetitions

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

> The examiners are required to set eight questions taking at least two questions from eachunit.

- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- > Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions

Facilitation the Achievement of Course Learning Outcomes

Month Wise and Unit wise Progressi on	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will understand the Types of Yoga:- Hatha yaga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, raj yoga, Patanjali yoga sutras- yama, niyama, asana, pranayama, Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharna, dhyan, Samadhi & their psychological impact. The Student will learn to Repetition of syllabus of Semester-I, Tests of flexibility, concentration, VO_2 max., balance. The Student will able to learn the Project on researches in Yoga, Officiating in Yoga competitions.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The Students will develop the According to yoga concept of normality, according to modern psychology, concept of personality & its development, yogic management of psycho-somatic ailments: frustration, anxiety, depression, Structure and organisation of yoga competition, Preparation, execution and closing of the competition, Protocols and ceremonies The Student will able to learn the Observing and assessing the video/tournament recording/movie and preparing a report.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Unit-III	The Students will gain knowledge of Corporate yoga, Yoga for healthy lifestyle, yoga & sports, education value of yoga, relevance of yoga in 21 st century, Different techniques of meditation and their practice prekha, vipashyana and different chakras Student will able to learn the Planning for a Yoga competition, Organisation of a Yoga competition.	Lecture Methods Demonstration Methods Assessment Methods Presentation	0	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/seminar
Unit-IV	The Students will gain knowledge of Yoga – teaching methodology, Teaching practice, techniques and modules, Preparing teaching lessons in yoga, Guidelines for preparing coaching lessons in Yoga and Use of teachingaids	Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/seminar

SEMESTER - II

COURSE CODE – MPEEC 524

COURSE NAME – SPORTS SPECIALISATION (TRACK AND FIELD)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective:- To provide knowledge and skill of various Track & Field events in Athletics. They will also be equipped with technical and tactical knowledge of all Athletics events.

Learning Outcome:- The Students will be able to learn and perform all Athletics events.

After the Completion of First Month:

The Students will develop the knowledge of Introduction of track & field and historical review with special reference to India, Training Methods- Weight Training, Circuit Training, Cross-Country, Sand Running., Calculations of staggers, straight and radius of standard athletics tracks of 200m and 400m distance.

The student will learn various types of Crouch Start

After the Completion of Second Month:

The Students will gain knowledge of Broad Jump- Measuring of run way and fixing of check marks, various techniques used in broad jump and Sprinting- fixing of the starting blocks, various finishing techniques used in sprints.

The student will learn Finishing Techniques in Track Event

After the Completion of Third Month:

The Students will gain knowledge of Relays- hold of the baton, various types of baton exchange (visual and non-visual), Fixing Up runners for different relay races and Broad Jump-Measuring of run way and fixing of check marks, various techniques used in broad jump

The student will learn Baton Exchange in Relay Event.

After the Completion of Fourth Month:

The Students will gain knowledge of Triple Jump: Approach run, take off and landing for hop, step and jump, flying phase, landing and follow up action, Discus throw: Hand hold, initial stance, preliminary swings, turn, delivery stance, delivery action, reverse action. Long distance running: Correct running style emphasizing on proper body position and foot placement, proper arm and leg action, running tacticsetc.

The student will learn Long Jump Technique.

THEORY SYLLABUS

Unit-I

- > Introduction of track & field and historical review with special reference toIndia.
- > Training Methods- Weight Training, Circuit Training, Cross-Country, SandRunning.
- Calculations of staggers, straight and radius of standard athletics tracks of 200m and 400m distance.

Unit-II

- Long Jump- Measuring of run way and fixing of check marks, various techniques used in broad jump
- > Sprinting- fixing of the starting blocks, various finishing techniques used insprints

Unit-III

Relays- hold of the baton, various types of baton exchange (visual and non-visual), and Fixing Up runners for different relayraces.

Unit-IV

Triple Jump:

Approach run, take off and landing for hop, step and jump, flying phase, landing and follow up action.

Discus throw: Hand hold, initial stance, preliminary swings, turn, delivery stance, delivery action, reverse action

Long distance running: Correct running style emphasizing on proper body position and foot placement, proper arm and leg action, running tacticsetc.

Practical

- 1. Various types of CrouchStart
- 2. Finishing Techniques in TrackEvent
- 3. Baton Exchange in Relayevent
- 4. Long Jump, Triple Jump, Discus Throw, Technique

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2 hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	- 10Marks
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions

30hrs

15hrs

15hrs

Facilitation the achievement of Course Learning Outcomes

Month Wise and Unit wise Progressi on	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge of Introduction of track & field and historical review with special reference to India, Training Methods- Weight Training, Circuit Training, Cross- Country, Sand Running., Calculations of staggers, straight and radius of standard athletics tracks of 200m and 400m distance. The student will learn various types of Crouch Start	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The Students will gain knowledge of Broad Jump- Measuring of run way and fixing of check marks, various techniques used in broad jump and Sprinting- fixing of the starting blocks, various finishing techniquesused in sprints. The student will learn Finishing Techniques in Track Event	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will gain knowledge of Relays- hold of the baton, various types of baton exchange (visual and non-visual), Fixing Up runners for different relay races and Broad Jump- Measuring of run way and fixing of check marks, various techniques used in broad jump The student will learn Baton Exchange in Relay Event.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will gain knowledge of Triple Jump: Approach run, take off and landing for hop, step and jump, flying phase, landing and follow up action, Discus throw: Hand hold, initial stance, preliminary swings, turn, delivery stance, delivery action, reverse action. Long distance running: Correct running style emphasizing on proper body position and foot placement, proper arm and leg action, running tacticsetc. The student will learn Long Jump Technique.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Semester-III

			Credit
S.No. Paper No.		Title	Theory/
			Practical/Tutorial
1	MPECC-531	Research Processes	4
2	MPECC-532	Applied Statistics	5 (4 Th + 1 P)
3	MPEEC-533	Subject Specialisation	5 (4 Th + 1 P)
4	MPEEC-534	Elective Optional Group-I	8 (4+4)
		Total Credits	22

Note:

Th	=	Theory
Р	=	Practical

MASTER OF PHYSICAL EDUCATION SEMESTER – III

COURSE CODE – MPECC 531 COURSE NAME – RESEARCH PROCESSES

Max.Marks-100

Time: 3Hrs.

(Theory=75 Marks, Internal Assessment=25 Marks)

Objective: -To provide the knowledge of various research methods to be implemented in conducting quality and meaningful research in the field of Physical education and sportssciences.

Learning Outcome:

- **I** To familiarize students with basic of research and the researchprocess.
- ^I To enable the students in conducting research work and formulatingproblem.
- ^I To familiarize participants with Statistical packages such asSPSS/EXCEL.
- ^I To impart knowledge for enabling students to develop data analytics skills and meaningful interpretation to the data sets so as to solve the Researchproblem.
- ^I To make students aware about various ethical Issues in the area of research in physical education and sports

Unit-I Learning Outcome

The students will develop a general idea about Research in Physical Education and Sports along with its definition and explanation. In addition, Unscientific and Scientific methods of problem solving would be made clear to the students. The students would also explore the need of research in Physical Education and sports

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of developing a research problem and the use of literature and Criteria for selection of a research problem. Types of Hypotheses would also be discussed. Basic literature search strategies and the steps in literature search would be informed and taught to thestudents.

Unit-III Learning Outcome:

Students would be taught about different research designs.

Unit-IV Learning Outcome:

The Students will gain knowledge of Ethical Issues in Research. Various areas of scientific dishonesty would be discussed. Copyright related ethical issues would be made clear tothem

THEORY SYLLABUS:

UNIT-I

Introduction to Research in Physical Education and Sports

- > Definition and Explanation of Research
- > Nature and Scope of research in PhysicalEducation
- Types of research
- Unscientific Vs Scientific methods of problemsolving
- > Need of research in Physical Education and sports

UNIT-II

Development of a research problem and the use of literature

- Research problem, Criteria for selection of a researchproblem
- > Types of Hypotheses (Research and NullHypothesis)
- Basic literature searchstrategies
- > Purpose of the literature review and the steps in literaturesearch
- Guidelines for writing a Research proposal (For Thesis, for research grant, for PhD research degree)

UNIT-III

20hrs

Descriptive research Methods

- Survey Nature, Importance and various types of survey, casestudy
- Tools and techniques of obtaining research Data (Interview, Questionnaire, Opinionnaire, Attitude scale and other sociometrytechniques)

Experimental research Methods

- > Threats to internal and external validity and how to controlthem
- > Pre, True and Quasi Experimental ResearchDesigns

Historical Research

- Definitions of Historical Research
- Sources of Historical research (Primary and Secondary)
- I Internal Criticism and External Criticism of Sources of historical research

UNIT-IV 20 hrs

Completing the research Process and Reporting

- Basic WritingGuidelines
- > Thesis and dissertation format according to APA.
- > Referencing format, Format for writing Bibliography and footnotes.
- Writing Abstracts and full paper for publication inJournal
- Guidelines for making Oral and PosterPresentation
- Ethical Issues inResearch
- Various areas of scientificdishonesty
- Protecting humansubjects
- Protecting AnimalSubjects

Note:

(a) One Theory period is equal to 1 credit of 1-hourduration.

Marking Scheme:

MaximumMarks - 100 marks Theory Examination	on - 75 Marks InternalAssessment - 25 Marks
---	---

Internal	A	Asse	essn	nent
(Maximum	Mark	S	_	25)
Presentation/	Class 7	Test	/Vi	va -
10			Μ	larks
Project/Assignment	nment/S	Sem	inaı	
10 Marks Atte	endance	e - 5	Ma	ırks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- > Outofeightquestionsonequestionshouldbeofshortnoteswhereastudenthastoattemptany three

questions out of total of a five short notes questions.

SUGGESTED READINGS

- 1. Thomas, Jerry R, Nelson Jack K & Silverman Stephen J (2011). *Research Methods in Physical Activity* (6th Ed) United Kingdom: HumanKinetics.
- 2. Verma, J. P., &Ghufran, M. (2014). *Research Methods and Statistics in Psychology* (6thEd). London: PsychologyPress.

REFERENCES

- 1. Best & Kahn (2003) Research in Education, 10th Ed. New Jersey; Prentice Hall,Inc.
- 2. Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice HallInc.
- 3. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sportsand Exercise Science, London: RoutledgePress
- 4. Cresswell, John W. (2016) *Research Design* (5th Ed), New York: SagePublications.
- 5. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human Kinetics
- 6. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, NewDelhi
- 7. Oliver, Paul. (2008) Writing your thesis, New Delhi: SagePublications.
- 8. Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall,Inc.

Facilitation to the Achievement of Course Learning Outcomes

Month wise and Unit wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	After the Completion of First Month: The Students will develop a general idea about Research in Physical Education and Sports along with its definition and explanation. In addition, Unscientific and Scientific methods of problem solving wouldbe made clear to the students. The students would also explore the need of research in Physical Education and sports	Demonstration Methods	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
UNIT-II	After the Completion of Second Month: The Students will develop the understanding and knowledge of developing a research problem and the	Demonstration Methods	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

	use of literature and Criteria for selection of a research problem. Types of Hypotheses would also be discussed. Basic literature search strategies and the steps in literature search would be informed and taught to the students.			
Unit-III	After the Completion of ThirdMonth:Students would be taught aboutdifferent researchdesigns.	Lecture Methods Demonstration Methods Assessment Methods Presentation	0 0 0	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-IV	After the Completion of Fourth Month: Important terms in Sampling (Population, Sample, Parameter, Statistic, Sampling and Sampling error) would be taught to the students in order to enable them to understand sampling techniques better. Students will have an ability to understand different types of sampling. Characteristics of a good sample and criteria in selecting the size of the sample would be taught.	Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION SEMESTER – III

COURSE CODE – MPECC 532 COURSE NAME – APPLIED STATISTICS

Max.Marks-100

Time: 3Hrs.

(Theory=50 Marks + Practicals=25+ Internal Assessment=25 Marks)

Objective: -To provide the knowledge of various methods of statistics, which will help the students to collect analysis and meaningful interpretation of data in research in the field of Physical education and sportsciences.

Learning Outcome:

- > To completely describe a data set, using appropriate descriptive statistics.
- > To interpret a set of descriptive statistics and understand the limitations of eachmeasure.
- Students shall be able to use and apply a wide variety of specific statistical methods.
- Students shall know how to organize, manage, and presentdata.
- > Show ability to explore and organize data foranalysis.
- > Students shall be able to use and apply a wide variety of specific statisticalmethods.
- > Demonstrate understanding of the properties of probability and probability distributions.
- > Demonstrate understanding of the probabilistic foundations of inference.
- > Apply inferential methods relating to the means of Normaldistributions.

After the Completion of First Month:

In the first month the Students will be introduced to basics of statistics. Various types of data will be explained to the students with appropriate examples. The students will understand the important role the statistics plays in research in physical education and sports. In addition, validity, reliability and objectivity would be made clear to the students during this month.

After the Completion of Second Month:

The Students will develop the understanding and knowledge of various measures of central tendency. The fundamentals of mean, median and mode would be taught to them. The students would be made to learn calculation of various measures of central tendency for grouped and ungrouped data. During this month students also would learn various types of graphical representation of data.

After the Completion of Third Month:

The Students will gain knowledge of probability and normal distribution. By learning this unit students would be able to find out the normality of a data set. In case of a deviation from normality, they would be able to describe the deviation of the data fromnormality.

After the Completion of Fourth Month:

At last the students would be taught the scatter gram. The basics of correlation would be taught to them. Various methods of finding out the correlation coefficient would also be taught to the students. The students will be provided with ample opportunity to practice techniques for determining correlation.

THEORY SYLLABUS:

UNIT-I

Introduction to Statistics in Physical Education and Sports

- IDefinition and Explanation of Statistics
- I Need and Importance of statistics in PhysicalEducation
- ITypes of Data and Variable

I Validity, Reliability and Objectivity (Methods to establish validity and reliability)

UNIT-II 15 hrs

Descriptive analysis of Data

- Measures of central tendency (Mean, Median, Mode and when to usethem)
- Measures of Variability (The Range, Quartile Deviation, Mean Deviation, Standard Deviation and Variance)
- > Frequency Distribution (Grouped and Un Grouped) and construction of frequencytable
- Percentiles and percentilerank
- Graphical Presentation of Data (Basics of Graph like Bar diagram, Histogram, Frequency Polygon, Frequency Curve, Ogive and Piediagram)

UNIT-III

15 hrs

15hrs

30 hrs

Probability and Normal Distribution

- > Definition and explanation of probability
- Normal Distribution, Properties of normal distribution
- Standard (z) Score and itsapplication
- Application of Normal Distribution
- > Deviation from Normality (Skewness,Kurtosis)

UNIT-IV

Correlation

- Introduction to Correlation and Scattergram
- Correlation Coefficient and correlationMatrix
- Multiple correlation Analysis (Rank order Correlation and Product momentCorrelation)
- > Coefficient of Determination and testing the significance
- > Properties and limitations of multiplecorrelation.

PRACTICAL

- Calculation of Mean, Median, Mode, Percentiles, Quartiles, Standard deviation, range, Skewness, Kurtosis, Normality of data (Sapirowilks' Test) and correlation Coefficient by Using computerised software like SPSS or MSExcel.
- > Construction of Graphs and Tables usingComputer.
- > Meaningful Description and interpretation of the computerisedoutcomes

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks – 25) Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Verma, J. P., &Ghufran, M. (2014). *Research Methods and Statistics in Psychology* (6thEd). London: PsychologyPress.
- 2. Thomas, Jerry R, Nelson Jack K & Silverman Stephen J (2011). *Research Methods in Physical Activity* (6th Ed) United Kingdom: HumanKinetics.

REFERENCES

- 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.
- 3. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi
- 4. Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs:Prentice Hall,Inc.
- 5. Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice HallInc.
- 6. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sportsand Exercise Science, London: RoutledgePress
- 7. Cresswell, John W. (2016) Research Design (5th Ed), New York: SagePublications.
- 8. Verma, J.P. (2016) Sports Research with Analytical Solution using SPSS (1st Ed), United Kingdom: WileyPublishers.

