

POST GRADUATE DIPLOMA IN FITNESS MANAGEMENT (ONE YEAR: TWO SEMESTER COURSE) W.E.F. 2022

DIBRUGARH UNIVERSITY

RULES AND REGULATIONS

Preamble: Fitness management is an interdisciplinary field that intermingle Anatomy, Physiology, Kinesiology & Biomechanics, exercise science, diet and nutrition fitness studies and etc. with practical knowledge and efficiency. People are becoming aware day by day for maintaining their health and fitness aiming to living comfortable and attractive life longer than ever before. PG Diploma in Fitness Management (PGDFM) one year (Two Semester) designed meant for preparing fitness management expert providing the individuals blended knowledge and capability of fitness education and practical skills in order to effectively counsel and motivate clients. They will be considered as qualified Certified Fitness Trainer for fitness centre, games and sports team or Personal Trainer.

The programme comprises of compulsory theory as well as practical courses and internship.

1. Introduction:

Short Title, Definition and Commencement:

- (a) These Regulations shall be called the Dibrugarh University Regulations for PG Diploma in Fitness Management, hereinafter referred to as the PGDFM programme.
- (b) Department: The term 'Department' is used to mean a department of Dibrugarh University or a Centre established for the purpose or that of a College affiliated to the Dibrugarh University with reference to the subject approved by Dibrugarh University.

- (c) These Regulations shall be effective from the academic session 2022-23.
- (d) Extent of Application: The Regulations shall be applicable to the students enrolled for the **PGDFM programme** of Dibrugarh University.
- (e) The PGDFM programme shall be of duration of one year of 2 semesters comprising **six academic months**. However, the students shall be permitted to complete the programme requirements within a maximum of two years from the date of admission to the programme.
- (f) There shall be at least 90 working days in each academic session exclusive of period of examination and admission etc.
- (g) There shall be minimum 35 (thirty five) working hours in a week (five days/week).
- (h) The programme will run as per the University Academic Calendar.
- (i) Any change in the Academic Calendar/Schedule may be made by the Academic Planning Committee whenever necessary.
- **2. Intake:** There shall be intake capacity of 20 (twenty) students.

3. Eligibility for admission:

Graduate with in any discipline from recognized university with a minimum of 50% mark in aggregate. Preference shall be given to the candidate who studied physical education as compulsory/elective subject and having participation at least in minimum Inter- District/School Competitions in Yoga/Sports and Games as recognized by the AIU/IOA/SGFI/Govt. of India.

Relaxation in the percents of marks in the qualifying examination and in the reservation of the seats for SC/ST/OBC and other categories shall be as per the rules of the Central Govt. /State Govt. whichever is applicable

4. Admission Procedure:

a) Newspaper/Website notice inviting application for admission into the **PGDFM** programme shall be issued by the Registrar or by any person authorized for the purpose at least one month in advance from the date of admission. Each applicant

- shall have to submit within the prescribed date his/her application with requisite documents as indicated.
- **b)** The admission shall be made on merit on the basis of marks in the qualifying examination or in the Entrance Examination (written test, physical fitness test and marks obtained in the qualifying examinations) or any other selection process as per the policy of the University/State Govt.
- c) The candidates seeking admission are expected to be free from any physical disability /defects, posses sound health and are medically fit. Qualified candidates will have to submit medically fitness certificate issued by recognized doctor.
- **d)** Age for admission to the **PGDFM programme** shall not be more than 35 years on ^{1st} July of the admission years.
- **e)** Relaxation of 3 years in case of higher limit of age may be granted for outstanding sportsperson, coaches and applicants duly deputed by the institutions/ organizations recognized by the University.
- f) Married woman is also eligible for admission. In case, a woman candidate conceives during the course, she will have to discontinue her studies. She can join back in the next academic session.

6. Course of Programme:

- **a.** The medium of instruction and examination shall be English
- b. The Credit System: All programmes shall run on Credit System (CS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.
- c. Course: The term course usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. A course may be designed to comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.

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

Theory Courses: Part A

Practicum and Practice Teaching: (Part B)

7. Course Structure

Scheme of Teaching and Examination

Semester - I

Part A: Theoretical Course							
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks	
	С	ore Cou	ırse				
PGDFMT101	Fitness & Wellness I	4	4	40	60	100	
PGDFMT102	Anatomy and Physiology	4	4	40	60	100	
PGDFMT103	Fitness Management I	4	4	40	60	100	
PGDFMT104Yoga Therapy & Massage		4	4	40	60	100	
	Part-B Practical Course						
PGDFMP10	1 Fitness Training and conditioning	8	4	40	60	100	
	Total	24	20	200	300	500	

Semester – II

Part-A: Theoretical Course								
Course Code	Title of the Papers	Total Hours		Internal Marks	External Marks	Total Marks		
Core Course								
PGDFMT201	Fitness and Wellness II	4	4	40	60	100		
PGDFMT202	Sports Medicine & Injury Management	4	4	40	60	100		

PGDFMT203	Fitness Management I	4	4	40	60	100		
	Part-B Practical Course							
PGDFMP201	Training and conditioning	8	4	40	60	100		
PGDFMP202	Project/Field Study and Practice Teaching	8	4	40	60	100		
Total		28	20	200	300	500		

8. Attendance:

Student must have 85% of attendance in each course for appearing the examination.