Facilitation to the Achievement of Course Learning Outcomes

Month wise and Unit wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	In the first month the Students will be introduced to basics of statistics. Various types of data will be explained to the students with appropriate examples. The students will understand the important role the statistics plays in research in physical		 Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/seminar

UNIT-II	education and sports. In addition, validity, reliability and objectivity would be made clear to the students during this month. The Students will develop the understanding and knowledge of various measures of central tendency. The fundamentals of mean, median and mode would be taught tothem. The students would be made to learn calculation of various measures of central tendency for grouped and ungrouped data. During this month students also would learn various types of graphical representation of data.	Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar
Unit-III	The Students will gain knowledge of probability and normal distribution. By learning this unit studentswould beabletofindoutthenormalityofa dataset.Incaseofadeviationfrom normality, they would be able to describe the deviation of the data from normality.	Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar
Unit-IV	At last the students would be taught the scatter gram. The basics of correlation would be taught to them. Various methods of finding out the correlation coefficient would alsobe taught to the students. The students will be provided with ample opportunity to practice techniques for determining correlation.	Lecture Methods Demonstration Methods Assessment Methods Presentation	0	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar

SEMESTER - III

COURSE CODE – MPEEC 533 (i) COURSE NAME – Subject Specialization (EXERCISE PHYSIOLOGY) MODULE- III (PHYSIOLOGICAL BASIS OF TRAINING)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: - To provide an understanding about the human physiology and how sports and exercise affect the human bodily functions.

Learning Outcome:

- > To understand the physiological basis of trainingprinciples.
- > To enable the students to understand how diet and training affects bodycomposition.
- > To give an insight of the basics of ergogenic aids anddoping.
- > To enlighten on the influence of ageing and gender onperformance.

After the Completion of First Month:

In the first month the students will be introduced to the physiology of training, will be introduced to general training principles, the physiology behind fatigue, adaptation process and hormonal changes that takes place while doing exercise.

After the Completion of Second Month:

The students will develop the understanding and knowledge of various methods to assess body composition, physiological effect of diet and exercise on body composition, and how diet and exercise will effect body composition.

After the Completion of Third Month:

The students will gain knowledge about ergogenic aids and basic knowledge about doping, further they will be taught about vitamins, minerals, proteins and amino acids, how they work and aid in performance.

After the Completion of Fourth Month:

At last the students would be taught about the effect of gender and ageing on performance, gender difference in body size and composition, the effects of ageing on: neuromuscular system, skeletal system, cardio metabolic system, cognition, psychological well-being and special issues related to female athletes.

THEORY SYLLABUS:

UNIT-I

Physiology of Training

- General Training Principles (Principles of overload, specificity, progression, diminishing returns, reversibility)
- Physiological basis of fatigue (Depletion of Energy Systems, Metabolic By-products, Neural Fatigue, Thermoregulatory stress, cardiopulmonary fatigue, tolerance for discomfort and mental toughness)
- Cardiovascular and neuromuscular adaptations to Aerobic Endurance training and Dynamic ResistanceTraining.
- > Hormonal responses and adaptation to exercise and training.

UNIT-II

Body Composition and Weight Control

- > Meaning of body composition and methods to assess bodycomposition
- > Effect of exercise on body composition andweight
- > Effect of diet on body composition andweight
- > Effect of diet plus exercise on body composition andweight

UNIT-III

Ergogenic Aids and Doping in Sports

- Vitamin and Mineral Supplements forhealth
- Macronutrient supplements for health (protein and essential fattyacids)
- Banned substances and doping: (Steroids, Hormones, Diuretics, Stimulants)
- Proteins and aminoacids

UNIT-IV

Gender and Ageing on Performance

- > Gender difference in body size and composition
- > Gender difference on physiological response to acute exercise andtraining
- Effects of ageing on: Neuromuscular system, Skeletal system, Cardiometabolic system, Cognition and PsychologicalWell-being
- Special issues of female athlete: (menstruation and menstrual dysfunction, pregnancy and osteoporosis)

PRACTICAL

- 1. Measuring Body MassIndex
- 2. Assessment of body composition using skin foldmeasurement
- 3. Assessment of Anthropometric measurements(skin fold, girth, widthetc)
- 4. Assessment of adult fitness test (Harvard step test, Cooper's 12 minutes run/ walktest)

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Record file	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- \blacktriangleright The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.

30 hrs

15 hrs

15hrs

Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions. (each carrying 5marks)

SUGGESTED READINGS

- 1. Kenney, W. L., Wilmore, J. H., &Costill, D. L. (2012). *Physiology of sportsand exercise* (5thed.). USA: HumanKinetics.
- 2. Plowman, S. A., & Smith, D. L. (2017). *Exercise physiology for health, fitness and performance (5thedn)*. Philadelphia: WoltersKluwer.
- 3. Porcari, J., Bryant, C., & Comana, F. (2015). *Exercise physiology*. USA: F ADavis.

REFERENCES

- 1. Dey, S. K. (2012). A text book of sports and exercise physiology. New Delhi: Jaypee Brothers MedicalPublishers.
- 2. Haff, G.G., &Dumke, C. (2012). *Laboratory manual for exercise physiology*. USA: Human Kinetics.
- 3. Maud, P.J., & Foster, C. (eds.) (2006). *Physiological assessment of human fitnessm*(2nded.). USA: HumanKinetics.
- 4. Silverthorn, D. U. (2009). *Human Physiology: An integrated approach (4thed.)* Pearson education, USA.
- 5. Tanner, R.K., & Gore, C.J. (eds.) (2013). *Physiological tests for elite athletes (2nded.)*. USA: HumanKinetics.
- 6. Wingerd, B. (2014). *The human body: Concepts of anatomy and physiology (3rded.)*. Lippincott Williams &Wilkins.

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progression	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
First Month- UNIT-I	In the first month the students will be introduced to the physiology of training, will be introduced togeneral training principles, the physiology behind fatigue, adaptation process and hormonal changes that takes place while doing exercise.	Methods Demonstration Methods	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/seminar
Second Month – UNIT-II	The students will develop the understanding and knowledge of various methods to assess body composition, physiological effect of diet and exercise on body composition, and how diet and exercise will effect body composition.	Methods Demonstration Methods	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Third	The students will gain knowledge	Electure	Evaluation ofPresentation

Month Unit-III	about ergogenic aids and basic knowledge about doping, further they will be taught about vitamins, minerals, proteins and amino acids, how they work and aid in performance.	0	Demonstration Methods Assessment Methods Presentation	0	Evaluation of Assignment MCQ/Class-test / viva/seminar
4 th Month Unit-IV	At last the students would be taught about the effect of gender and ageing on performance, gender difference in body size and composition, the effects of ageing on: neuromuscular system, skeletal system, cardio metabolic system, cognition, psychological well-being and special issues related to femaleathletes.		Lecture Methods Demonstration Methods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar

SEMESTER – III

COURSE CODE – MPEEC 533 (ii) COURSE NAME – Subject Specialization (SPORTS BIOMECHANICS) MODULE- III-(MECHANICAL ANALYSIS OF SPORTS TECHNIQUES)

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: -To provide understanding about mechanical principles underlying the sports performance and to analyses the fundamental techniques and techniques of sports in mechanical prospective.

Learning Outcome:

- To enable the students to learn the mechanical principles involved in performance of sports techniques.
- **I** To impart knowledge on mechanical features of fundamentaltechniques.
- **I** To learn about the mechanical analysis of track and fieldskills.
- **I** To enable the students to learn mechanical analysis of skills in gymnastics andhockey.

After the Completion of First Month:

In the first month the students will be introduced to the mechanical principle that is fundamental to performance of sports techniques. After attaining the knowledge about mechanical principles the students would be able to understand how these principles are applied in sports performance.

After the Completion of Second Month:

After completion of second month the students would learn to analyse the general techniques like pulling pushing, climbing and lifting. In addition they will be familiar with the mechanical principles involved in the performance of these techniques.

After the Completion of Third Month:

The students will be able to analyse the skills from track and field, namely Fosbury flop, long jump, shot put, and hurdling at the end of the third month. Students will further conversant with the mechanical principles involved in the performance of these techniques.

After the Completion of Fourth Month:

At last the students would be taught to mechanically analyse the skills of gymnastics and hockey, specifically front roll, cartwheel, hitting and dribbling. Supplementing, the students will become acquainted with the mechanical principles governing the performance of above mentionedskills.

THEORYSYLLABUS:

UNIT-I

Mechanical Principles

- IMechanical principles underlying sportstechniques
- I Application of mechanical principles in sportsperformance

Pulling Pushing Climbing Π Lifting **UNIT-III** Mechanical analysis of track andfield skills 15 hrs High jump (Fosburyflop), Long Jump(hitch-kick) 0 Shot put (DiscoPut) Hurdling **UNIT-IV** Mechanical analysis of gymnastics andhockey skills 15 hrs Frontroll Π Cartwheel Hitting Dribbling PRACTICAL 1. Identification and assessment of levers in sports skillmovements. 2. Mechanical analysis of fundamental movements and sportsskills.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(**b**) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

1. Robertson, D. G., Caldwell, G. E., Hamill, J., Kamen, G., & Whittlesey, S. N. (2004). *Reaserch methods in biomechanics*. USA: HumanKinetics.

REFERENCES

- 1. Chapman, A. E. (2008). *Biomechanical analysis of fundamental human movements* .USA: Human Kinetics
- 2. Broer, M, R., & Zemicke. (1979). *Efficiency of human movements*. Philadelphia: W.B. SaunderCo.
- 3. Hall, J. S. (1991). Basic biomechanics. USA: Mosby YearBook.
- 4. Hay, J. (1985). *The Biomechanics of sports technique,3rd Ed.* Englewood Cliffs;NJ: Prentice Hall:Inc.
- 5. John W., B. (1979). Priciples of coaching .Englewood Cliffs, N.J.: Prentice HallInc.

Facilitation to the Achievement of Course Learning Outcomes

Month wise Progressi on	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	The students will learn the important mechanical principles that rules the sports performance. They will be enlighten about the application aspects of these mechanical principles in sports performance.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
UNIT-II	The students would learn to analyse the general techniques like pulling, pushing, climbing and lifting. Furthermore they will also be understanding the mechanical principles involved in the performance of these techniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-III	The students would be taught the fine mechanical aspects of the techniques Fosbury flop, long jump, shot put, and hurdling. The students will further strengthen their knowledge by understanding skills in view of the mechanical principles involved in the performance thesetechniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-IV	The students will learn to analyses the mechanical aspect of the skills front roll, cartwheel, in gymnastics and hitting, dribbling in hockey. The mechanical principle already learnt will be used for in depth understanding of mechanical aspects of the techniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

SEMESTER - III

COURSE CODE – MPEEC 533 (iii) COURSE NAME – Subject Specialization (EXERCISE AND SPORTSPSYCHOLOGY)

MODULE- III (GROUP PROCESSESS)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objectives: - To provide the knowledge about Psychometrics, Arousal, Stress and Anxiety, Leadership and Communication.

Learning Outcome:-Students will acquire the in depth knowledge about Psychometrics, Arousal, Stress and Anxiety, Leadership and Communication.

After Completion of First Month: -

The Students will develop the knowledge about Psychometrics, how use & administer different Psychological tests.

After Completion of Second Month: -

The Students will get an insight into the meaning Arousal, Stress & Anxiety and how these affect the Performance and Characteristics of an Athlete.

After Completion of Third Month: -

The Students will gain an insight into Leadership, characteristics of a good leader, and different leadership strategies.

After Completion of Fourth Month: -

The Students will gain knowledge about the importance of Communication, types of Communication, the effect of effective communication in sports.

THEORY SYLLABUS

Psychometrics. Importance ofPsychometry, Uses ofpsychometry, Sports specific psychological tests and theirapplications.

UNIT-II

UNIT-I

- Arousal, stress, andanxiety.
- Define Arousal stress, andanxiety,
- Measuring arousal andanxiety,
- Trait and state anxiety,
- Stress and stressprocesses,
- Arousal, Anxiety Performancerelationship.

UNIT-III

- Leadership
- > Leaders in sports, Multidimensional model of sportleadership.

15hrs

15hrs

- Components of effective
- Leadership, leadershipstyles.

UNIT-IV

- Communication.
- > Purpose of communication,
- communication process,
- > Types of communication,
- > Improving Communication, confrontation, Effectivecommunication.

PRACTICALS

- Competitive state anxietyinventory.(CSAI-2).
- SportsCompetition Trait Anxiety(SCAT)

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5mark).

SUGGESTED READING:

- 1. Cox, Richard H. (1985) SportsPsychology Concepts and Application, Wm C Brown Publishers.
- Gill, Diane L, Willams Lavon (2008), Psychological Dynamics of Sportsand Exercise, 3rd Edition, Human Kinetics, USA.
- Weinberg Robert, Gould Daniel (2014), Foundation of Sports& Exercise Psychology, 6th Edition, Human Kinetics,USA

REFRENCE

1. Gill, Diane L. (1986), Psychological Dynamics of Sport. Human Kinetics Publishers, USA.

- 2. Kmalesh. M.L (2014) Psychology in Physical Education and Sport, Khel SahityaKhendra, NewDelhi.
- 3. Martens Raine (1987) Coaching Guide to SportsPsychology, Human Kinetics Publishers, USA.
- 4. Orlick Terry (1986) Psyching For SportsMental Training For Athletes, Leisure Presss, USA.
- 5. Shaw .D F, Corban R M (2005)Sportsand Exercise Psychology, IndiAN Edition, BIOS Scientific Publishers, USA.
- 6. Singer, Robert N (1975) Motor Learning and Human Performance, Macmillan Publishing co. NewYork.
- 7. Silva. M John, Weinberg .S Robert (1984), Psychological Foundation of Sport. Human Kinetics ,USA

Month	Course Learning Outcomes	Teaching and	Assessment Tasks
wise		learning Activity	
Progressi			
on			
First	The Students will develop the	Lecture Methods	Evaluationof
	knowledge about Psychometrics, how	Demonstration	Presentation
Month	use & administer different	Methods	Evaluation of
	Psychologicaltests.	Assessment Methods	Assignment
		Presentation	MCQ
			Class-test / viva/
			seminar
Second	The Students will get an insight into the	Lecture Methods	Evaluationof
	meaning Arousal, Stress & Anxiety and	Demonstration	Presentation
Month	how these affect the Performance and	Methods	Evaluation of
	Characteristics of an Athlete.	Assessment Methods	Assignment
		Presentation	MCQ
			Class-test / viva/
			seminar
Third	The Students will gain an insight into	Lecture Methods	Evaluationof
	Leadership, characteristics of a good	Demonstration	Presentation
Month	leader, and different leadership	Methods	Evaluation of
	strategies.	Assessment Methods	Assignment
		Presentation	Practical's
	•		Class-test / viva/
			seminar
Fourth	The Students will gain knowledge about	Lecture Methods	Evaluationof
M 4	the importance of Communication,	Demonstration	Presentation
Month	types of Communication, the effect of	Methods	Evaluation of
	effective communication insports.	Assessment Methods	Assignment
		Presentation	Practical's
			Class-test / viva/
			seminar

SEMESTER – III

COURSE CODE – MPEEC 533 (iv) COURSE NAME – Subject Specialization (SPORTS SOCIOLOGY) MODULE- III (SOCIAL PHENOMENON OF SPORTS) Duration:03hours

Marks:100

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: -To provide the knowledge and understanding of Sports Sociology.

Learning Outcome:

- > The Students will be able to know and develop a sociological perspective of sportsby learning basic sociological theories, concepts, and researchmethods.
- > The students will be equipped with the knowledge and importance of social development throughsports
- > To understand the Sports as a social phenomenon and Demonstrate how sports influences our values, attitudes, beliefs, perceptions, behavior, culture, and society.
- > To guide the development of cultural aspects through sports and apply the basic principles and theories of sociology to analyze the role of sports in our everyday sociallives.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Sociological Foundation: Sociology and Sociology of Sports, Physical education & sports as a need of the society. Sociological implications of Physical Education and Sports, Physical activities and Sports as a men's cultural heritage.