9. Examinations:

- i. There shall be examinations at the end of each semester, for first semester in the month of December: for second semester in the month of June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent regular examinations.
- ii. A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

10. Pattern of Question Papers:

Question Papers shall have five questions (with option for each) corresponding to four units of each theory course.

PGDFM.: Format of Question Paper for 4 Units.

Each question paper shall have 6 questions. The pattern will be as follows:

Question No.	Description	Unit	Marks
1	Answer in detail (Long Question) with option	From Unit 1	10
2	Answer in detail (Long Question) with option	From Unit 2	10
3	Answer in detail (Long Question) with option	From Unit 3	10
4	Answer in detail (Long Question) with option	From Unit 4	10
5	Short Answer Type (Short notes)	From all unit	10
6	M.C.Q. Type Questions (10 out of 10 Que.)	From all unit	10
		Total	60

11. Evaluation:

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

One Test	15 Marks
Seminar / Quiz	10 Marks
Assignments	10 Marks
Attendance	5 Marks
Total	40 Marks

Attendance shall be taken as a component of continuous assessment, even though the students should have minimum 85% attendance in each course.

The fractions of the marks allotted for the attendance shall be:

% of attendance	Allotted marks
85	0 marks
86-88	1 marks
89-91	2 marks
92-94	3 marks
95-97	4 marks
98-100	5 marks

In addition to continuous evaluation component, the end semester examination, which will be written type examination of **at least 3 hours duration**, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 40:60. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end-semester practical examination.

12. Minimum Passing Standard:

The minimum passing standard for CIA (Continuous Internal Assessment) and External Examinations shall be 50%, i.e. 16 marks out of 40 marks and 24 marks out of 60 marks respectively for theory courses. The minimum passing for both CIA & external examination shall be 50%, i.e. 20 marks out of 40 and 30 marks out of 60 marks for the practical courses.

13. Grading:

Once the marks of the CIA (Continues Internal Assessment) and SEA (Semester End Assessment) for each of the courses are available, both (CIA and SEA) will be added. The marks, thus obtained for each of the courses will then be graded as per details provided in **SI. No. 16** from the first semester onwards the average performance within any semester from the first semester is indicated by Semester Grade Point Average (SGPA) while continuous performance (including the performance of the previous semesters also) starting from the first semester is indicated by Cumulative Grade Point Average (CGPA). These two are calculated by the following formula:

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

$$CGPA = \frac{\sum_{j=1}^{N} SGPA_{j}}{N}$$

Where Ci is the Credit earned for the course is in any semester; Gi is the Grade point obtained by the student for the course i and n number of courses obtained in that semester; $SGPA_j$ is SGPA of semester j and N number of semester. Thus CGPA is

average of SGPA of all the semesters starting from the first semester to the current semester.

14. Classification of Final Results:

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

15. Award of the PGDFM Diploma:

A candidate shall be eligible for the award of the degree of the PGDFM only if he/she has earned the minimum required credit.

16. Letter Grades and Grade Points:

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

Percentage	Grade Point	Letter Grade	Description	Classification of final result
85 & above	8.5-10.0	0	Outstanding	First class with Distinction
70-84.99	7.0-8.49	A+	Excellent	First class with distiliction
60-69.99	6.0-6.99	А	Very Good	First Class
55-59.99	5.5-5.99	B+	Good	Higher Second Class
50-54.99	5.0-5.49	В	Above	Second Class
			Average	

40-49.99	4.0-4.99	С	Average	Pass Class
Below 40	0.0	F	Fail/ Dropped	Dropped
	0	AB	Absent	

17. Grade Point Calculation

Calculation of Semester Grade Point Average (SGPA) and Credit Grade Point (CGP) and declaration of class for PGDYED Programme.

The credit grade points are to be calculated on the following basis:

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

Example - I

Marks obtained by Student in course CC101 = 65/100

Percentage of marks = 65 %

Grade from the conversion table is = A

Grade Point =
$$6.0 + 5 (0.99/9.99)$$

= $6.0 + 5 \times 0.1$
= $6.0 + 0.5$
= 6.5

The Course Credits = 04

Credits Grade Point (CGP) = $6.5 \times 04 = 26$

The semester grade point average (SGPA) will be calculated as a weighted average of all the grade point of the semester courses. That is Semester grade point average (SGPA) = (sum of grade points of all five courses of the semester) / total credit of the semester as per example given below:

SEMESTER-1

		Marks out of 100		Grade	Credit Grade
Courses No.	Credit	(%)	Grade	Point	point
PGDFMT101	4	65	А	6.5	26
PGDFMT102	4	60	Α	6	24
PGDFMT103	4	62	Α	6.2	24.8
PGDFMT104	4	57	B+	5.7	22.8
PGDFMP101	4	55	B+	5.5	22
	20				119.6