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of Sports as an Art, Sportsas a Science, Sports and educational opportunities, Sports and Violence –Is sports a cause or cure to violence, Sports, Gender and Race, Sports and Economy – Commercialization of sports, Sports and Social Mobility-Sports and general career Success, Sports in future-Changing society, Sports and integration

Unit-III Learning Outcome:

The Students will gain knowledge of the Duality of Sport, SportsUnites, SportsDivides, Names, Logos, Mascots and Flags: The Contradictory Uses of Sports Symbols, Sportsis Fair; Sportsis Foul, Sports as the Path to Success, Professional SportsFranchises, Globalization of Sport, The Challenge: Changing Sport, Sportsis Healthy; SportsisDestructive

Unit-IV Learning Outcome:

The Students will gain knowledge of Role of Teaching in Society - Professional ethics-ethics and values related to sports, sportsmanship, Role of teacher in changing society through physical education and sport, Culture- Definition, effect of culture on people's life style, Sociometery

THEORY SYLLABUS:

Unit-I

Sociological Foundation: Sociology and Sociology of Sports, Physical education & sports as a need of the society. Sociological implications of Physical Education and Sports, Physical activities and Sports as a men's culturalheritage.

Unit-II

Sports as an Art, Sportsas a Science, Sports and educational opportunities, Sports and Violence -Is sports a cause or cure to violence, Sports, Gender and Race, Sports and Economy -Commercialization of sports, Sports and Social Mobility-Sports and general career Success, Sports in future-Changing society, Sports and integration

Unit-III

The Duality of Sport, SportsUnites, SportsDivides, Names, Logos, Mascots and Flags: The Contradictory Uses of Sports Symbols, Sportsis Fair; Sportsis Foul, Sports as the Path to Success?, Professional SportsFranchises, Globalization of Sport, The Challenge: Changing Sport, Sportsis Healthy; Sportsis Destructive

Unit-IV

Role of Teaching in Society - Professional ethics-ethics and values related to sports, sportsmanship, Role of teacher in changing society through physical education and sport, Culture- Definition, effect of culture on people's life style, Sociometery

PRACTICALS AND ASSIGNMENTS

- Π Prepare a model on Social Mobility insports
- Sports as a need of the society for the socialization collect the views of 10 peoples nearby your area.

Note:

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- \geqslant The examiners are required to set eight questions taking at least two questions from eachunit.
- The students have to answer any five questions out of the total of eightquestions. ۶
- \triangleright Each question shall be of a maximum of 10marks.
- \triangleright Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

15hrs

15hrs

SUGGESTED READINGS

- 1. Maguire, J. and Young JAI, K., (2005). Theory, Sportsand Society, ElsevierLtd.
- 2. Jain, Rachna, (2005). Sports Sociology, New Delhi: Khel SahitayaKendra,
- 3. Singh, Bhupinder, (2004). Sports Sociology, New Delhi:Friends.
- 4. Hosue, J., Tomlinson, A., Whannel, G., (1999). Undertaking Sports– An Introduction to the Sociology and Cultural Analysis of Sport, Routbdge, NewYork.
- 5. Coaplay, Joy. J., (1997). SportsIn Society, Issues And Controversies, Mcgraw Hill International edition

Facilitation to the Achievement of Course Learning Outcomes

Month	Course Learning Outcomes	Teaching and	Assessment Task
wise and Unit wise Progressio n		Learning Activity	
UNIT-I	The Students will develop the understanding and knowledge regarding Sociological Foundation: Sociology and Sociology of Sports, Physical education & sports as a need of the society. Sociological implications of Physical Education and Sports, Physical activities and Sports as a men's cultural heritage.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/seminar
UNIT-II	The Students will develop the understanding and knowledge ofSports as an Art, Sportsas a Science, Sports and educational opportunities, Sports and Violence –Is sports a cause or cure to violence, Sports, Gender and Race, Sports and Economy – Commercialization of sports, Sports and Social Mobility- Sports and general career Success, Sports in future- Changing society, Sports and integration	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/seminar

UNIT-III	The Students will gain knowledge of the Duality of Sport, Sport Unites, Sport Divides, Names, Logos, Mascots and Flags: The Contradictory Uses of Sports Symbols, Sportsis Fair; Sportsis Foul, Sports as the Path to Success?, Professional SportsFranchises, Globalization of Sport, The Challenge: Changing Sport, Sportsis Healthy; Sportsis Destructive	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/seminar
UNIT-IV	The Students will gain knowledge of Role of Teaching in Society - Professional ethics- ethics and values related to sports, sportsmanship, Role of teacher in changing society through physical education and sport, Culture- Definition, effect of culture on people's life style, Sociometery	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/seminar

SEMESTER - III

COURSE CODE – MPEEC 533 (v) COURSE NAME – Subject Specialization (SPORTS MANAGEMENT) MODULE-1– (FINANCE AND MATERIAL MANAGEMENT)

Marks:100

Duration:03hours

(Theory=75 Marks + Internal Assessment=25 Marks)

Objective: - To provide basic knowledge of finance and material management

Learning Outcome:

- > The Students will be able to understand the fundamentals of financialmanagement.
- > The students will be able to get the information about basics marketing and production.
- > The students will get basic information about purchase and inventorymaterial.
- > The students will have brief awareness about facilitymanagement.

Unit-I Learning Outcome:

The Students will start developing knowledge about meaning, objectives and purposes of finance management. Students will gain knowledge regarding principles and scope of financial management. Students will start developing the information about planning and preparation of budget in finance management. Students will also get a basic awareness about mechanics of purchase and auditing.

Unit-II Learning Outcome:

The Students will start developing knowledge regarding marketing and production. The student will learn about concept, meaning, production and marketing in sports management, they will learn about different marketing surveys and analysis. They also start learning about appraisal and career advancement. They will also understand different registration procedure of firm/organization.

Unit-III Learning Outcome:

The Students will start developing knowledge about purchase and inventory materials. The students will start to improve their knowledge regarding Concept of modification, standardization, modernization of material. The students will get information regarding purchase procedure and different types. They also will learn about Principles, steps in procurement and Accounting procedure. Students will also get brief idea about Stockmaintenance.

Unit-IV Learning Outcome:

The students will start developing knowledge about Planning, procuring and maintenance of facilities. The students will start learning about planning Indoor & Outdoor facilities. They will also initiate to know about planning and management of Sports infrastructure. They will get key valid information about Management of Records

THEORY SYLLABUS:

UNIT-I:

FinancialManagement

- > Meaning, objectives, purposes of financemanagement
- Principles and scope of financialmanagement
- Planning and preparation ofbudget
- Mechanics of purchase and auditing

 $20 \ hrs$

UNIT-	П	
	tingandProduction	20 hrs
\triangleright	Meaning, concept of Marketing and Production	
\triangleright	Concept of marketing in sportsindustries	
\triangleright	Marketing surveys and analysis	
\triangleright	Firm/organization registration procedure	
UNIT-	III:	
Purcha	ase andInventoryMaterials	20 hrs
\triangleright	Concept of modification, standardization and modernization ofmaterial	
\triangleleft	Types and Purchaseprocedure.	
\triangleright	Principles and steps inprocurement	
\triangleright	Stock maintenance and Accounting procedure	
UNIT-	IV:	
Facilit	yManagement 20 hrs	5
\triangleright	Planning, procuring and maintenance offacilities	
\triangleright	Planning Indoor & Outdoorfacilities	
\triangleright	Planning and management of Sportsinfrastructure	
\triangleright	Management of Records	

Note:

One Theory period is equal to 1 credit of 1-hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination	- 75Marks
InternalAssessment	- 25Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ClassTest/Viva	-	10	Marks
Project/Assignment/Seminar	-	10	Marks
Attendance	- 5	Marl	KS

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions

SUGGESTED READINGS

- 1. AlkaDhawan. Arya 2019. Case Studies Mentor in Business Studies. Publishing Company, IV Edition Printed at Prince Print Process, G.T. Karnal Road, Delhi. ISBN:978-81-8296-672-7
- 2. Bucher, C.H.1983. Administration of PhysicalEducationandAthleticProgrammes, The C.V. Mosby Company, London,
- Larry Horine, 2ND Edition, 1991. Administration of Physical Education and SportsPrograms Wim. C. BrownPublishers
- 4. Marcia L Walker & David K Stotlar (1997). SportsFacility Management. John and Bartlett Publisher Inc. LondonU.K
- 5. M.L. Kamlesh, II updated Edition 2016. Management Concepts in Physical Education and Sport. KhelSahitya Kendra, NewDelhi.
- 6. Voltmar, B.P. et. al. 1979. The Organization and Administration of Physical Education., Prentice Hall Inc., NewJersey,

7. Zeigler, E.M. and Dewie, G.W. 1983. Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia,

Month wise and Unit Wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop knowledge about meaning, objectives and purposes of finance management. Students will gain knowledge regarding principles and scope of financial management. Students will develop information about planning and preparation of budget in finance management. Students will also get a basic awareness about mechanics of purchase and auditing.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The Students will develop knowledge regarding marketing and production. The students will learn about concept, meaning, production and marketing in sports management, they will learn about different marketing surveys and analysis. They also learning about appraisal and career advancement. They will also understand different registration procedure of firm/organization.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop knowledge about purchase and inventory materials. The students will improve their knowledge regarding Concept of modification, standardization, modernization of material. The students will get information regarding purchase procedure and different types. They also will learn about Principles, steps in procurement and Accounting procedure. Students will also get brief idea aboutStock maintenance.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Unit-IV	The students will develop knowledge	Lecture Methods	Evaluationof
	about Planning, procuring and	Demonstration	Presentation
	maintenance of facilities. The	Methods	Evaluation of
	students will be learning about	Assessment Methods	Assignment
	planning Indoor & Outdoor facilities.	Presentation	MCQ
	They will also know about planning		Class-test / viva/
	and management of Sports		seminar
	infrastructure. They will get key valid		
	information about Management of		
	Records		

SEMESTER - III

SUBJECT CODE – MPEEC 533 (vi) SUBJECT NAME – Subject Specialization (KINANTHROPOMETRY IN SPORTS) MODULE- (BODY COMPOSITION AND POSTURE)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: -To provide the knowledge of body composition and physiological changes of aging.

Learning Outcome:

- > The Students will be able to understand the concept posture and postural deformities.
- > The students will be able to get the knowledge of posture and assessment of posture.
- > The students will be able to understand about the bodycomposition.
- Students can assess the body composition by variousmethods.

After the Completion of First Month:

The Students will develop the understanding and knowledge regarding Posture – Concept, Significance, and Benefits. Bad Posture (Sitting, Standing, Walking, Lying down); Effects of Bad Posture on Our Body. Postural Deformities – Types and Causes (Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, Flat Foot), Corrective Exercises. Postural training guidelines, Corrective Exercises.

After the Completion of Second Month:

The Students will develop the understanding the Defining and quantification of Posture, Assessment of Posture and body shape, other clinical method of posture assessment, measurement in a dynamic phase of posture assessment, deviation from normal posture and injury. Curvatures and movement of vertebral column

After the Completion of Third Month:

The Students will develop the understanding and knowledge regarding Definition of Body composition and role of body composition in sports, Determination of body composition: Muscles, Mass, Bone Mass and Fat Mass, Body mass index and its importance in sports, Body Fat percentage

After the Completion of Fourth Month:

The Students will develop the understanding and knowledge regarding Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition.

.THEORY SYLLABUS:

UNIT-I

- > Posture Concept, Significance, Benefits.
- Bad Posture (Sitting, Standing, Walking, Lyingdown);
- Effects of Bad Posture on OurBody.
- Postural Deformities Types and Causes (Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, FlatFoot),
- > Corrective Exercises. Postural training guidelines, CorrectiveExercises.

Unit-II

- > Defining and quantification of Posture,
- Assessment of Posture and body shape, other clinical method of postureassessment, \triangleright
- \triangleright Measurement in a dynamic phase of postureassessment,
- Deviation from normal posture and injury. \geqslant
- Curvatures and movement of vertebralcolumn. \triangleright

Unit-III

- \triangleright Definition of Body composition and role of body composition insports,
- \triangleright Body Composition: various Methods (direct and indirect technique) to estimate of Human BodyComposition,
- \geqslant Determination of body composition: Muscles, Mass, Bone Mass and FatMass,
- \triangleright Body mass index and its importance in sports, Body Fatpercentage

Unit-IV

- \triangleright Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition, Water displacement method, Under water weighing methods,
- Kin anthropometric determination of the body composition (skin foldthickness), \geqslant
- \geqslant Application of surface anthropometry (the bodyprofile),
- Bioelectrical impedance analysis, Ultrasound assessment of fat, Arm X-ray assessment of fat, \geq Computed tomography (CT) assessment offat

PRACTICAL

- \triangleright Body Composition, Anthropometry, Bioelectrical Impedance Analysis, BIA, BodyMass
- Index, BMI, Body fat percentage, Methods of Body Composition Assessment, SkinFold \triangleright
- \triangleright Measurements, Validity, and reliability of the tests, Experience and skill of the measure, type of caliper, equation chosen, Compressibility of the skin fold, appropriate referencemethod used. DEXA.Demonstrate Stretching and Strengthening Exercises for Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, Flat Foot, Back Pain and NeckPain

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/or test	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks – 25) Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks

15hrs

15hrs

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Sherrill C. (1998), Adapted Physical Activity, Recreation and Sport: cross diciplinari and lifespan, Ed bartell.
- 2. Eston R., Reilly T (1996) Kinanthropometry and exercise Physiology Laboratory manual, Routledge,taylor and F group, London and NewYork
- 3. Frincisco Esparza-Ros, Raquel Vaquero- Cristobal and Michael Marfell-Jones (2019). International Standards for Anthropometric Assessment, International Society for the Advancement of Kinanthropometry.
- 4. H.S. Sodhi and L.S. Sidhu (1984) Physique and Selection of Sportsmen byPunjab Publishing House.
- 5. J.E.L. Carter (2002) the Heath-Carter Anthropometric Somatotype InstructionManual.
- 6. Marry Ann Forciea : Geriatric Secret: Han by Belfusinc., Sydney.
- 7. McArdle, W.D., Katch, V. and Katch, F.I. (2006). Exercise Physiology (6th edition), Baltimore.
- 8. Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach). Mohali: ANOVAPublications.

Month wise and unit wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledgeregarding Posture – Concept, Significance, and Benefits. Bad Posture (Sitting, Standing, Walking, Lying down); Effects of Bad Posture on Our Body. Postural Deformities – Types and Causes (Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, Flat Foot), Corrective Exercises. Postural training guidelines, Corrective Exercises.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The Studentswill developtheunderstandingtheDefiningand	Lecture Methods Demonstration Methods	Evaluation of Presentation

	quantification of Posture, Assessment		Evaluation of
	of Posture and body shape, other clinical method of posture assessment, measurement in a dynamic phase of posture assessment, deviation from normal posture and injury. Curvatures and movement of vertebralcolumn	Presentation	Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding and knowledge regarding Definition of Body composition and role of body composition in sports, Determination of body composition: Muscles, Mass, Bone Mass and Fat Mass, Body mass index and its importance in sports, Body Fatpercentage	LectureMethodsDemonstrationMethodsAssessmentMethodsPresentationImage: Second S	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will develop the understanding and knowledge regarding Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition.	LectureMethodsDemonstrationMethodsAssessmentMethodsPresentationImage: Second S	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

SEMESTER – II

COURSE CODE – MPEEC 533 (vii) COURSE NAME – Subject Specialization (STRENGTH, CONDITIONING AND SPORTS PERFORMANCE)

MODULE III (CORE STABILIZATION, BALANCE AND AGILITY)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: To provide the knowledge of agility, skill and technique and also to know the importance of balance and coordination for various sports and games.

Learning outcome:

- 1. The students will able to understand and to imply the importance of agility training
- 2. The students will be equipped with the knowledge of balance and eccentric training.

After the completion of First month:

The students will develop to understand the knowledge regarding the importance and basis of agility and coordinativetraining.

After the completion of Secondmonth:

The student will able to understand the Core training- core stabilization, core strength, core power training (Anti extension exercises, anti-rotation exercises, scapulo thoracic exercise, lumbo-pelvic hip exercises) and Core Anatomy, core testing and program design

After the completion of Third month:

The student will able to understand the concepts and importance of balance and its purpose in performance enhancement and injury prevention, guidelines for balance training, balance exercises and balance training programme, safe progression of balance exercises and stability training for jointsystems.

After the completion of Fourth month:

The student will able to understand the concepts and importance of Define eccentric training, eccentric training methods, eccentric training for strength and endurance, eccentric exercise and rehabilitation.

THEORY SYLLABUS:

Unit-I

Agility and coordinative training: Deterministic model of agility, factors determining agility, assessment of agility. Coordination: definition, types of coordinative abilities, factors that make up coordination, importance and development of coordinative abilities.

Core training: Core training- core stabilization, core strength, core power training (Anti extension exercises, anti-rotation exercises, scapulo thoracic exercise, lumbo-pelvic hip exercises) and Core Anatomy, core testing and program design.

Balance and Stability training Define balance and its purpose in performance enhancement and injury prevention, guidelines for balance training, balance exercises and balance training programme, safe progression of balance exercises and stability training for joint systems.

UNITIV

UNITII

UNITII

Eccentric training: Define eccentric training, eccentric training methods, eccentric training for strength and endurance, eccentric exercise and rehabilitation.

PRACTICAL:

SAQ, Core exercises, Balance exercises, Eccentric exercises and Coordination exercises.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks Theory Examination -50Marks

Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks – 25) Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

15hrs

15hrs

15hrs

Reference:

- 1. Lee E.Brown. (2005) Training for speed, agility and Quickness, Humankinetics.
- **2.** Jay Dawes and Mark Roozen. (2012)Developing agility and quickness, Human kinetics.
- 3. Jay R. Hoffman (2012) NSCA'S Guide to Program Design, HumanKinetics.
- **4.** Frederic Dellavier(2010) Core training anatomy HumanKinetics.
- **5.** Jeffrey M.Willardson, (2014) Developing the core, sportsperformance series, NSCA, HumanKinetics,
- 6. Jason Brumitt.(2010) Core Assessment and training, HumanKinetics.
- 7. Greg Brittenham and Daniel Taylor.(2014), Conditioning to the core, Human kinetics.
- 8. Fredric Delavier. (2010) Core training Anatomy, HumanKinetics.

Month Wise And Unit Wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding: Agility and coordinative training: Deterministic model of agility, factors determining agility, assessment of agility. Coordination: definition, types of coordinative abilities, factors that make up coordination, importance and development of coordinative abilities.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The students will understand the concepts Core training- core stabilization, core strength, core power training (Anti extension exercises, anti-rotation exercises, scapulo thoracic exercise, lumbo-pelvic hip exercises) and Core Anatomy, core testing and program design	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding and knowledge of balance and its purpose in performance enhancement and injury prevention, guidelines for balance training, balance exercises and balance training programme, safe progression of balance exercises and stability training for joint systems.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Unit-IV	The Students will develop Concept of	Lecture Methods	Evaluationof
	Define eccentric training, eccentric training	Demonstration	Presentation
	methods, eccentric training for strength and	Methods	Evaluation of
	endurance, eccentric exercise and	Assessment	Assignment
	rehabilitation.	Methods	MCQ
		Presentation	Class-test / viva/
			seminar

ELECTIVES OPTIONAL GROUP-I

MASTER OF PHYSICAL EDUCATION

SEMESTER - III COURSE CODE – MPEEC 534 (i) COURSE NAME –FUNDAMENTALS OF SPORTS BIOMECHANICS

Marks:100

Duration:03hours

(Theory=75 Marks + Internal Assessment=25 Marks)

Objective: -To provide understanding about the mechanical basis of human movement and how mechanics influence exercise and sports performance.

Learning Outcome:

- > To understand the area of application of biomechanics in physical education and sports.
- > To familiarize students with the procedures used in biomechanics to investigate human movement.
- > To enable students to understand linear kinematics by learning the stuffingof linear kinematics.
- > To provide an insight on angular kinematics by learning different aspects involved in angular kinematics.
- > To enable students to understand linear kinetics by learning the contents of linearkinetics.
- > To provide an insight on angular kinetics by learning different aspects involved in angular kinetics.

After the Completion of First Month:

The students will develop insight about biomechanics and related terminologies, concepts and means used in biomechanics to analyses human motion. Students will also understand the significance of biomechanics and its area of application in sports and physicaleducation.

After the Completion of Second Month:

The definitions, concepts and perceptions about the ultimate contents of linear kinematics will be taught to the students during this month. They will also accomplish knowledge about projectile and the characteristics of trajectory of objects projected in different conditions.

After the Completion of Third Month:

The students would attain facts on the stuffing in angular kinematics. They will also acquire knowledge on the differences between the contents of and their measuring units. At the end of this unit they would be capable of understanding the relationships between area of knowledge in linear kinematics and angularkinematics.

After the Completion of Fourth Month:

The students will learn the definitions, concepts, insights about the contents of linear kinetics and angular kinetics. They will also be taught Newton's Laws of motion and its application in sports, how the spin is imparted on an object and the influence of spin in the trajectory of the object moving through air. At the end of this unit they would be capable of understanding the functions of levers.

THEORY SYLLABUS:

UNIT 1

Introduction

- \geq Definition and meaning of terms mechanics, biomechanics, kinetics andkinematics
- \triangleright Need and scope of biomechanics in physical education insports.
- ۶ Meaning of the terms kinesiological analysis, mechanical analysis and biomechanical analysis.

UNIT 2

Linear Kinematics

- Forms of motion Distance and displacement, speed and velocity \geqslant Acceleration, acceleration due togravity Projectile, trajectory ofprojectile UNIT 3 **AngularKinematics** 20 hrs Angular distance and angulardisplacement Angular speed and angularvelocity \triangleright \triangleright Angular acceleration Relationship of linear kinematics to angular kinematics 6 UNIT 4 **Linear and Angular Kinetics** Inertia, mass, force, momentum, weight, friction. \geq
 - Newton's laws of motion
 - \triangleright Spin
 - \triangleright Equilibrium, stability, centre of gravity,
 - \triangleright levers

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- The examiners are required to set eight questions taking at least two questions from eachunit. \triangleright
- \geqslant The students have to answer any five questions out of the total of eightquestions.
- \triangleright Each question shall be of a maximum of 15marks.
- \geqslant Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks).

SUGGESTED READINGS

20 hrs

20 hrs

> Bartlett, R. (1997). Introduction to sports biomechanics. New York: E &

FN. REFERENCES

- 1. Hall, J. S. (1991). Basic biomechanics. USA: Mosby YearBook.
- 2. Miller, R. (1990). Biomechanics (3rd ed.). New York:Macmillan.
- 3. John W., B. (1979). Principles of coaching. Englewood Cliffs, N.J.: Prentice HallInc.
- 4. Hay, J., & Reid J, G. (1998). Mechanics of human motion(2nd Ed.). Englewood Cliffs, N.J.: Prrentice Hallinc.
- 5. Broer, M, R., &Zemicke. (1979). Efficiency of human movements. Philadelphia: W.B. SaunderCo
- 6.

Month wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	The students will develop a precise insight about the field of study i.e. Biomechanics. In addition they accomplish knowledge about the need and importance of biomechanicsin the sports and physical education. The definitions, meanings and explanations of means used in biomechanics will also be learnt by the students.	Lecture MethodsDemonstrati on MethodsAssessment MethodsMethods	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/seminar
UNIT-II	The students will gain concept about linear kinematics and the areas of mechanics that encompasses. They learn the definitions, meaning and units of those areas of mechanics that comes under liner kinematics.	 Lecture Methods Demonstrati on Methods Assessment Methods Presentation 	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
Unit-III	The students will acquire knowledge about the angular kinematics. The definitions, meaning, units and the application of mechanical contents that comes under angular kinematics will be learnt by the students at the end they will also be capable of understanding the relationship between linear kinematics and angular Kinematics	 Lecture Methods Demonstrati on Methods Assessment Methods Presentation 	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar

Unit-IV	The students will develop a clear concept through the definitions explanations about the contents of linear kinetics and angular kinetics. They would understand the Newton's laws of motion and how these lawsare applied in sports performance. They would learn about the spin and how the spin is imparted on an object. The students would understand how spin influence the trajectory of the object moving through air. Furthermore they would learn about centre of gravity, stability, equilibrium and the factors influencingthem.		Lecture Methods Demonstrati onMethods Assessment Methods Presentation		Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
---------	--	--	---	--	---

SEMESTER - III

COURSE CODE – MPEEC 534 (ii) COURSE NAME – FUNDAMENTALS OF EXERCISE PHYSIOLOGY

Marks:100

Duration:03hours

(Theory=75 Marks + Internal Assessment=25 Marks)

Objective: -To provide an understanding about the physiological basis of exercise.

Learning Outcome:

- > To introduce the subject matter to thestudents.
- > To enable the students to understand the impact of exercise on different bodysystems.
- > To make the students learn the bioenergetics in physicalactivity.
- To impart knowledge for enabling students to develop an idea regarding physiological basis of muscular activity.

After the Completion of First Month:

The students will develop a general idea about how muscle contracts. They will gain knowledge on the basics of energy systems and neural control of activities.

After the Completion of Second Month:

The Students will develop the understanding and knowledge of acute and chronic effect of exercises on different systems of body.

After the Completion of Third Month:

The students will be introduced to the concept and influence of body composition on performance. They will also develop an insight on the influence of environmental aspects on sports performance.

After the Completion of Fourth Month:

At the end of this month students will develop an understanding of the physiological testing procedures.

THEORY SYLLABUS:

UNIT 1

NeuromuscularActivity.

- Gross & Microscopic structure of skeletal muscle, Sliding Filament theory of muscular contraction.
- Energy System (Aerobic & Anaerobic) during rest and exercise.
- > Neural transition (Nerve & Nerve Synopses, Neuromuscularjunction).

UNIT 2

Exercise andBody Systems

- Acute and chronic responses to trainingon:
- CardiovascularSystem
- RespiratorySystem
- NeuromuscularSystem
- EndocrineSystem

UNIT 3

EnvironmentandPerformance.

- Influence of environmental conditions on athleticperformance.
- > Concept and assessment of bodycomposition.
- > Impact of body composition on health and fitness.
- Water and electrolytebalance.

UNIT 4

Fundamentals of ExerciseTesting

- Medical clearance, PAR-Q, Stop TestIndicators.
- Monitoring ExerciseIntensities.
- Pre-Exercise TestingPreparation

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks).

SUGGESTED READINGS

Dercari, J., Bryant, C., & Comana, F. (2015). Exercise physiology. USA: F A

Davis REFERENCES

- 1. Willmore, J. H., Costill, David L., & Kenny, W. (2008). *Physiology of sportsand Exercise* (4thed). USA, HumanKinetics
- 2. Tanner, R. K., & Gore, C. J. (Eds.) (2013). Physiological test for elite athletes (2nded.). USA: HumanKinetics.
- 3. Smith, L, Denise & Fernhall, B. (2011) Advanced cardiovascular exercise physiology. USA: HumanKinetics.
- 4. Gardediner. F. P (2011) Advanced neuromuscular exercise physiology. USA: Human Kinetics.
- 5. Haff, G. G., & Dumke, C. (2012). Laboratory manual for exercise physiology. USA: Human Kinetics.
- 6. Tiwari, Sandhya (1998), Exercise Physiology, SportsPublication

20 hrs

7. Mcaedle, D. William, Katch, I. W & Katch, L.V(2001) Exercise physiology Energy, nutrition and human performance. Lippincott Williams & WikinsUSA

inutition and	numan pen	office. Li	ippincou w	mains &	WIKIIISUSA

Month wise Progression	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
First Month- UNIT-I	The students will develop a general idea about howmuscle contracts. They will gain knowledge on the basics of energy systems and neural control of activities.	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/seminar
Second Month – UNIT-II	The Students will develop the understanding and knowledge of acute and chronic effect of exercises on different systems of body.	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Third Month Unit-III	The students will be introduced to the conceptand influence of bodycomposition on performance. They willalso develop an insight onthe influence of environmental aspects on sports performance.	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/ seminar
4 th Month Unit-IV	At the end of this month students will develop an understanding of the physiological testing procedures.	 Lecture Methods Demonstrati onMethods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test/ viva/ seminar

SEMESTER - III COURSE CODE – MPEEC 534 (iii) COURSE NAME –FUNDAMENTALS OF KINANTHROPOMETRY IN SPORTS

Marks:100

Duration:03hours

(Theory=75 Marks + Internal Assessment=25 Marks)

Objective: -To provide the knowledge of implementation of Fundamentals Sports Anthropometry.

Learning Outcome:

- ^I TheStudentswillbeabletounderstandtheconceptoffundamentalofsportsanthropometry and its application in the field of sports.
- ^I The students will be able to get the knowledge about different stages of growth and development. It will be helpful for talent identification insports.
- ^I To assess the body composition and to suggest proper body composition forsports.
- I To guide the proper development of body type for particular sports and to identifytalent.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Importance, definition, Aim and objectives, Characteristics and Principles of Sports Anthropometry, Application of Anthropometry in the field of sports, Anthropometric Instruments: Tools and General Techniques

Unit-II Learning Outcome:

Meaning, definition and importance of Growth and Development, Application of Growth and Development in the field of Sports, Stages of Human growth, Difference between human growth and development, concept of maturity, Distance Curve and Velocity, Determination of velocity and distance curve.

Unit-III Learning Outcome:

The Students will gain knowledge of Body composition and its role in sports participation, Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition, Body mass index and its importance in sports.

Unit-IV Learning Outcome:

The Students will be able to understand theRole of Physique in Sports, Physique in Different Sports Activities, Different component of somatotype, its importance& scope in sports, Classification of Somatotype, Health & Carter Method of somatotype.

THEORY SYLLABUS:

Unit-I

- Meaning, definition, Aim and objectives
- > Characteristics and Principles of SportsAnthropometry,
- > Application of Kinanthropometry in the field ofsports
- > Anthropometric Instruments: Tools and GeneralTechniques.

Unit-II

- > Meaning, definition and importance of Growth andDevelopment
- > Application of Growth and Development in the field of Sports
- Stages of Human growth, Difference between human growth and development, Concept of maturity
- > Distance Curve and Velocity, Determination of velocity and distancecurve

Unit-III

- > Body composition and its role in sportsparticipation
- Body Composition: various Methods (direct and indirect technique) to estimate of Human BodyComposition
- > Body mass index and its importance insports

Unit-IV

- Role of Physique inSports
- Physique in Different SportsActivities
- > Different component of somatotype, its importance& scope insports
- > Classification of Somatotype, Health & Carter Method ofsomatotype

Note:

One Theory period is equal to 1 credit of 1 hour duration. **Marking Scheme:** Maximum Marks- 100 marks Theory Examination - 75Marks Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks).

SUGGESTED READINGS

- Frincisco Esparza-Ros, Raquel Vaquero- Cristobal and Michael Marfell-Jones (2019).International Standards for Anthropometric Assessment, International Society for the Advancement of Kinanthropometry.
- H.S. Sodhi and L.S. Sidhu (1984) Physique and Selection of Sportsmen by Punjab Publishing House.
- > J.E.L. Carter (2002)the Heath-Carter Anthropometric Somatotype InstructionManual.
- McArdle, W.D., Katch, F.I., and Katch, V.L. (2010). Exercise Physiology: Energy, nutrition, and human performance (7th edition). Lippincot Williams & Wilkins. Baltimore, MD,USA.
- Norton, K. & Olds, T. (1996). Anthropometrica. Sydney: University of New South Wales Press, Australia.
- Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach). Mohali: ANOVAPublications.

20hrs

20hrs

Month wise and Unit wise Progressi on	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding Importance, definition, Aim and objectives, Characteristics and Principles of Sports Anthropometry, Application of Anthropometry in the field of sports, Anthropometric Instruments: Tools and General Techniques	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The student will learn Meaning, definitionand importance of Growth and Development, Application of Growth and Development in the field of Sports, Stages of Human growth, Difference between human growth and development, concept of maturity, Distance Curve and Velocity, Determination of velocity and distance curve.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will gain knowledge of Body composition and its role in sports participation, Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition, Body mass index and its importance in sports.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will be able to understand the Role of Physique in Sports, Physique in Different Sports Activities, Different component of somatotype, its importance& scope in sports, Classification of Somatotype, Health & Carter Method of somatotype.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

SEMESTER - III COURSE CODE – MPEEC 534 (iv) COURSE NAME – FUNDAMENTALS OF PROFESSIONAL PREPARATION Duration: 03hours

Marks:100

(Theory=75 Marks, Internal Assessment=25 Marks)

Objective: -To provide the knowledge of implementation of Sports Training and talent identification procedures.