Examples: Conversion of marks into grade points

PGDFMT101 $65 = 60 + 5 = 6.0 + 5 \times (0.99 / 9.99) = 6.0 + 5 \times 0.1 = 6.0 + 0.5 = 6.5$

PGDFMT102 60 = 6.0

PGDFMT103 $62 = 60 + 2 = 6.0 + 2 \times (0.99/9.99) = 6.0 + 2 \times 0.1 = 6.0 + 0.2 = 6.2$

PGDFMT104 $57 = 55 + 2 = 5.5 + 2 \times (0.49 / 4.99) = 5.5 + 2 \times 0.1 = 5.5 + 0.2 = 5.7$

PGDFMP101 55 = 5.5

SEMESTER GRADE POINT AVERAGE (SGPA) = Total Credit Grade Points = 119.6/20 = 5.98

SGPA Sem. I = 5.98

At the end of Semester-1

Total SGPA = 5.98

Cumulative Grade Point Average (CGPA) = 5.98/1 = 5.98

CGPA = 5.98, Grade = B+, Class = Higher Second Class

SEMESTER-2

		Marks out of			Credit Grade
Courses No.	Credit	100 (%)	Grade	Grade Point	point
PGDFMT201	4	83	A+	8.3	33.2
PGDFMT201	4	76	A+	7.6	30.4
PGDFMT203	4	59	B+	5.9	23.6
PGDFMP201	4	81	A+	8.1	32.4
PGDFMP202	4	78	A+	7.8	31.2
	20				150.8

SGPA Sem. II = 7.54

At the end of Semester-2

Total SGPA for all the two semesters = 13.52

Cumulative Grade Point Average (CGPA) = 13.52/2 = 6.76

CGPA = 6.76, Grade = A, Class = First Class

Note:

- (1) SGPA is calculated only if the candidate passes in all the courses, i.e. gets minimum C grade in all the courses.
- (2) CGPA is calculated only when the candidate passes in all the courses of all the previous and current semesters.

- (3)The cumulative grade point average will be calculated as the average of the SGPA of all the semesters continuously, as shown above.
- (4) For the award of the class, CGPA shall be calculated on the basis of:
 - (a) Marks of each Semester End Assessment And
 - (b) Marks of each Semester Continuous Internal Assessment for each course.

The final class for PGDFM Degree shall be awarded on the basis of last CGPA (grade) from all the semester examinations.

18. Grievance Redressal Committee:

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

19. Revision of Syllabi:

- a. Syllabi of every course should be revised if necessary.
- Revised Syllabi of each semester should be implemented in a sequential way.
- c. In courses, where units / topics related to governmental provisions, regulations or laws, that change to accommodate the latest developments, changes or corrections are to be made consequentially as recommended by the Academic Council.
- d. All formalities for revisions in the syllabi should be completed before the end of the semester for implementation of the revised syllabi in the next academic year.
- e. During every revision, up to twenty percent of the syllabi of each course should be changed so as to ensure the appearance of the students who have studied the old (unrevised) syllabi without any difficulties in the examinations of revised syllabi.
- f. In case, the syllabus of any course is carried forward without any revision, it shall also be counted as revised in the revised syllabi.

PGDFM Detail Syllabus

SEMESTER -I

Theory Courses

PGDFMT101: FITNESS & WELLNESS-I

Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- To understand basic concept of fitness and wellness.
- Student will understand different factors affecting fitness management and sports training.
- To understand concept and different phases of systematic periodized training.
- To understand basic concept of Nutrition and balanced diet. They will able to know how to determine ideal body weight of an individual according to their health status and professional requirement.

- Student will able understand the modern concept of Fitness and Wellness.
- Student will employ the knowledge concept of holistic health through fitness and wellness.
- It will orient students towards positive healthy lifestyle.
- Students will realize and apply the Fitness and wellness management technique.
- Student will able to prepare Periodized training programme.

Unit	Topic	Contact Hours	Marks
I	Introduction to Fitness & Wellness Meaning, definition & Importance of Fitness & Wellness Components of Physical Fitness & Wellness Principles of Fitness & Wellness Factors affecting Fitness & Wellness 	14	15
II	 Introduction of Sports Training Definition , Aim, Objective &Principles of Sports Training Warming up and Cooling down (Meaning, 	14	15

	Importance, types &Methods) o Load & Principles of Load o Training Variables(Intensity, Volume, Load, Frequency & Density)Duties during testing – Duties after testing.		
	Bio-motor Components and Periodization		
III	 Types, Factors, Methods for Developing Strength, Speed, Endurance & Flexibility Concept of Periodization & Formulation of Periodization Program Phases of Periodization (Preparatory, Competition & Transition Phases) Training Cycle & its Types (Micro, Meso, Macro Cycle) 	16	15
	Sports Nutrition and Exercise Performance		
IV	 Management Basic concept of food, Essential Nutrition & Balanced Diet Sports Nutrition: Concept & Pre Exercise/ Competition, during Exercise/Competition and post Exercise/ Competition meal 	14	15
	 Concept of Obesity and Weight Management, Diet Plan, Concept of Weight Loss, Weight Gain and Fad Diet. Calorie Calculation- BMI & Calculation of Dietary Requirements 		