Learning Outcome:

- The Students will be able to know and develop a Concept of Foundation of Professional Preparation
- > The student will understand the importance of Professional Preparation in Physical Education.
- > The student will understand the modern concepts of curriculum.
- > The student will understand the importance of teachingMethods.

After the Completion of First Month:

The Students will develop the knowledge regarding Importance, definition, Aim and objectives, foundation of professional preparation Ideals Indian democracy, History of professional preparation in India, role of physical education in democracy, Forces and factor effecting Education Policies and programs and Purpose of education, physical education about NCTE and UGC.

After the Completion of Second Month:

The Students will develop the knowledge of Professional qualification and personal qualities of physical educators. Under graduate preparation of professional personnel, Post graduate preparation of professional personnel, Laboratory and Field Experiences, Library and the concept of professional leadership.

After the Completion of Third Month:

The Students will gain knowledge of Need and importance of Curriculum Design, Meaning, Importance and factors affecting curriculum design and the role of the teacher in curriculum design. Principles of Curriculum design, Role of the teacher in curriculum designs, classification of activities for different age group and sexes and types of activities

After the Completion of Fourth Month:

The Students will gain knowledge of Different methods of teaching lecture, grouping of students Block of period, total time allotment and teaching aids, Development program for different levels of education, Requirement of co-education, Activities suitable for co-education, Factors effecting coeducation Policies and programs and Special Provision for development of girls programme.

THEORY SYLLABUS: Unit-I

Foundation of Professional Preparation

> Ideals of Indian Democracy: Contribution of Physical Education.Foundation of professional

preparation

- professional preparation in physical education Historical review of professional preparation in India
- > The Role of Physical Education and Sports in Ensuring SustainableDemocracy
- Forces and factor effecting Education Policies and programs social, religious, economic and political.
- Recommendation and functions of NCERT and UGC
- Purpose of education and physicaleducation

Unit-II

Professional Preparation in Physical Education

- > Professional qualification and personal qualities of physicaleducators.
- Under graduate preparation of professional personnel, Purpose of under graduate preparation admission requirements and area ofspecialization.
- Post Graduate preparation of professional personnel: Purposes of post graduate studies, admission requirements and area ofspecialization.
- > Laboratory Experiences, Field Experiences, Facilities and special resources forLibrary.
- > The concept of professional leadership. Types of Leadership Traits of a Good Leader, Functions of aleader.

Unit-III

Modern concept of thecurriculum15 Lectures

- > Need and importance of curriculum,
- Curriculum Design, Meaning, Importance and factors affecting curriculum design and the role of the teacher in curriculumdesign.
- Principles of Curriculumdesign.
- > The Role of the teacher in curriculumdesigns.
- > classification of activities for different age group and sexes and Types of activities,
- Influences of different Factors oncurriculum

Unit-IV

Methods of teaching

- Different methods of teaching lecture, projects, activities, demonstration, Selecting methods of teaching
- > Grouping of students for instruction the types of grouping
- > Block of period, total time allotment and teachingaids.
- Development program for different levels of education: Kindergarten, elementary school, Middle School, High School and Higher Secondary School, College and University, Special institution (Technical School & orphan hostel) special days, national daysetc.
- > Co-education in physical education and Requirement of co-education

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks

20hrs

20hrs

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Batia, K.K. and Narang, (1991) Principles of Education (Methods and Technique) Ludhiana Prakash Brothers EducationalPublisher,
- 2. Bhatia, K.K.Kadian, K.S.Chanda, PC and Sharma (1990) Contemporary problem of Indian Education, JalandharPrakash
- 3. James, J. (2005). Curriculum design in physical education and sports. New Delhi: Friends Publications (India).ISBN-10: 8172161433. ISBN-13: 978-8172161439.

Month wise Progression	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
First Month- UNIT-I	The Students will develop the knowledge of Foundation of professional preparation Ideals Indian democracy, History of professional preparation in India, role of physical education in democracy, Forces and factor effecting Education Policies and programmes and Purpose of education and physical education NCTE and UGC	Lecture Methods Demonstratio nMethods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/seminar
Second Month – UNIT-II	The Students will develop the Knowledge of Professional qualification and personal qualities of physical educators. Under graduate preparation of professionalpersonnel, Post Graduate preparation of professional personnel, Laboratory and Field Experiences, Library and the concept ofprofessional leadership.	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar
Third Month – UNIT-III	The Students will develop the Knowledge of Need and importance of Curriculum Design, Meaning, Importance and factors affecting curriculum design and the role of the teacher in curriculum design. Principles of Curriculum design, Role of the	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar

	teacher in curriculum designs, classification of activities for different age group and sexes andtypes of activities		
Fourth	The Students will develop the	Lecture Methods	Evaluation of Presentation
Month –	knowledge of Different methods of teaching lecture, grouping of students Block of period,	Demonstratio n Methods	Evaluation ofAssignment
UNIT-IV	total time allotment and teaching aids, Development program for different levels of education. Coeducation in physical education Requirement of co-education,	Assessment Methods Presentation	MCQ/Class-test / viva/ seminar

Semester-IV

			Credit
S.No.	Paper No.	Title	Theory/
			Practical/Tutorial
1	MPECC-541	Advanced Statistics	5 (4 Th + 1 P)
2	MPECC-542	Dissertation	8
3	MPEEC-543	Subject Specialisation	5 (4 Th + 1 P)
4	MPEEC-544	Elective Optional Group-II A	8 (4+4)
		Total Credits	20

Note:

Th	=	Theory
Р	=	Practical

MASTER OF PHYSICAL EDUCATION SEMESTER - IV

COURSE CODE – MPECC 541 COURSE NAME – ADVANCED STATISTICS

Marks:100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: -To provide the knowledge of various methods of statistics, which will help the students to collect analysis and meaningful interpretation of data in research in the field of Physical education and sportsciences.

Learning Outcome:

- > To completely describe a data set, using appropriate descriptive statistics.
- > To interpret a set of descriptive statistics and understand the limitations of eachmeasure.
- Students shall be able to use and apply a wide variety of specific statistical methods.
- > Students shall know how to organize, manage, and presentdata.
- > Show ability to explore and organize data foranalysis.
- > Students shall be able to use and apply a wide variety of specific statisticalmethods.

Unit-I Learning Outcome:

This semester will deal with various inferential statistics, hence in this month the students would be given a general idea about the important terminologies for drawing inferences. Students would be taught about the formulation of hypothesis. Type-I and Type II error, level of significance and degree of freedom would also be taught during this month.

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of various methods of drawing interference when the size of the data is smaller. Various kinds of t test ll be taught during this month. Students will get enough opportunity to practice problems in calculating ttest.

Unit-III Learning Outcome:

The Students will gain knowledge of analysis of variance. To begin with the students would be taught about the assumptions for ANOVA to enable the students to know where to apply this statistical technique. Practical classes will also be undertaken to enable students to do the calculations using SPSS/MS Excel

Unit-IV Learning Outcome:

Both the merits and demerits of the non-parametric test would be taught. The use analysis and interpretation of Chi square test to be taught during this month. In Practical classes the Calculation of above mentioned test using SPSS/MS Excel would be taught to the students, along with their interpretation

THEORY SYLLABUS:

UNIT-I

Statistical Inference

- Formulation and testing of hypothesis
- > Type-I and Type-II Error and itsseverity
- Level of Significance and Degree ofFreedom
- One tailed and two tailedtests

> Methods of Probable and non-probable SamplingMethods

UNIT-II

Test of Significance for small Samples

- ✤ t Test for onesample
- > t Test for two independent Sample (Independent ttest)
- t Test for two dependent Sample (Dependent tTest)
- > Assumptions for dependent and independent sample ttest

UNIT-III

Analysis of Variance (ANOVA)

- Important Terminologies in One-wayANOVA
- Assumptions for One-way ANOVA
- Procedure for applying one-way ANOVA
- I Multiple t Tests Vs. One-way ANOVA
- I Post hoc tests for significance.

UNIT-IV 15 hrs

Non-Parametric Statistics

- Advantages and disadvantages of Non-Parametrictests
- > Introduction to non-parametrictest.
- > Assumptions in Chi-SquareTest.
- Application of Chi-SquareTest
- > Descriptive Statistics for Non-Parametricdata.

PRACTICALS

Calculation of t test (one sample, dependent and Independent), ANOVA (One way and Factorial), Correlation, Chi square, Conversion of raw data into standard score, along with their analysis and interpretation by using SPSS or MS Excel.

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration. 30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks 15 hrs

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Verma, J. P., & Ghufran, M. (2014). *Research Methods and Statistics in Psychology* (6thEd). London: PsychologyPress.
- 2. Thomas, Jerry R, Nelson Jack K & Silverman Stephen J (2011). *Research Methods in Physical Activity* (6th Ed) United Kingdom: HumanKinetics.

REFERENCES

- 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.
- 3. Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice HallInc.
- 4. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sportsand Exercise Science, London: RoutledgePress
- 5. Cresswell, John W. (2016) Research Design (5th Ed), New York: SagePublications.
- 6. Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, NewDelhi
- 7. Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall,Inc.
- 8. Verma, J.P. (2016) Sports Research with Analytical Solution using SPSS (1st Ed), United Kingdom: WileyPublishers.

Month wise Progressio n	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	This semester will deal with various inferential statistics, hence in this month the students would be givena general idea about the important terminologies for drawing inferences. Students would be taught about the formulation of hypothesis. Type-I and Type II error, level of significance and degree of freedom would also be taught during this month.	Lecture MethodsDemonstrati on MethodsAssessment MethodsPresentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/seminar
UNIT-II	The Students will develop the understanding and knowledge of various methods of drawing an	 Lecture Methods Demonstrati on Methods 	Evaluation of Presentation Evaluation of Assignment

	interference when the size of the data is smaller. Various kinds of t test ll be taught during this month. Students will get enough opportunity to practice problems in calculating ttest	0	Assessment Methods Presentation	ן	MCQ/Class- test / viva/ seminar
Unit-III	The Students will gain knowledge of analysis of variance. To begin with the students would be taught about the assumptions for ANOVA to enable thestudentstoknowwheretoapply this statistical technique. Practical classes will also be undertaken to enable students to do the calculations using SPSS/MS Excel.	0 0 0	Lecture Methods Demonstrati on Methods Assessment Methods Presentation	D D D	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
Unit-IV	Both the merits and demerits of the non-parametric test would be taught. The use analysis and interpretationof Chi square test to be taught duringthis month. In Practical classes the Calculation of above-mentionedtest using SPSS/MS Excel would be taught to the students, along with their inter pretation	0	Lecture Methods Demonstrati on Methods Assessment Methods Presentation)))	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar

SEMESTER - IV

COURSE CODE – MPEEC 542 COURSE NAME –DISSERTATION (IN THE AREA OF SUBJECT SPECIALISATION)

Marks: 100

(Internal Assessment by the Supervisor: 30 Marks + Assessment of the Report by an Examiner: 40 Marks + Viva-voce to be conducted by an External: 30 Marks)

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 the Organisation on the recommendation of D.R.C. (Departmental Research Committee).

A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination. 3. The candidate has to face the Viva-Voce conducted by DRC.

SUBJECT SPECIALISATION MASTER OF PHYSICAL EDUCATION SEMESTER-IV COURSE CODE – MPEEC 543 (i) **COURSE NAME – Subject Specialization (EXERCISE PHYSIOLOGY)** MODULE IV-(PHYSIOLOGY OF HUMAN PERFORMANCE)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: - To provide an understanding about the physiological basis of human

performance. Learning Outcome:

- To educate the students regarding influence of growth and development of performance. Π
- To understand the concept, causes and hazards of obesity. П
- To get an insight into the influence of environmental factors onperformance. Π
- To enlighten the students regarding the impact of exercise onimmunity. Π

After the Completion of First Month:

The Students will develop the understanding and knowledge about growth and development, how exercise effect or aid in growth and development, the influence of growth and development on physiological adaptations due to training.

After the Completion of Second Month:

The Students will gain knowledge about the physiological basis of obesity, health consequences of obesity, the causes of obesity and the mechanism behind obesity.

After the Completion of Third Month:

At last the students would be taught about Environmental conditions at altitude, Physiological responses to exercise in the heat cardiovascular function, factors limiting exercise in the heat, body fluid balance and about Physiological responses to exercise in cold (Muscle function, Metabolic responses).

After the Completion of Fourth Month:

The Students will develop a general idea about the effect of Exercise on immune system, how the immune system responds different types of workout and training schedules.

THEORY SYLLABUS:

UNIT-I

Growth and Development

- Influence of growth and development on: (height, weight, bone, muscle, fat, and nervous system).
- \triangleright Impact of growth and development on physiological adaptation to acute exercise (strength, cardiovascular and respiratory function, metabolic function, endocrine responses and substrate utilization during exercise).
- \geqslant Influence of growth and development on physiological adaptations to training (body composition, strength, aerobic capacity, anaerobiccapacity).

UNIT-II

Physiological basis of obesity

- Overweight versusobesity
- Health consequences of obesity
- \triangleright Causes of obesity (energy intake, energy expenditure, mechanisms of obesity)

15 hrs

UNIT-III

Training and Environment

- Environmental conditions at altitude: (Atmospheric changes, sun, temperature, wind and terrain considerations)
- > Adjustments to acute and chronic altitudeexposure
- > Performance and altitudetraining.
- > Physiological responses to exercise in cold (Muscle function, Metabolicresponses)

UNIT-IV

Exercise and Immunity

- > Immune response to medium duration, moderate to high intensity aerobicexercise.
- > Immune response to prolonged, moderate to high intensity aerobic exercise.
- > Immune response to intense intervalexercise.

PRACTICALS

Assessment of Health related physical fitness

Note:

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks Theory Examination -50Marks

Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

RECOMMENDED READINGS

- 1. Kenney, W. L., Wilmore, J. H., &Costill, D. L. (2012). *Physiology of sportsand exercise* (5thed.). USA: HumanKinetics.
- **2.** Plowman, S. A., & Smith, D. L. (2017). *Exercise physiology for health, fitness and performance (5thedn)*. Philadelphia: WoltersKluwer.
- 3. Porcari, J., Bryant, C., & Comana, F. (2015). *Exercise physiology*. USA: F ADavis.

SUGGESTED READINGS

- 1. Dey, S. K. (2012). A text book of sports and exercise physiology. New Delhi: Jaypee Brothers MedicalPublishers.
- 2. Haff, G.G., &Dumke, C. (2012). *Laboratory manual for exercise physiology*. USA: Human Kinetics.
- 3. Maud, P.J., & Foster, C. (eds.) (2006). *Physiological assessment of human fitnessm*(2nded.). USA: HumanKinetics.
- 4. Silverthorn, D. U. (2009). *Human Physiology: An integrated approach (4thed.)* Pearson education, USA.
- 5. Tanner, R.K., & Gore, C.J. (eds.) (2013). *Physiological tests for elite athletes (2nded.)*. USA: Human Kinetics.
- 6. Wingerd, B. (2014). *The human body: Concepts of anatomy and physiology (3rded.)*. Lippincott Williams &Wilkins.

Month wise Progressi on	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
First Month- UNIT-I	The Students will develop the understanding and knowledge about growth and development, how exercise effect or aid in growth and development, the influence of growth and development on physiological adaptations due to training.	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/seminar
Second Month – UNIT-II	The Students will gain knowledge about the physiological basis of obesity, health consequences of obesity, the causes of obesity and the mechanism behindobesity.	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
Third Month Unit-III	At last the students would be taught about Environmental conditions at altitude, Physiological responses to exercise in the heat cardiovascular function, factors limiting exercise in the heat, body fluid balance and about Physiological responses to exercise in cold(Muscle function, Metabolic responses).	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar
4 th Month Unit-IV	The Students will develop a general idea about the effect of Exercise on immune system, how the immune system responds different types of workout and training schedules.	Lecture Methods Demonstratio n Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class- test / viva/ seminar

SEMESTER - IV COURSE CODE – MPEEC 543 (ii) COURSE NAME –Subject Specialization (SPORTS BIOMECHANICS) MODULE IV (TECHNIQUES OF BIOMECHANICAL ANALYSIS IN SPORTS)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: - To provide knowledge about methods and techniques used in biomechanical analysis and to analyses techniques of sports in mechanical prospective.

Learning Outcome:

- ^I To familiarize the students with methods and techniques of biomechanicalanalysis.
- To provide knowledge on mechanical structure of swimming and volleyballskills.
- **I** To learn about the mechanical analysis of basketball and cricketskills.
- ^I To make the students learn the mechanical analysis of footballskills.

After the Completion of First Month:

The students would develop a general idea about cinematography, statistical modelling and computer simulation. They also would develop the insight and knowledge about quantitative analysis.

After the Completion of Second Month:

The students would learn the analysis of swimming and volleyball skills that is freestyle, butterfly, passing serving and spiking. Supplementing, the students will become acquainted with the mechanical principles governing the performance of above mentioned skills.

After the Completion of Third Month:

Students would be taught the mechanical analysis of basketball and cricket skills specifically set shot Lay-up shot, pass, forward dive and bowling. Students will further conversant with the mechanical principles involved in the performance of these techniques.

After the Completion of Fourth Month:

At the end students would learn the mechanical analysis of kicking, heading and throwing in football. Students will further conversant with the mechanical principles involved in the performance of these techniques.

THEORY SYLLABUS:

UNIT-I Methods and Techniques ofBiomechanicalAnalysis

- Cinematography
- Statisticalmodelling
- Computer simulation
- Qualitative analysis

UNIT-II

Mechanical Analysis of Swimming andVolleyballSkills

- Freestyle
- Butterfly

15 hrs

- Passing
- Serving
- Spiking

UNIT-III Mechanical Analysis of Basketball andCricketSkills 15 hrs \triangleright Setshot \triangleright Lay upshot > Pass Forwarddive \triangleright \triangleright Bowling **UNIT-IV** Mechanical AnalysisofFootball 15 hrs Kicking ۶ Heading \geq Throwing **PRACTICALS**

- 1. Quantitative analysis of sports skills and observation ofperformance
- 2. Mechanical analysis of fundamental movements and sportsskills.
- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

1. Chapman, A. E. (2008). *Biomechanical analysis of fundamental human movements* .USA: HumanKinetics

REFERENCES

- 1. Robertson, D. G., Caldwell, G. E., Hamill, J., Kamen, G., & Whittlesey, S. N. (2004). *Reaserch methods in biomechanics*. USA: HumanKinetics.
- 2. Bartlett, R., & Bussey, M. (2012). *Sports biomechanics reducing injury risk and improving sports performance*. New York:Routledge.
- 3. Bartlett, R. (1997). Introduction to sports biomechanics. New York: E & FNspon.
- 4. Broer, M, R., & Zemicke. (1979). *Efficiency of human movements*. Philadelphia: W.B. SaunderCo.
- 5. Hall, J. S. (1991). *Basic biomechanics*. USA: Mosby YearBook.
- 6. Hay, J. (1985). *The Biomechanics of sports technique,3rd Ed.* Englewood Cliffs;NJ: Prentice Hall:Inc.
- 7. John W., B. (1979). *Priciples of coaching*. Englewood Cliffs, N.J.: Prentice HallInc.

Month wise Progression	Course Learning Outcomes	Teaching and Learning Activity	Assessment Task
UNIT-I	The students will learn about the cinematography, statistical modelling. Students will develop an insight about quantitativeanalysis.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
UNIT-II	The students would be taught the fine mechanical aspects of the techniques freestyle, butterfly, passing, serving and spiking. The students will further strengthen their knowledge by understanding skills in view of the mechanical principles involved in performance of thesetechniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-III	The students will learn to analyse the mechanical aspect of the skills namely set shot Lay-up shot, pass, forward dive and bowling. The mechanical principle already learned will be used for in depth understanding of mechanical aspects of the techniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar
Unit-IV	The students would learn to analyse football skills specifically kicking, heading and throwing. Furthermore they will also understand the mechanical principles involved in the performance of these techniques.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/ seminar

SEMESTER - IV COURSE CODE – MPEEC 543 (iii) COURSE NAME –Subject Specialization (EXERCISE AND SPORTS PSYCHOLOGY) MODULE IV (PSYCHOLOGICAL ASPECTS OF SPORTS PERFORMANCE)

Marks:100

Duration:03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objectives: - To provide the knowledge about Different Psychological aspects of Competition, Pros & Cons of Aggression, the different stages of Skill Acquisition, and Character development in sports, through sports and for sports.

Learning Outcome: -Students will acquire the in depth knowledge about the Psychological aspects of competition, aggression in sports, methods of Skill Acquisition, role of memory in Skill Acquisition and about Character development in Sports.

Unit-I Learning Outcome: -

The Students will develop the knowledge about Psychological aspects of Competition, orientation in Sports and psychological changes during, before and after Competition.

Unit-II Learning Outcome: -

The Students will get an insight into the meaning of Aggression, causes of Aggression and use, misuse and disuse of aggression in sports.

Unit-III Learning Outcome: -

The Students will gain an insight into the process of Skill Acquisition, role of memory in Skill Acquisition, and about individual differences in SkillAcquisition.

Unit-IV Learning Outcome: -

The Students will gain knowledge about Character development and Sportspersonship, strategies for enhancing character development, and guiding principles of character development.

THEORY SYLLABUS

UNIT-I

- > Psychological Aspects of Competition.
- Competition Orientation in Sports, Determinants of competitive Behavior Pre, during& post competitive psychological situation.
- > Short term and long term psychological preparation.

UNIT-II

- Aggression insports.
- Definingaggression.
- Causes of aggression,
- Types of aggression,

15hrs

UNIT-III.

- Process of SkillAcquisition-
- > Meaning & classification of Motor skill & Sportskills.
- > Concept, Condition & principles of motor skillslearning
- > Development consideration in skillacquisition.
- Role of Attention & Memory in MotorLearning
- > Individual difference in skill Acquisition & the importance of feedback in SkillAcquisition.

UNIT-IV

- > Character development and sports personship.
- > Defining character and sports personship,
- > Approaches to develop character and sports personship,
- > Strategies for enhancing character development, guiding practice in characterdevelopment.

PRACTICALS

- > Reaction time equipmentoperations.
- Operation of Vienna TestSystem

(a) One Theory period is equal to 1 credit of 1 hourduration.

(b) One practical period is equal to 1 credit of 2hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25)to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READING:

- Cox, Richard H. (1985) SportsPsychology Concepts and Application, Wm C Brown Publishers.
- Gill,DianeL,WillamsLavon(2008),PsychologicalDynamicsofSportandExercise ,3rdEdition, Human Kinetics, USA.

15hrs

15hrs

Weinberg Robert, Gould Daniel (2014), Foundation of Sports& Exercise Psychology, 6thEdition, Human Kinetics, USA

REFERENCE

- 1. Kmalesh. M.L (2014) Psychology in Physical Education and Sport, Khel SahityaKhendra, New Delhi.
- 2. Martens Raine (1987) Coaching Guide to SportsPsychology, Human Kinetics Publishers, USA.
- 3. Orlick Terry (1986) Psyching For SportsMental Training For Athletes, Leisure Presss, USA.
- 4. Shaw .D F, Corban R M (2005)Sportsand Exercise Psychology, IndiAN Edition, BIOS Scientific Publishers, USA.
- 5. Singer, Robert N (1975) Motor Learning and Human Performance, Macmillan Publishing co. NewYork.
- 6. Silva. M John, Weinberg .S Robert (1984), Psychological Foundation of Sport. Human Kinetics ,USA.

Month	Course Learning Outcomes	Teaching and	Assessment Tasks
wise and		learning Activity	
Unit wise			
Progressio			
n			
Unit-I	The Students will develop the	Lecture Methods	Evaluation of
	knowledge about Psychological	Demonstration	Presentation
	aspects of Competition, orientation in	Methods	Evaluation of Assignment
	Sports and psychological changes	Assessment Methods	MCQ
	during, before and after Competition.	Presentation	Class-test / viva/ seminar
Unit-II	The Students will get an insight into	Lecture Methods	Evaluation of
	the meaning of Aggression, causes of	Demonstration	Presentation
	Aggression and use, misuse and	Methods	Evaluation of Assignment
	disuse of aggression in sports.	Assessment Methods	MCQ
		Presentation	Class-test / viva/ seminar
Unit-III	The Students will gain an insight into	Lecture Methods	Evaluation of
	the process of Skill Acquisition, role	Demonstration	Presentation
	of memory in Skill Acquisition, and	Methods	Evaluation of Assignment
	about individual differences in Skill	Assessment Methods	Practical's
	Acquisitio	Presentation	Class-test / viva/ seminar
Unit-IV	The Students will gain knowledge	Lecture Methods	Evaluation of
	about Character development and	Demonstration	Presentation
	Sportspersonship, strategies for	Methods	Evaluation of Assignment
	enhancing character development,	Assessment Methods	Practical's
	and guiding principles of character	Presentation	Class-test / viva/ seminar
	development.		

SEMESTER - IV COURSE CODE – MPEEC 543 (iv) COURSE NAME –Subject Specialization (SPORTS SOCIOLOGY) MODULE IV (SOCIALISATION IN SPORTS)

Marks: 100

Duration: 03hours

(Theory=50 Marks + Practicals=25, Internal Assessment=25 Marks)

Objective: -To provide the knowledge and understanding of Sports Sociology.

Learning Outcome:

- ^I The Students will acquire knowledge regarding the need of socialunderstanding.
- ^I The students will be equipped with the knowledge and importance of social development through sports
- I To understand the Sports as a social phenomenon
- I To understand the relation of sportsand the lifecycle.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Social Factors are concerning sports in society, Social Stratification in sports, Discrimination & democratization in sports, Sports Aggression & Violence in sports, Problems regarding Professionalization & children in sports.

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of SocialCultural factors concerning sports in society: Sports as Social Institutions, Sports as an element of society, Sports as an Element of Culture, cultural Product and development, Manipulative Socialization and coercedconformity

Unit-III Learning Outcome:

The Students will gain knowledge of Introduction to Sports and the life cycle: Politics and sports, role of politics in sports, Role of media in sports, Economy and sports, role of economy in the development of sports and games, Violence in sports and its causes, Role of sports in the promotion of NationalIntegration

Unit-IV Learning Outcome:

The Students will gain knowledge of Methods and methodology: Research techniques in social sciences, Positivism and field research, Inductive and deductive methods, Empirical and analytical techniques, Semiotics, and phenomenology, Hermeneutics, Identifying research problems in sportssociology

THEORY SYLLABUS:

UNIT-I

15hrs

Social Factors are concerning sports in society, Social Stratification in sports, Discrimination & democratization in sports, Sports Aggression & Violence in sports, Problems regarding Professionalization & children in sports.

UNIT-II

Social Cultural factors concerning sports in society: Sports as Social Institutions, Sports as an element of society, Sports as an Element of Culture, cultural Product and development, Manipulative Socialization and coercedconformity

UNIT-III

Sportsand the life cycle: Politics and sports, role of politics in sports, Role of media in sports, Economy and sports, role of economy in the development of sports and games, Violence in sports and its causes, Role of sports in the promotion of National Integration

UNIT-IV

Methods and methodology: Research techniques in social sciences, Positivism and field research, Inductive and deductive methods, Empirical and analytical techniques, Semiotics, and phenomenology, Hermeneutics, Identifying research problems in sportssociology.

PRACTICALS AND ASSIGNMENTS

- Prepare a paper on sports sociological work done in India by scrutinizing literature and compare and evaluate with the studies done at internationallevel.
- IAssessment of Group-cohesion and SocialDevelopment.

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hour duration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ^I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Jain, Rachna, (2005). Sports Sociology, New Delhi: Khel SahitayaKendra,
- 2. Maguire, J. and Young JAI, K., (2005). Theory, Sportsand Society, ElsevierLtd.

15hrs

15hrs

- 3. Singh, Bhupinder, (2004). Sports Sociology, New Delhi:Friends.
- 4. Hosue, J., Tomlinson, A., Whannel, G., (1999). Undertaking Sports– An Introduction To The Sociology And Cultural Analysis of Sport, Routbdge, NewYork.
- 5. Coaplay, Joy. J., (1997). SportsIn Society, Issues And Controversies, Mcgraw Hill International edition
- 6. Edwerd& Larry, (1973), Sociology of Sports, Illinois, the dorsipress.

Month wise Progressio n First Month- UNIT-I	Course Learning Outcomes The Students will develop the understanding and knowledge regarding Social Factorsare concerning sports in society, Social Stratification in sports, Discrimination & democratization in sports, SportsAggression & Violence in sports, Problems regarding Professionalization & children in sports.	TeachingandLearning ActivityLecture MethodsDemonstrationMethodsAssessmentMethodsPresentation	Assessment Task Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
Second Month – UNIT-II	The Students will develop the understanding and knowledge of SocialCultural factors concerning sports in society: Sports as Social Institutions, Sports as an element of society, Sports as an Element of Culture, cultural Product and development, Manipulative Socialization and coerced conformity	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/ seminar
Third Month – UNIT-III	The Students will gain knowledge of Introduction to Sports and the life cycle: Politics and sports, role of politics in sports, Role of media in sports, Economy and sports, roleofeconomyinthedevelopmentofsports and games, Violence in sports and its causes, Role of sports in the promotion of National Integration	Lecture Methods DemonstrationMeth ods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/seminar
Fourth Month – UNIT-IV	The Students will gain knowledge of Methods and methodology: Research techniques in social sciences, Positivism and field research, Inductive anddeductive methods, Empirical and analytical techniques, Semiotics, and phenomenology, Hermeneutics, Identifying research problems in sport sociology	Lecture Methods DemonstrationMeth ods Assessment Methods Presentation	Evaluation of Presentation Evaluation ofAssignment MCQ/Class-test / viva/seminar

SEMESTER - IV COURSE CODE – MPEEC 543 (v) COURSE NAME –Subject Specialization (SPORTS MANAGEMENT) MODULE IV- (EVENTS AND SERVICES MANAGEMENT)

Max. Marks-100

Time: 3hrs.

(Theory=75 Marks, Internal Assessment=25 Marks)

Objective: - To provide basic knowledge of sports management.

Learning Outcome:

- The Students will be able to understand the meaning and concept of eventmanagement.
- > The students will be able to get the knowledge about organizing sportsevents.
- > The students will get basic information about super vision and its importance in sports management.
- > The student will be able to understand different office maintenance and supervision.

Unit-I Learning Outcome:

The Students will start developing knowledge about meaning and concept of sports management. Students will start gathering the information about principles and planning of event management. Students also get a basic awareness about Checklist, rehearsal, itinerary, execution, reporting and follow-up procedures of an events. They will also gain knowledge about Organizational structure of sports events.

Unit-II Learning Outcome:

The Students will start developing practical knowledge regarding organizing intramural and extra mural programs. The students will get a basic idea about Public fund rising, writing circulars, notification, invitation and report. Students will start recognizing the roles of manager. They will also learn about Formation of Committee and Selection of Officials. Students will also have a brief idea about Planning Opening and Closing Ceremony.

Unit-III Learning Outcome:

The students will start to improve their knowledge about meaning and importance of super vision. The students will get information regarding various principles and Importance of Supervision. They will develop knowledge about techniques, duties and responsibilities of Supervision.