- o Dick, W. F. (1980). *Sports training principles*. London: Lepus Books.
- Jensen, R. C.& Fisher, A.G. (1979). Scientific basis of athletic conditioning. Philadelphia: Lea and Fibiger, 2ndEdn.
- Matvyew, L.P. (1981). Fundamental of sports training. Moscow: Progress Publishers.
- Singh, H. (1984). Sports training, general theory and methods. Patiala: NSNIS.
- o Uppal, A.K., (1999). Sports Training. New Delhi: Friends Publication.
- Majeed Allauddin., M.S. Pasodi. (2018). Fitness and Life Style Management.
 New Delhi: Khel Sahitya Kendra publishers and distributors
- Anushree Anil M. (2018). Sports Medicine and Health Management. New Delhi: Khel Sahitya Kendra publishers and distributors
- Mike Bates. (2008). Health fitness management: a comprehensive resource for managing and operating programs and facilities (2 ed.). USA: Library of Congress Cataloging-in-Publication Data.
- Deepak Bachewar. (2020). Sports Medicine. New Delhi: Khel Sahitya Kendra publishers and distributors
- Kavitha Sangangouda. M. (2018). Sports Nutrition. New Delhi: Khel Sahitya Kendra publishers and distributors
- Sandeep M. Chawak (2018). Sports Training. New Delhi: Khel Sahitya

Kendra publishers and distributors

PGDFMT102: HUMAN ANATOMY & PHYSIOLOGY Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- To enable the learner to understand the basic structure and function of human body.
- To acquire the knowledge organization of human body and its regulation.
- To understand support and movements system of human body.

Learning Outcomes:

• Student will come to know the various basic concept of basic anatomical structure of human body parts and organs.

Unit	Topic	Contact Hours	Marks
I	General Anatomy and Physiology Introduction – Scope of Anatomy & Physiology Cell (Microscope Structure and Function) Tissues and its types Brief Introduction of Systems of Human Body	14	15
II	 Brief Introduction of Muscle-Skeletal System Bones- Composition, Function, Classification Joints- Definition, Classification Muscles- Classification Origin & Insertion of Major Muscles. 	14	15
III	Cardio Vascular System	14	15
IV	 Digestive System & Endocrine System Structure and Function of Digestive System Brief Introduction of Endocrine System, Endocrine Glands, (pituitary, Thyroid, Adrenal) 	16	15

- J.P. Sharma (2021). Exercise Physiology. New Delhi: Khel Sahitya Kendra publishers and distributors
- Gerard J. Tortora, Bryan Derrickson (2017). Principles of Anatomy and Physiology. USA: John Wiley and Sons Publishers.
- Mahaboobjan A. (2021). Kinesiology and Biomechanics. New Delhi: Khel Sahitya Kendra publishers and distributors
- Benu Gupta (2021). Text Book of Physical Education Health Education, Anatomy and Physiology. *New Delhi: Khel Sahitya Kendra publishers and distributors*
- Sujay Bisht (2020). Anatomy and Physiology. . New Delhi: Khel Sahitya Kendra publishers and distributors

- Anatomy and physiology for Nurses –Evelyn Pearce
- Textbook of Medical Physiology-Arthur C. Guyton
- Human Physiology C.C. Chatterjee
- D. (1979). A Christine, M. D., (1999). *Physiology of Sports and Exercise*.USA: Human Kinetics.
- Conley, M. (2000). Bioenergetics of Exercise Training.
- David, R. M. (2005). Drugs in Sports, (4th Ed). Routledge Taylor and Francis Group.
- Gupta, A. P. (2010). *Anatomy and Physiology*. Agra: SumitPrakashan.
- Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B. Saunders.
- Hunter, M. dictionary for physical educators.
- H. M. Borrow & R. McGee, (Eds.), A Practical approach to measurement in Physical Education (pp. 573-74). Philadelphia: Lea &Febiger.
- Karpovich, P. V. (n.d.). *Physiology of Muscular Activity.* London: W.B. Saunders Co.
- Lamb, G. S. (1982). Essentials of Exercise Physiology. Delhi: Surject Publication.
- Moorthy, A. M. (2014). Anatomy, Physiology and Health Education. Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). Physiology of Exercise. St. Louis: The C.V. Mosby Co.
- Pearce, E. C. (1962). Anatomy and Physiology for Nurses. London: Faber & Faber Ltd.
- Singh, S. (1979). *Anatomy and Physiology and Health Education*. Ropar: Jeet Publications.

PGDFMT103: Fitness Management- I Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- To understand basic concept of fitness management and role of a fitness manager.
- To understand techniques of applying First-aid and other safety protocol while training.
- To understand different fitness centre and layout management.
- To assess and test fitness of different fitness components affecting health and performance.

- Student will able to understand different function of fitness manager.
- Student will know managerial skills and responsibilities of Fitness instructor.
- Student will able to assess different parameters of training of bio-motor abilities.