Unit-IV Learning Outcome:

The students will start developing awareness about Meaning, concept and importance of office management. The students will start learning about Functions and practices of office. They will also learn about Office spaces and routines

THEORY SYLLABUS:

UNIT-I:

EventManagement

- Meaning and concept of sports eventsmanagement
- Principles and Planning of SportsEvents

- > Checklist, rehearsal, itinerary, execution, reporting and follow-up procedures of anevents
- > Organizational structure of sports events

UNIT-II:

OrganizingSportsEvents

- > Organizing Intramurals and Extramuralprogramme
- > Public fund rising, writing circulars, notification, invitation and report
- Formation of Committee and Selection of Officials
- Planning Opening and ClosingCeremony

UNIT-III:

Supervision

- Meaning and objectives of Supervision
- Principles and Importance of Supervision
- Techniques of Supervision
- Duties and responsibilities of Supervision

UNIT-IV:

Office MaintenanceandSupervision

- > Meaning and concept of officemanagement
- Importance of Office
- Functions and practices ofoffice
- Office spaces androutines

Note

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 15marks.
- > Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notesquestions.

SUGGESTED READINGS

- AlkaDhawan. Arya (2019). Case Studies Mentor in Business Studies. Publishing Company, IV Edition Printed at Prince Print Process, G.T. Karnal Road, Delhi. ISBN: 978-81-8296-672-7
- 2. Bucher, C.H. (1983). Administration of Physical Education and Athletic Programmes, The

20hrs

20hrs

C.V. Mosby Company, London,

- Larry Horine, 2ND Edition, (1991). Administration of Physical Education and SportsPrograms Wim. C. BrownPublishers
- 4. M.L. Kamlesh, II updated Edition (2016). Management Concepts in Physical Education and Sport. KhelSahitya Kendra, NewDelhi.
- 5. Voltmar, B.P. et. al. (1979). The Organization and Administration of Physical Education. Prentice Hall Inc., NewJersey,
- 6. Zeigler, E.M. and Dewie, G.W. (1983). Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia,

Month wise and unit wise Progression Unit-I	Course Learning Outcomes The Students will develop knowledge about meaning and concept of sports management. Students will gather the information about principles and planning of event management. Students also get a basic awareness about Checklist, rehearsal, itinerary, execution, reporting and follow-up procedures of events. They will again knowledge about Organizational structureof sports events.	TeachingandlearningActivityILectureMethodsIIDemonstrationMethodsIIAssessmentMethodsIIPresentation	Assessment Tasks Image: Evaluation of Presentation Image: Evaluation of Assignment Image: MCQ Image: Class-test / viva/ seminar
Unit-II	The Students will develop practical knowledge regarding organizing intramural and extra mural programs. The students will get a basic idea about Public fund rising, writing circulars, notification, invitation and report. Students will be recognizing the roles of manager. They will learn about Formation of Committee and Selection of Officials. Students will have a brief idea about Planning Opening and Closing Ceremony.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The students will improve their knowledge about meaning and importance of super vision. The students will get information regarding various principles and Importance of Supervision. They will develop knowledge about techniques, duties and responsibilities of Supervision.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

Unit-IV	The students will develop awareness about	۵	Lecture	۵	Evaluation of
	Meaning, concept and importance of office management. The students will be learning	0	Methods Demonstration	0	Presentation Evaluation of
	about Functions and practices of office. They		Methods		Assignment
	will learn about Office spaces and routines		Assessment Methods	0	MCQ Class-test /
		۵	Presentation	-	viva/seminar

SEMESTER - IV COURSE CODE – MPEEC 543(vi) **COURSE NAME – Subject Specialization (KINANTHROPOMETRY IN SPORTS) MODULE-IV(SOMATOTYPING)**

Max. Marks-100

Time: 3hrs.

(Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks)

Objective: -To provide the knowledge of Fundamentals of Kinanthropometry.

Learning Outcome:

- The Students will be able to understand the concept obesity and weightmanagement.
- Π The students will be able to understand the techniques of measurement of different body parts.
- The students will be able to understand the concept of somatotype and the classification.
- Students can assess a somatotype with heath and cartermethod.

After the Completion of First Month:

The Students will develop the understanding and knowledge regarding Obesity, theories of obesity, Dieting and weight cycling, Reliable weight loss programme, Life time weight management programme for success, Kinanthropometry. Achieving healthy body weight, role of diet & exercise in achieving a healthy body weight.

After the Completion of Second Month:

The Students will develop knowledge Anthropometric of Measurements and Procedures, Equipment for anthropometric measurements, Gross Body Measurements and procedures, Length of Body Parts, Measurements and procedures, Diameters of Body Parts, Measurements and procedures, Circumferences of Body Parts, Measurements and procedures, Skinfold Thickness, Measurements andprocedures.

After the Completion of Third Month:

The Students will develop the understanding Somatotyping: Introduction, Definition of Somatotyping and Classification, Different component, Importance & scope in sports, role of somatotype in sports, Classification of Somatotype for different sports and games, The Kinanthropometric Profile.

After the Completion of Fourth Month:

The Students will develop the understanding and assess the Health & Carter Method of somatotype: Anthropometric Somatotype, Photoscopic Somatotype, anthropometric and Photoscopic somatotype, Analysis of Somatochart, plotting of body type on anthropometric chart.

.THEORY SYLLABUS:

Unit-I

- \geq Overview of Anthropometry.
- \triangleright Purpose of Anthropometrics.
- \geqslant Equipment setupProcedure.
- \triangleright Location and identification of landmarks for bodyparts.
- \triangleright Calibration Procedure: Medium large sliding caliper, small sliding breadth caliper, Stadiometer, digital weight scale, skinfoldcaliper.
- \geq EquipmentPrecautions.

30 hrs

Unit-II

- > Anthropometric Measurements and Procedures,
- Equipment for anthropometric measurements, Gross Body Measurements and procedures, Length of Body Parts, Measurements and procedures, Diameters of Body Parts, Measurements and procedures, Circumferences of Body Parts, Measurements and procedures, Skinfold Thickness.

Unit-III

- > Somatotyping: Introduction, Definition of Somatotyping
- Classification of somatotype
- Different component of somatotype
- > Importance & scope of somatotype insports
- Classification of Somatotype for different sports and games
- > The KinanthropometricProfile

Unit-IV

- > Health & Carter Method of somatotype:
 - AnthropometricSomatotype
 - PhotoscopicSomatotype
 - Anthropometric and PhotoscopicSomatotype
- Analysis of Somatochart
- > Plotting of body type on anthropometricchart.

Practical

- ✓ Skinfold Measurement (Biceps, Triceps, Subscapular, Suprailliac, Supraspinale, Front Thigh, Calf, etc.)
- ✓ Diameters or Breadths (cms): Bicristal diameter (Shoulder Breadth), Transverse chest diameter, Anteroposterior chest diameter, Femur bicondylar diameter (knee breadth), HumerusBicondylar diameter (elbowBreadth)
- ✓ Assess Energy and Nutrient intake from Diet using suitableSoftware
- ✓ Circumferences or Girths of body parts, Calf circumference, Thigh circumference, Waist circumference, Chest circumferenceetc.
- ✓ Classifying somatotype onchart
- ✓ Analysis of somatotypechart.

Note

- (a) One Theory period is equal to 1 credit of 1 hourduration.
- (b) One practical period is equal to 1 credit of 2hourduration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks 15hrs

15hrs

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- > Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Eston R., Reilly T (1996) Kinanthropometry and exercise Physiology Laboratory manual, Routledge,taylor and F group, London and NewYork
- 2. Frincisco Esparza-Ros, Raquel Vaquero- Cristobal and Michael Marfell-Jones (2019).International Standards for Anthropometric Assessment, International Society for the Advancement of Kinanthropometry.
- 3. H.S. Sodhi and L.S. Sidhu (1984) Physique and Selection of Sportsmen byPunjab Publishing House.
- 4. J.E.L. Carter (2002) the Heath-Carter Anthropometric Somatotype InstructionManual.
- 5. Sheldon, W.H. (1951) Atlas of Men: A Guide for Somatotyping the Adult Male at All Ages. Gramercy Publishing Company, NewYork.
- 6. Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach). Mohali: ANOVAPublications.

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding Obesity, theories of obesity, Dieting and weight cycling, Reliable weight loss programme, Life time weight management programme for success, Kinanthropometry. Achieving healthy body weight, role of diet & exercise in achieving a healthy body weight.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/seminar

Unit-II	The Students will develop knowledge Anthropometric of Measurements and Procedures, Equipment for anthropometric measurements, Gross Body Measurements and procedures, Length of Body Parts, Measurements and procedures, Diameters of Body Parts, Measurements and procedures, Circumferences of Body Parts, Measurements and procedures, Skinfold Thickness, Measurements and procedures.	0	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding Somatotyping: Introduction, Definition of Somatotyping and Classification, Different component, Importance & scope in sports, role of somatotype in sports, Classification of Somatotype for different sports and games, The Kinanthropometric Profile.		Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will develop the understanding and assess the Health & Carter Method of somatotype: Anthropometric Somatotype, Photoscopic Somatotype, anthropometric and Photoscopic somatotype, Analysis of Somatochart, plotting of body type on anthropometric chart.		Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

SEMESTER - IV COURSE CODE – MPEEC 543(vii) COURSE NAME –Subject Specialization (STRENGTH, CONDITIONING AND SPORTS PERFORMANCE) MODULE IV (PLANNING AND PERIODIZATION)

Max. Marks-100

Time:3hrs.

(Theory = 50 Marks + Practical = 25 + Internal Assessment = 25 Marks)

Objective: To provide the knowledge of planning, control and evaluation of training program.

Learning outcome:

- The students will able to understand the concepts of planning, typesofplanandtraining session, structure of training session.
- The students will be equipped with the knowledge of evaluation of training program and talent identification.

After the completion of First month:

The students will develop to understand the knowledge regarding the importance and basis of planning and training session

After the completion of Second month:

The student will able to understand the concepts and importance of Training cycles – micro cycle, meso cycle, annual training program. Periodization - Periodization of biomotor abilities. Periodization of strength training, Periodization of endurance, Periodization of speed, integrated Periodization, annual training plan and its phases and characteristics, planning for competition, peaking and tapering forcompetition.

After the completion of Third month:

The student will able to understand the concepts and importance of testing and Evaluation of training programme:-; scouting, recording evaluation and administration- scoring and interpretation of selectedtests

After the completion of Fourth month:

The student will able to understand the concepts and importance of Requirement for control of training programme, types of control, components of control, working documents for control of training i.e. planning documents, Performance documents, training documents, Evaluation of training programme:-Coach's, athlete's and sports scientist evaluation ; Coach's qualities and qualifications

THEORY SYLLABUS:

UNIT-I

Define planning and its importance, scope of planning, objectives of training, training system of training, Adaptation, super compensation cycle and adaptation, planning requirements, types of training plans, Principles of planning, Workout planning, importance of planning, planning requirements, types of training plan, training lesson Training session, structure of training session, fatigue and methodological guidelines for lessons.

UNITII

15hrs

Periodization of training: Training cycles – micro cycle, meso cycle, annual training program. Periodization - Periodization of biomotor abilities. Periodization of strength training, Periodization of endurance, Periodization of speed, integrated Periodization, annual training plan and its phases and characteristics, planning for competition, peaking and tapering for competition.

UNITIII

Test and Evaluation of training Programme: - Evaluation of training programme:-; scouting and recording evaluation, principles of test selection, administration- scoring and interpretation of selected tests, Coach's qualities and qualifications, Psychological training of youth and adult in sports and games forcompetition.

UNITIV

Control of training programme :- Requirement for control of training programme, types of control, components of control, working documents for control of training i.e. planning documents, Performance documents, training documents, Evaluation of training programme:-Coach's, athlete's and sports scientist evaluation ; Coach's qualities and qualifications

PRACTICAL:

Testing of all motor abilities (Speed, strength, endurance, agility, flexibility, co-ordination Balance and sports specific fitness testing in major sport).

Note

(a) One Theory period is equal to 1 credit of 1 hourduration.(b) One practical period is equal to 1 credit of 2hourduration.

30 hrs

Marking Scheme: Maximum Marks- 100 marks

Theory Examination -50Marks Practical - 25 Marks Internal Assessment - 25Marks

Practical Assessment (maximum marks 25) to be evaluated jointly by external and internal examiner in following procedure.

Demonstrationand/ortest	-10 marks
Viva-voce	-10marks
Recordfile	- 5marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 10marks.
- Out of eight questions one question should be of short notes where a student has to attempt any two questions out of total of a four short notes questions (each carrying 5marks).

REFERENCE:

1. Jay R. Hoffman, NSCA'S Guide to Program Design, Human Kinetics, 2012.

15hrs

- **2.** MickalA Clarke and et al, NASM 'S Essentials of sports performance training, National Academy of sports Medicine,2015.
- **3.** Todd Miller, NSCA'S guide to tests and assessment, NSCA,2012.
- **4.** Physiological tests of elites and athletes, Australian Institute of sports, Human kinetics, second edition,2013.
- **5.** Tudor O.Bompa, Periodization: Theory and methodology of training, Sixth edition, Human kinetics , 2017 -
- 6. Tudor O.Bompa, Periodization training for sports, Third edition, Human Kinetics, 2015.
- 7. Thomas R and Roger W.Eearle, 2015, Essentials of strength training and conditioning, Fourth Edition, HumanKinetics..

Month wise and Unit wise Progressio n	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding planning and its importance, planning requirements, types of training plans, Training session, structure of training session, fatigue and methodological guidelines for lessons	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The students'will be able to understand the concpetsof Training cycles – micro cycle, meso cycle, annual training program. Periodization - Periodization of biomotor abilities. Periodization of strength training, Periodization of endurance, Periodization of speed, integrated Periodization, annual training plan and its phases and characteristics, planning for competition, peaking and tapering for competition.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding and knowledge of testing and Evaluation of training programme:-; scouting, recording evaluation and administration- scoring and interpretation of selected tests.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will develop Concept of talent identification and its importance in Requirement for control of training programme, types of control, components	Lecture Methods Demonstration Methods Assessment Methods	Evaluationof Presentation Evaluation of Assignment

of control, working documents for control	Presentation	MCQ
of training i.e. planning documents,		Class-test / viva/
Performance documents, training		seminar
documents, Evaluation of training		
programme: -Coach's, athlete's and sports		
scientist evaluation; Coach's qualities and		
qualifications		
-		

ELECTIVE OPTIONAL GROUP-II

MASTER OF PHYSICAL EDUCATION

SEMESTER - IV

COURSE CODE – MPEEC 544 (I) COURSE NAME –ELECTIVE OPTIONAL (FUNDAMENTAL OF SPORTS SOCIOLOGY) Marks:100 Duration: 03hours

(Theory=75Marks + Internal Assessment=25 Marks)

Objective: -To provide the knowledge and understanding of Sports Sociology.

Learning Outcome:

- ^I The Students will be able to know and develop a sociological perspective on sports by learning basic sociological theories, concepts, and researchmethods.
- ^I The students will be equipped with the knowledge and importance of social development throughsports
- To understand the Sports as a social phenomenon and Demonstrate how sports influences our values, attitudes, beliefs, perceptions, behavior, culture, and society.
- ^I To guide the development of cultural aspects through sports and apply the basic principles and theories of sociology to analyze the role of sports in our everyday sociallives.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding Introduction of sociology: Meaning and definition of sociology, Nature, Scope & Methods of Sociology, Society, community, association and institutions, Meaning and definition of socialization

Unit-II Learning Outcome:

The Students will develop the understanding and knowledge of Social structure and organization: group (primary and secondary) crows and public, marriage family and kinship, social stratification, social class and caste, social mobility.

Unit-III Learning Outcome:

The Students will gain knowledge of Sports Sociology: Meaning, definitions and importance of Sports Sociology, Scope of Sports Sociology, Sports Sociology as adiscipline,

Unit-IV Learning Outcome:

The Students will gain knowledge ofSports and Society: Sports as a Social occurrence, Socialization through sports and games, Sports and mass media, Sports and politics, Effect of appearance, sociability and specialization on sports participation

THEORY SYLLABUS:

UNIT-I

Introduction of sociology: Meaning and definition of sociology, Nature, Scope & Methods of Sociology, Society, community, association and institutions, Meaning and definition of socialization

UNIT-II

Social structure and organization: group (primary and secondary) crows and public, marriage family and kinship, social stratification, social class and caste, social mobility. UNIT-III 20hrs

Introduction to Sports Sociology: Meaning, definitions and importance of Sports Sociology, Scope of Sports Sociology, Sports Sociology as a discipline,

UNITIV

Sports and Society: Sports as a Social occurrence, Socialization through sports and games, Sports and mass media, Sports and politics, Effect of appearance, sociability and specialization on sports participation

Note One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- > The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks).