Unit	Topic	Contact Hours	Marks
	Introduction to Fitness Management		
_	 Meaning, Definition of Fitness Management 		
I	 Aim & Objective of Fitness Management 	14	15
	 Function of Management (planning, Organizing, 		
	Leading & Controlling)		

	 Role of Manager in Fitness Industry 		
	Manager Skills, Roles, Instructor Professional		
	Responsibilities & Concerns		
	 Managerial Knowledge based Skills & Roles 	14	15
	 Professional Responsibilities (Training & 		
	Certification, Medical Clearance & Pre-exercise		
II	testing 7 First Aid Training / Certification		
	 Instructor Etiquette, Issues & consideration, how 		
	to train female clients		
	 Instructor Concerns (Exercise Danger Signs, 		
	Symptoms of Over Training)		
	Fitness & Gym Management		
	 Current issues/ Latest Trends in Fitness & 		
	Wellness (Cross fit, Pilates, Kettlebell		
	 Ideal Fitness Centre Setup(Size, Cost, types, 	16	15
III	zones Areas)		
	 Various equipment and facilities of weight training, 		
	cardiac fitness and free hand exercise &		
	Responsibility of Service Desk		
	 Purchasing & Maintaining of Health Fitness 		
	Equipment		
	Fitness Assessment and Testing		
	 Introduction and Benefits of Fitness Assessments 		
	 Fitness components 		
IV	 Fitness assessments (Resting Values, Body 	14	15
	Composition, BMI, Skinfold, Fatfold, Muscular		
	strength Endurance & Flexibility Assessments &		
	prescribe Form)		
	 Concept of body Image & Self Esteem 		

- Essentials of strength training and conditioning / National Strength and Conditioning Association; G. Gregory Haff, N. Travis Triplett, editors. -- Fourth edition.
- Complete guide to fitness & health. | American College of Sports Medicine's complete guide to fitness and health, Second edition. | Champaign, IL: Human Kinetics, [2017]
- Concepts of physical fitness: active lifestyles for wellness / Charles B. Corbin ... [et al.]—14th ed.
- Baechle, TR, and Earle, RW. Learning how to manipulate training variables to maximize results. In Weight Training: Steps to Success. 4th ed. Champaign, IL: Human Kinetics, 177-188, 2011.
- Ajay Pralhadrao K. (2020). Management of Physical Educatio, Sports & Games.
 New Delhi: Khel Sahitya Kendra publishers and distributors
- Jaswinder S. (2020). Sports Management. New Delhi: Khel Sahitya Kendra publishers and distributors

- Neeraj Pratap S. (2019). Essential of Physical Education. *New Delhi: Khel Sahitya Kendra publishers and distributors*
- Vijaya Lakshmi (2018). Physical Fitness. New Delhi: Khel Sahitya Kendra publishers and distributors
- M.A. Bari (2018). Test, Measurement & Evaluation in Physical Education. New Delhi: Khel Sahitya Kendra publishers and distributors
- Bessesen, D. H. (2008). Update on obesity. J ClinEndocrinol Metab.93(6), 2027-2034
- Butryn, M.L., Phelan, S., &Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
- Giam, C.K & The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
- Mcglynn, G., (1993). *Dynamics of fitness.* Madison: W.C.B Brown.
- Sharkey, B. J.(1990). *Physiology of fitness*, Human Kinetics Book.
- Nutritive value of Indian food:- National Institute of Nutrition (NIN)
- Nutrition and dietetics with Indian case studies: Shubhangini A. Joshi, Mc-Grow Hill Publication

PGDFMT104: YOGA & NATURO- YOGIC THERAPY Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- To give an orientation to Yoga.
- To know different forms of Yoga.
- To discus about various yogic practices.
- To impart the knowledge of Yoga in treatment of diseases.
- To give knowledge on natural therapies.

- They will know about the effects of asanas, pranayamas bandhas and mudras on human body.
- They will know about different cleansing processes (shatkarmas)
- They will able to understand different yogic practices for stress management and hypo-kinetic diseases.
- Students will understand about naturo-yogic therapy.

Unit	Topic	Contact Hours	Marks
	Yoga and Historical Background of Yoga		
	 Introduction of Yoga & Historical Tradition of Yoga 		
I	 Concept and Principles of Yoga Therapy 	14	15
	 Meaning, Definition and Types of Yoga Therapy 		
	 Yogic Diet – Role of Yogic diet in Yoga Therapy 		
	 Meaning and Definition and Basic Principles of 		
	Naturopathy		

	Introduction & types of Alternative Therapy		
	Philosophy of Nature Cure (Panch Maha Bhoota The agent)		
	Theory)		
	Asanas and Pranayamas		
	Meaning and Definition of Asana. Types and Classification of Asanas Maditative		
	Types and Classification of Asanas: Meditative	16	15
	asanas, Cultural Asanas, Relaxative Asanas	10	15
11	 Concept of Pranayama, Panchaprana, Location & 		
"	Function of Prana.		
	Types of Pranayama – Nadishodhana Pranayama – Suryahhadi Pranayama		
	Pranayama, Suryabhedi Pranayama,		
	Chandrabhedi Pranayama, Ujjayi Pranayama,		
	Sheetali Pranayama, Shitkari Pranayama &		
	Bhramri Pranayama. Cleaning Process (shatkriya), Mudra and Bandha,		
	Nadi and Chakras		
III	 Concept of Shatkriya, Meaning, types and 	14	15
•••	Principles of Cleaning Process	14	13
	 Meaning, Definition and Types of Mudra and 		
	Bandha		
	Concept, Definition and Types of Meditation		
	Meaning and Concept of Nadi and Chakras Management and Varia Management		
	Yogic approach of treatment and Yogic Management		
IV	 Fasting – Definition, Introduction & Classification 	14	15
IV	of Fasting	14	15
	Therapeutic Benefits of Fasting Street and its Management through Yang		
	Stress and its Management through Yoga Vagio Management of Disheting and Obseits		
	Yogic Management of Diabetics and Obesity Yogic Management of Asthma and Propolitics		
	Yogic Management of Asthma and Bronchitis Yogic Management of Hyper tension and		
	Yogic Management of Hyper tension and Coronary Artory Disease		
	Coronary Artery Disease		

- Rahul Kushwah (2021). Fundamentals of Yogic Practices A Complete Guide on Yoga. *New Delhi: Khel Sahitya Kendra publishers and distributors*
- Shushan Bhate Sr. (2021). Role of Different Schedules of Yoga in Managing Health Related Fitness Problems in Obese People. *New Delhi: Khel Sahitya Kendra publishers and distributors*
- Mahadevi Wali (2019). Yoga for healthy being. . New Delhi: Khel Sahitya Kendra publishers and distributors
- K.C. Shekar (2019). Yoga for Health. New Delhi: Khel Sahitya Kendra publishers and distributors
- Yogic therapy Swami Sivananda Saraswati of Umchal Ashram
- Yogic Therapy- Swami Kuvalayananda and Dr. S.L.Vinekar
- New Horizon of Modern Medicine-Dr.H.R.Nagendra
- Everybody's Guide to Nature Cure Harry Benjamin
- Your diet in health and disease Harry Benjamin

- Yogic therapy- Yogacharya Sundaram
- A Matter of Health Dr. P.Krishna Raman
- Protective Diet in heath and disease K.L.Mjkhopadhyay
- A Complete Handbook of nature cure Dr. h.K. Bakhru
- Yoga Mimamsa, a quqrtely research Journal published by Kaivalyadham, Lonavla.

PGDFMP101: Practical

Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Unit	Contents	Contact hours	Marks
	 Current issues/Latest Trends in Fitness & Wellness Responsibility of Service Desk 		
Unit I	 Various equipment and facilities of weight training, cardiac fitness and free hand exercise Gym Equipment set up Ideal, Fitness Centre Setup (Size, Cost, types, zones Area); Introduction of classification of training zones: dry zone, Wet Zone, Cardiac Zone, Strength zone, etc. Maintaining & Purchasing Health Fitness Equipment 	20	15
Unit II	 Fitness assessment; health history form, risk factor analysis, designing fitness test and PAR-Q form, workout cards etc. Fitness Assessments: Resting values, Body Composition, BMI, Skinfold, Fatfold, Height, and Weight. 	20	15
Unit III	Asana Pranayama	20	15
Unit IV	Cleaning Process (shatkriya),Mudra and Bandha,Nadi and Chakras	20	15

Semester II

PGDFMT201: FITNESS & WELLNESS-II

Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- Introduction to Weight / Resistance training.
- Designing training programme for various muscle groups and motor components.
- Fitness training for specific group population.
- Introduction to different Supplements and Drugs.

- Students will know Different principles of training.
- Students will able to determine factors affecting training.
- Students will come to know various substance and their effects in human

	body.		
Unit	Topic	Contact Hours	Marks
I	Introduction to Weight/Resistance Training & Program Introduction & Significance of Weight Training Principle (FITT & SMART) of Weight Training Do's & Don't of Weight Training	12	15
II	 Weight training Exercises, Methods & Design of Training Program Weight training for the major muscles – Neck, shoulder, chest, Abdominal, Back, Hip and lower limbs Weight Training Methods (Weiders Principles of Strength training) Cardiovascular Training – Concept, Benefits, Breathing Technique, Calculate Target Heart Rate Zone,(Concept & method of Aerobic, Anaerobic fitness program me) Core Stability Training – Concept, Importance, List 	16	15
III	of Core Group Muscles and Various Levels. Fitness For Specific Group Fitness for Weight Loss and Weight Gain Fitness for special population (Hypertension, Cardiac & Diabetic Patients) Feminine Fitness – Pre and Post natal Exercise Plan Fitness for Senior Citizens	14	15
IV	Erogenic Aids: Drugs and Supplements Effects (Positive & Negative) Concept of Ergogenic Aids & Pharmalogical Agents Hormonal Agents & Physiological Agents Nutritional Agents: Supplements & their effects	16	15