SUGGESTED READINGS

- 1. IGNOU, (2007). The Study of Society Understanding Sociology, Delhi -IGNOU,
- 2. Maguire, J. and Young Jai, K., (2005). Theory, Sportsand Society, ElsevierLtd.
- 3. Jain, Rachna, (2005). Sports Sociology, New Delhi: Khel SahitayaKendra,
- 4. Singh, Bhupinder, (2004). Sports Sociology, New Delhi:Friends.
- 5. Hosue, J., Tomlinson, A., Whannel, G., (1999). Undertaking Sports– An Introduction To The Sociology And Cultural Analysis of Sport, Routbdge, NewYork.
- 6. Coaplay, Joy. J., (1997). SportsIn Society, Issues And Controversies, Mcgraw Hill International edition

20hrs

20hrs

Month wise Progressio n First Month- UNIT-I	Course Learning Outcomes The Students will develop the understanding and knowledge regarding Introduction of sociology: Meaning and definition of sociology, Nature, Scope &Methods of Sociology, Society, community, association and institutions, Meaning	TeachingandLearning ActivityILecture MethodsDemonstrationMethodsAssessmentMethodsPresentation	Assessment Task Evaluation of Presentation Evaluation Evaluation of Assignment MCQ/Class-test MCQ/Seminar Viva/seminar
Second Month – UNIT-II	and definition of socialization The Students will develop the understanding and knowledge ofSocial structure andorganization: group (primary and secondary) crows and public, marriage family and kinship, social stratification, social class and caste, social mobility.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
Third Month – UNIT-III	The Students will gain knowledge of Sports Sociology: Meaning, definitions and importance of Sports Sociology, Scope of Sports Sociology, Sports Sociology as a discipline,	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class-test / viva/seminar
Fourth Month – UNIT-IV	The Students will gain knowledge ofSports and Society: Sports asa Social occurrence, Socialization through sports and games, Sportsand mass media, Sports and politics, Effect of appearance, sociability and specialization on sports participation	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ/Class- test/viva/seminar

SEMESTER – IV

COURSE CODE - MPEEC 544 (ii) **COURSE NAME -ELLECTIVE OPTIONAL (FUNDAMENTALS OF SPORTS PSYCHOLOGY**) **Duration:03hours**

Marks:100

(Theory=75 Marks + Internal Assessment=25Marks)

Objectives: - To provide the foundation for Sports Psychology and to give a firsthand insight into the development and evolution of Psychology in the context of Exercise and Sport.

Learning Outcome:-Students will acquire the basic knowledge about Psychology of Exercise and Sports& about a few important aspects of Human mind which has a direct impact on Sportsparticipation & competition.

After Completion of First Month: -

The Students will develop the knowledge & understanding regarding Definition, Dimension Psychology in Exercise & sport, the importance of Psychology in Sports, Complexity of Behavior in Sports& Exercise.

After Completion of Second Month: -

The Students will get an insight into how Mental Health, Emotions, Depression, Anxiety, Stress and Tension effect Sports Performance and about the Methods of Sports Psychology.

After Completion of Third Month: -

The Students will gain an insight into Motivation, types of Motivation, Guidelines for building motivation and about Goal setting and its principles.

After Completion of Fourth Month: -

The Students will gain knowledge about Personality, how to measure Personality and about different Personality types.

UNIT-I

- Introduction to Sportsand ExercisePsychology. \geq
- What is sports and exercise psychology? Applied sports psychology, Sportspsychology
- Specialties, The history of sportsand exercise psychology, Importance of sportpsychology.

UNIT-II

- \geq Psychological effects of Exercise.
- Mental Health, Emotion, Mood, Depression, Anxiety, Stress and Tension. \triangleright
- \triangleright Methods of sportspsychology.
- \triangleright Introspection, observation, clinical procedures, survey methods, Psycho analysis, Interview

UNIT-III

 \triangleright Motivation.

Personality.

Definepersonality

Measuringpersonality

Why study personalitystructure.

- > Define motivation, Intrinsic and extrinsic motivation, Guidelines for buildingmotivation.
- Goal setting-Types of goals, Goal settingprinciples \geqslant

UNIT-IV

 \geq

 \geqslant

 \triangleright

20hrs

20hrs

20hrs

> Understanding personality insports.

Note

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks Theory Examination -75Marks Internal Assessment - 25Marks

Internal Assessment (Maximum Marks – 25) Presentation/ClassTest/Viva – 10Marks

r ieseinanon/Class i est/ v iva	- TOWIAIKS
Project/Assignment/Seminar	- 10Marks
Attendance	- 5Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- ^I Out of eight questions one question should be of short notes where a student has to attempt any three questions out of total of a five short notes questions (each carrying 5marks)

SUGGESTED READING:

- 1. Cox, Richard H. (1985) SportsPsychology Concepts and Application, Wm C Brown Publishers.
- 2. Gill, Diane L, Willams Lavon (2008), Psychological Dynamics of Sportsand Exercise, 3rdEdition, Human Kinetics,USA.
- 3. Weinberg Robert, Gould Daniel (2014), Foundation of Sports& Exercise Psychology, 6thEdition, Human Kinetics,USA.

REFERENCE

- 1. Gill, Diane L. (1986), Psychological Dynamics of Sport. Human Kinetics Publishers, USA.
- 2. Kmalesh. M.L (2014) Psychology in Physical Education and Sport, Khel Sahitya Khendra, NewDelhi.
- 3. Martens Raine (1987) Coaching Guide to SportsPsychology, Human Kinetics Publishers, USA.
- 4. Orlick Terry (1986) Psyching For SportsMental Training for Athletes, Leisure Presss, USA.
- 5. Shaw .D F, Corban R M (2005)Sportsand Exercise Psychology, IndiAN Edition, BIOS Scientific Publishers, USA.
- 6. Singer, Robert N (1975) Motor Learning and Human Performance, Macmillan Publishing co. NewYork.
- 7. Silva. M John, Weinberg .S Robert (1984), Psychological Foundation of Sport. Human Kinetics, USA.

Month wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
First Month	The Students will develop the knowledge & understanding regarding Definition, Dimension Psychology in Exercise & sport, the importance of Psychology in Sports, Complexity of Behavior in Sports& Exercise.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Second Month	The Students will get an insight into how Mental Health, Emotions, Depression, Anxiety, Stress and Tension effect Sports Performance and about the Methods of Sports Psychology	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Third Month	The Students will gain an insight into Motivation, types of Motivation, Guidelines for building motivation and about Goal setting and its principles.	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation of Presentation Evaluation of Assignment Practical's Class-test / viva/ seminar
Fourth Month	The Students will gain knowledge about Personality, how to measure Personality and about different Personality types	 Lecture Methods Demonstration Methods Assessment Methods Presentation 	 Evaluation Of Presentation Evaluation of Assignment Practical's Class-test / viva/ seminar

SEMESTER - IV COURSE CODE – MPEEC 544 (iii) COURSE NAME –ELLECTIVE OPTIONAL (FUNDAMENTALS OF SPORTS MANAGEMENT AND ADMINISTRATION)

Marks:100

Duration: 03hours

(Theory=75 Marks + Internal Assessment=25 Marks)

Objective: -To provide the knowledge of Management in Physical Education and Sport.

Learning Outcome:

- > The Students will be able to understand the concept of basic fundamentals of sportsmanagement.
- > The students will be able to get the knowledge about class and officemanagement.
- > To provide student with the basic skill to organized intramural and extramuralsuccessfully.
- > The student will be able to understand the important and ways of personnel management in the field of physical education and sport.

Unit-I Learning Outcome:

The Students will develop the understanding and knowledge regarding the important and significant of management in the field of physical Education and sport. The student will also be aware about the various functions and features of management. With understanding about the various styles adopted in administration, student once they get into a job will be able to handle different administrators better.

Unit-II Learning Outcome:

The Students will develop the understanding about class and office management. The ways and means of taking successful class management including personal planning and preparation for a class. Student will also be taught the needs and function of office and how to utilize itsuccessfully.

Unit-III Learning Outcome:

The Students will understand how to organize successfully both intramural and extramural programmes. Besides, student will also learn how to organize and manage a tour programme.

Unit-IV Learning Outcome:

The Students will understand about Desirable qualities of Physical Education Teacher and Sports Administrator. There will also be sufficient awareness about the important of staffing in the field of physical education and sports and the student will also have the idea on how to evaluate the personnel.

THEORY SYLLABUS:

UNIT-I

Management Concept:

- Meaning and Definition of the Terms Management and Administration.
- > Importance/Significance of Management in Physical Education and Sports.
- Features of Management.
- Functions of Management.
- Types of Administrators.

Unit-II

.

Class Management and Office Management:

- > Teacher's preparation before Class (Lesson Plan, markings of the courts, necessary equipment, suitableuniform).
- > Attendance and controlling theClass.
- > The need for Office, its location and set-up.
- > Office function and practices.

Unit-III

Intramurals and Extramural

- > Meaning and Aims of IntramuralProgramme.
- > Organizing IntramuralCompetitions.
- > Meaning and Educational Outcome of Extramurals.
- SportsTour Management (Physical Education Teacher as Manager of theTeam).

Unit-IV

Personnel Management,

- > Desirable qualities of Physical Education Teacher and SportsAdministrator.
- > Staff Co-operation and itssignificance.
- > Staffing.
- > Monitoring performance of physical education personals

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 75 Marks Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- > The examiners are required to set eight questions taking at least two questions from eachunit.
- \blacktriangleright The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of a total of a five short note questions (each carrying 5marks).

SUGGESTED READINGS

- 1. Bucher, C.H. Administration of Physical Education and Athletic Programmes, The C.V. Mosby Company, London, 1983.
- 2. Dr. S. Dheer&Radhika Kamal, Organisation and Administration of Physical Education, Friends, Publication (India),2002.

20hrs

20hrs

- 3. Larry Horine, Administration of Physical Education and Sports, Wm.C. Brown Publishers, 1991 (IInd Edition)
- 4. Voltmar, B.P. et. al. The Organization and Administration of Physical Education. Prentice Hall Inc., New Jersey, 1979.
- 5. Zeigler, E.M. and Dewie, G.W. Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia,1983.

Month wise and unit wise Progressio n	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding Management Concept about Meaning and Definition of the Terms – Management and Administration; Importance/Significance of Management in Physical Education and Sports; Features of Management; Functions of Management; Types of Administrators.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-I	Class Management and Office Management: Teacher's preparation before Class (Lesson Plan, markings of the courts, necessary equipment, suitable uniform).Attendance and controlling the Class. The need for Office, its location and set-up. Office function and practices.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	Intramurals and Extramural: Meaning and Aims of Intramural Programme.Organizing Intramural Competitions. Meaning and Educational Outcome of Extramurals.SportsTour Management (Physical Education Teacher as Manager of the Team).	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	Personnel Management: Desirable qualities of Physical Education Teacher and Sports Administrator.Staff Co- operation and its significance. Staffing. Monitoring performance of physical education personnel's	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluation of Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar

MASTER OF PHYSICAL EDUCATION SEMESTER - IV COURSE CODE – MPEEC 544 (iv) COURSE NAME –ELLECTIVE OPTIONAL (FUNDAMENTALS OF TRAINING THEORY)

Marks:100

Duration: 03hours

(Theory=75 Marks Internal Assessment=25 Marks)

Objective: To provide the basic knowledge of sports training and theory.

Learning outcome:

The students will able to understand the concepts of sports training and its application to sedentary and elites. The students will be equipped with the knowledge of periodization and identify the talents for various sports and games.

Unit-I Learning Outcome:

The students will develop to understand the general knowledge regarding training theory and its objectives.

Unit-II Learning Outcome:

The student will able to understand the concepts and importance of periodization, workout plan and training cycles.

Unit-III Learning Outcome:

The student will able to understand the concepts and importance of preparation of training and its variables, means and method to develop various motorqualities.

Unit-IV Learning Outcome:

The student will able to understand the concepts and importance of talent identification and its importance in sports and games, key stage in talent identification and development process, talent identification in individual and team sports, structure of talent identification, development of templates of talent identification in different sports.

THEORY SYLLABUS:

UNIT-I:

Basic terms of training theory and methodology: General terminology, introduction to basic terms (Fitness, Training, conditioning, competition, performance), relation between fitness, condition, physical status and performance, Scope of training, objectives of training, system of training, Principles of Sports training,.

UNITII:

Periodization- meaning and types of periodization, aim and content of periods- preparatory, competitive and transition period. Planning and training session, principles of planning, Workout planning, importance of planning, planning requirements, types of training plan, training lesson. Training cycles – micro cycle, meso cycle, annual training program.

UNITIII:

Preparation for training and variables of training: Volume, Intensity, density, Load, frequency, repetition, overtraining, over reaching and acute fatigue, Strength- Means and methods of strength

20hours

20 hours

20 hours

210

development, Speed- Means and methods of speed development, Endurance- Means and methods of endurance development, Flexibility- Means and methods of flexibility, development and coordinative abilities- Means and methods of coordinative development for peak performance and maintenance of fitness for generalpopulation.

UNITIV:

20 hours

Talent identification: Definition of talent identification and its importance in sports and games, key stage in talent identification and development process, role of nature and nurture in the development of elite players, potential predictors of performance, influences on sports talent, talent identification in individual and team sports, structure of talent identification, development of templates of talent identification in differentsports.

Note:

One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 75 Marks Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks - 25)

Presentation/ Class Test/Viva - 10 Marks Project/Assignment/Seminar - 10 Marks Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

- ^I The examiners are required to set eight questions taking at least two questions from eachunit.
- ^I The students have to answer any five questions out of the total of eightquestions.
- Each question shall be of a maximum of 15marks.
- Out of eight questions one question should be of short notes where a student has to attempt any three questions out of a total of a five short note questions (each carrying 5marks).

Reference:

- 1. Tudor O.Bompa, Periodization: Theory and methodology of training, Sixth edition, Human kinetics , 2017 -
- 2. Jay R. Hoffman, NSCA'S Guide To Program Design, Human Kinetics, 2012.
- 3. Tudor O.Bompa, Periodization training for sports, Third edition, Human Kinetics, 2015.
- 4. Ian Jeffreys, Developing speed, ,NSCA, Sports performances series, Human kinetics2013
- 5. Alter J Micheal, Science of Flexibility, Third edition, Human Kinetics, 2004.
- 6. Mark Kovacs, dynamic stretching, Ulysses press, USA,2010.
- 7. Ben Reuter, Developing endurance, NSCA, Sports performance series, Human kinetics, 2012.
- 8. Physiological tests of elites and athletes, Australian Institute of sports, Human kinetics, second edition,2013.

Month wise and Unit wise Progression	Course Learning Outcomes	Teaching and learning Activity	Assessment Tasks
Unit-I	The Students will develop the understanding and knowledge regarding General terminology, introduction to basic terms (Fitness, Training, conditioning, competition, performance), relation between fitness, condition, physical status and performance, Scope of training, objectives of training, system of training, Principles of Sportstraining,.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-II	The students will be able to understand the concepts of Periodization- meaning and types of periodization, aim and content of periods- preparatory, competitive and transition period. Planning and training session, principles of planning, Workout planning, importance of planning, planning requirements, types of training plan, training lesson.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-III	The Students will develop the understanding and knowledge of Preparation for training and variables of training:Volume, Intensity, density, Load, frequency, repetition, overtraining, over reaching and acute fatigue, Strength- Means and methods of strength,speed,enduranceandflexibility development,	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
Unit-IV	The Students will develop Concept of talent identification and its importance in sports and games, key stage in talent identification and development process, role of nature and nurture in the development of elite players, potential predictors of performance, influences on sports talent, talent identification in individual and team sports, structure of talent identification, development of templates of talent identification in different sports.	Lecture Methods Demonstration Methods Assessment Methods Presentation	Evaluationof Presentation Evaluation of Assignment MCQ Class-test / viva/ seminar