- William A., Jacob J. & Jeniffer K. (2012). Basic of Strength & Conditioning Manual. The National Strength and Conditioning Association (NSCA) Manual.
- K.C. Shekar (2018). Weight Training. New Delhi: Khel Sahitya Kendra publishers and distributors
- Umesh J. Rathi (2018). Guide to Sports Nutrition. New Delhi: Khel Sahitya Kendra publishers and distributors
- Anushree Anil M. (2018). Sports Medicine and Health Management. New Delhi: Khel Sahitya Kendra publishers and distributors
- Sandeep S. Sokhi (2018). Fitness, Health & Nutrition. New Delhi: Khel Sahitya

Kendra publishers and distributors

- Essentials of strength training and conditioning / National Strength and Conditioning Association; G. Gregory Haff, N. Travis Triplett, editors. -- Fourth edition.
- Complete guide to fitness & health. | American College of Sports Medicine's complete guide to fitness and health, Second edition. | Champaign, IL: Human Kinetics, [2017]
- Concepts of physical fitness: active lifestyles for wellness / Charles B. Corbin ... [et al.]—14th ed.
- Baechle, TR, and Earle, RW. Learning how to manipulate training variables to maximize results. In Weight Training: Steps to Success. 4th ed. Champaign, IL: Human Kinetics, 177-188, 2011.
- Bessesen, D. H. (2008). Update on obesity. J ClinEndocrinol Metab.93(6), 2027-2034
- Butryn, M.L., Phelan, S., &Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
- Giam, C.K & The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
- Mcglynn, G., (1993). *Dynamics of fitness.* Madison: W.C.B Brown.
- Sharkey, B. J.(1990). *Physiology of fitness*, Human Kinetics Book.
- Nutritive value of Indian food:- National Institute of Nutrition (NIN)
- Nutrition and dietetics with Indian case studies: Shubhangini A. Joshi, Mc-Grow Hill Publication

PGDFMT202: SPORTS MEDICINE & INJURY MANAGMENT Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- This will help the students to understand the need and importance of sports medicine, physiotherapy and rehabilitation techniques and process.
- It will help the students to understand and facilitate the process of recovery from injury, illness or disease to normal condition.
- It will enable the learners in acquiring proper adequate rehabilitation programme.

Learning Outcomes:

 Student can be able to understand the importance and objectives of Sports Medicine, Physiotherapy and rehabilitation programme in the field of Sports and Fitness.

Unit	Topic	Contact Hours	Marks
	Sports Medicine and Physiotherapy		
	 Meaning and Definition of Sports Medicine 		
	 Aims and objectives of Sports Medicine 		
	 Need and importance of Sports Medicine. 	12	15
	 Meaning and concept of Physiotherapy 		

	Need and importance of physiotherapy		
	Guiding principle of physiotherapy		
	Management of Injury		
	 Introduction to Posture, Causes and its Effects of 		
	poor Posture		
	 Correction of Common Postural Defects Through 	14	15
II	Exercises		
	 Sports Injury: Meaning and Classification of Sports Injury 		
	Common Sports Injuries and their diagnosis:		
	Causes, Sign and Symptoms and Remedial		
	Exercises		
	 Principles of safety in sports; RICE, PRICE. 		
	Brief Introduction to CPR (Cardio Pulmonary)		
	Resuscitation)		
	First Aid & Doping		
	 Meaning and principles of first aid 		
III	Qualities of first aider	14	15
	Types of Bandaging		
	 Doping: Meaning and Classification of doping, 		
	effects of doping.		
	 Dope test: NADA and WADA 		
	Athletic Care and Rehabilitation		
	 Meaning of Athletic Care and Rehabilitation 		
	 Meaning and classification of Therapeutic 		
IV	Exercises: Active and Passive Exercise	18	15
	 Therapeutic modalities: Exercise therapy, Electro 		
	Therapy, Thermo Therapy, Hydro-Therapy		
	Massage Therapy		
	 Meaning and Classification of massage 		
	Techniques and their effects, uses, application		
	on Body Parts,		
	Principles of Massage		

- Christine. M. D.. (1999). Physiology of sports and evercise. USA: Human Kinetics.
- Conley, M. (2000). Bioenergetics of exercise training. .
- David, R. M. (2005). Drugs in sports, (4th Ed). Routledge Taylor and Francis Group.
- Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New I)elhi, 2003.
- Khanna- G.L., (1990). Exercise physiology and sports medicine. Delhi, Lucky Enterprises.
- Methew, D.K. & Fox. E.I.. (1971). Physiological basis of physical education athletics.
- Philadelphia: W Saunders Co.
- Pandey, P.K., (1987). Outline of sports medicine, New Delhi: J.P. Brothers Pub.

- Williams, J. G. P. (1962), Sports medicine. London: Edward Arnold Ltd.
- Sinku K. Singh (2018). Sports Injuries and Rehabilitations. New Delhi: Khel Sahitya Kendra publishers and distributors
- Ghorpade S. Sonajirao (2018). Sports Medicine, Physiotherapy and Rehabilitation. New Delhi: Khel Sahitya Kendra publishers and distributors
- Anju Ambast (2018). Prevention and Treatment of Sports Injuries. New Delhi: Khel Sahitya Kendra publishers and distributors
- Hoshiyar Singh (2017). Athletics Care and Rehabilitation (New Syllabus). New Delhi: Khel Sahitya Kendra publishers and distributors
- Parveen Kumar (2012). Introduction to Exercise Science. New Delhi: Khel Sahitya Kendra publishers and distributors

PGDFMT203: FITNESS MANAGEMENT- II

Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Learning Objectives:

- To impart knowledge of maintaining client and personnel management skills.
- To impart knowledge of different strategies of marketing and promotion in fitness industry.
- To evaluate Fitness parameters.

- Students will understand different management skills in Fitness industry.
- Students will know skills of client handling and employer management.

Unit	Topic	Contact Hours	Marks
	Business & Leadership skill		
I	 Managing a Fitness Facility (Personal Skill, Component of a Successful Business and Necessary Skills) Personnel Management (Hiring, Managing Staff, Benefits and Bonus, Training, Leadership and Communication) 	14	15
	 Directing a Fitness Program (roles & Responsibilities) Program Planning 		
	Human Resource Management in Fitness		
II	 Meaning, definition, nature & functions of Human Resource Management Importance & steps of Instructor training in Human Resource Management Human Resource Audit I – Formation Management model (Administrative & Scientific Model) 	14	15
	Marketing, Promotion, Advertising, Public Relation in		
III	Fitness		

	 Concept of Marketing, Promotion, Adverting & Sales Responsibilities of Marketing, Promotion, Adverting & Sales Marketing and Promotion Steps for business 	14	15
	 Steps/Procedure of Public Relation 		
	Fitness Evaluation		
IV	 Definition, Goal & Model of Evaluation Placement of Employers, Transfer of Employers, Leaving an Organization with Grade Health Fitness Evaluation Model Use of Evaluation Model 	16	15

- Broyles, F. J. &Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach.* New York: Prentice hall Inc.
- Bucher, C. A. (1983). *Administration of Physical Education and Athletic programme*.St. Louis: The C.V. Hosby Co.
- Earl, F. Z,& Gary, W. B. (1963). *Management competency development in sports and physical education*. Philadelphia: W. Lea and Febiger.
- Kozman, H.C. Cassidly, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
- Pandey, L.K. (1977). *Methods in Physical Education*. Delhi: Metropolitan Book Depo.
- Voltmer, E. F. &Esslinger, A. A. (1979). *The organization and administration of Physical Education*. New York: Prentice Hall Inc.

Practical PGDFMP201: Practical Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks

Unit	Contents	Contact hours	Marks
Unit I	 Demonstration & Performance of various fitness training exercises and drills. Calculation of Load and various training intensities while training. 	20	20
	Calculation of dietary Requirement and Preparation of personal Diet chart		
Unit II	 First aid and injury management techniques; PRICE, CPR 	20	20
	Massage techniques		
	Relaxation techniques; Autogenic training, progressive muscular relaxation training,		
	biofeedback, therapeutic modalities, relaxation through meditation		

Unit III	 Fitness Testing protocols of : Strength, Endurance, Speed coordination, flexibility, body composition, Calculation of BMI Physiological Test: Testing of Blood Pressure, lungs capacities, respiratory testing: heart rate, vo2max, 	18	20				
PGDFMP202 : PRACTICUM OF FITNESS TRAINING Marks: Internal: 40 Marks; External Marks: 60 Marks; Total 100 Marks							
Unit	Contents	Contact hours	Marks				
Unit I	 Demonstration & Performance of various fitness training exercises and drills. Preparation of training Plan(Annual Training plan, Macro Cycle plan, Micro Cycle plan, Meseo cycle plan, session plan), Personal training plan. Preparation of videos and movement analysis. 	20	20				
Unit II	Group Project/Field Study	20	20				
Unit III	Practice Teaching: For the purpose of practice teaching the students will have to organize a minimum one week non-residential fitness Camp where each student will be assigned to prepare and provide training (with proper training plan) on different aspects fitness training.	18	20				

GRADING SYSTEM

The following scale of grading system shall be applied to indicate the performance of students in terms of letter grade and grade points as given bellow:

Percentage of marks	Letter	Grade	Description of	Classification of
obtained in a course (in	grade	point	performance	final result
semester plus end				
semester)				
85 & above	0	8.5-10.0	Outstanding	First class with
70-84.99	A ⁺	7.0-8.49	Excellent	Distinction
60-69.99	Α	6.0-6.99	Very Good	First Class
55-59.99	B+	5.5-5.99	Good	Higher Second Class
50-54.99	В	5.0-5.49	Above Average	Second Class
40-49.99	С	4.0-4.99	Average	Pass Class
Below 40	F	0.0	Fail/ Dropped	Dropped
	AB		Absent	

Calculation of Grading

SGPA (Semester Grade Point Average)

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

CGPA (Cumulative Grade Point Average)

$$CGPA = \frac{\sum_{j=1}^{N} SGPA_{j}}{N}$$

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

The CGPA earned by a candidate may be converted to equivalent percentage of marks by multiplying the CGPA by 10 (ten).