

**MAHARAJA'S COLLEGE, ERNAKULAM (Govt.  
Autonomous -Affiliated to MG University, Kottayam)**

**UNDERGRADUATE PROGRAMMES**

**(HONOURS)SYLLABUS**

**MCE-UGP (Honours)**

**(2024AdmissionOnwards)**



**Faculty : Physical Education and Sports Sciences**

**BoS : Physical Education**

**Programme : Multi-Disciplinary Courses**

Maharaja's College, Ernakulam  
(Govt .Autonomous)  
Park Avenue Road, Marine Drive  
Ernakulam-682011, Kerala, India

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# Preface

The Department of Physical Education at Maharajas Government Autonomous College, Ernakulam, has consistently been at the forefront of promoting health and wellness through education. In alignment with the Kerala Government's FYUG (Four Year Undergraduate Program) initiative, we are thrilled to present the Multi-Disciplinary Course (MDC) that now includes specialized content for aspiring fitness trainers.

This course is a significant step forward in our mission to provide comprehensive education that meets the evolving demands of the fitness industry. By integrating fitness trainer content into the MDC, we offer students a unique blend of theoretical knowledge and practical skills. This program is designed to equip students with the expertise needed to excel as professional fitness trainers, combining elements of exercise science, nutrition, anatomy, and wellness coaching.

Our approach ensures that students are not only well-versed in the technical aspects of fitness but are also prepared to inspire and guide others in leading healthier lives. Through this course, students will engage in hands-on training, experiential learning, and collaborative projects that reflect real-world scenarios in the fitness industry.

We are confident that this program will empower our students to become competent and confident fitness professionals, capable of making a positive impact in the lives of individuals and communities. The inclusion of fitness trainer content in our MDC underscores our commitment to providing education that is relevant, practical, and aligned with the needs of today's dynamic world. We look forward to witnessing the growth and success of our students as they embark on this rewarding journey.

Reena Joseph

Head of the department  
Department of Physical Education  
Maharajas College Ernakulam

## Board of Studies in Physical Education

SI NO	Name of the Member	Official Address	Status in BoS
1	Reena Joseph	Head of the department Department of Physical Education Maharajas College Ernakulam	Chair Person
2	Dr. Jayakumar	Assistant Professor Department of Physical education Victoria College Palakkad	External Expert
3	Dr. Anish Babu P.V.	Assistant Professor Department of Physical Education, RIT Engineering College Kottayam	External Expert
4	Ashish Joseph	Assistant Professor Department of Physical education, ST Thomas College Pala	University Nominee
5	Dr. Satheesh Kumar K.S.	VO2 Sports & Fitness Solutions Pvt Ltd, Koramangala, Bangalore	Expert from Industry
6	Dr. Renjith T A	Head Coach Hyderabad FC Reserve team & Former U-16 Indian Team Assistant Coach	Alumna
7	Dr. Aju T.G	Assistant Professor & HoD Department of Physical Education, Govt. College Munnar	External Member
8	Anty T J	Assistant Professor & HoD Department of Physical Education, St Alberts College Ernakulam	External Member
9	Nisha Philip	Assistant Professor & HoD Department of Physical Education, St Teresas College Ernakulam	External Member
10	Shreekanth S K	Assistant Professor, Department of Physical Education, Maharajas College Ernakulam	Internal Member

## Curricular Structure of the MCE–UG (Honours) Programme

No.	CourseType	No.of Courses	Total Credits
1	Foundation: Multi–disciplinary Courses (MDC)	3	9

## Programme Outcomes (POs)

PO1	Critical Thinking and Analytical Reasoning
PO2	Scientific Reasoning and Problem Solving
PO3	Multidisciplinary/Interdisciplinary/Trans disciplinary Approach
PO4	Communication Skills
PO5	Leadership Skills
PO6	Social Consciousness and Responsibility
PO7	Equity, Inclusiveness and Sustainability
PO8	Moral and Ethical Reasoning
PO9	Networking and Collaborating
PO10	Lifelong Learning

## Evaluation Scheme

Components	Marks (3 Credit)
Continuous Internal Assessment (CIA)	25
End Semester Examination	50
Total	75

# Syllabus Index

## SEMESTER I

Course code	Title of the Course	Types of the Course	Credit	Hours/week	Hour Distribution/week			
					L	T	P	O
MCE1MDCPHE100	Foundations of Fitness training and Exercise Science	MDC	3	4	2	0	2	0

## SEMESTER II

Course Code	Title of the Course	Types of the Course	Credit	Hours/week	Hours distribution/ Week			
					L	T	P	O
MCE2MDCPHE100	Exercise Sciences & Fitness Training Program Designing	MDC	3	4	2	0	2	0

## SEMESTER III

Course Code	Title of the Course	Types of the Course	Credit	Hours/week	Hours distribution/ Week			
					L	T	P	O
MCE3MDCPHE200	Integrative Approaches to Health & Wellness	MDC	3	4	2	0	2	0

L-Lecture, T- Tutorial, P-Practical/Practicum, O- Others

# SEMESTER I



Maharajas Govt. Autonomous College Ernakulam

Program						
Course Name	Foundations of Fitness Training and exercise science					
Type of Course	MDC					
Course Code	MCE1MDCPHE100					
Course Level	100					
Course Summary	This course equips learners of all ages to get the knowledge of foundations of fitness training and exercise Science to achieve their fitness goals.					
Semester	I	Credits			3	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		2		1		60
Pre-requisites, if any	Should be able to do Physical Activity					

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Basic knowledge of Health fitness	K	1
2	Basic knowledge about Health fitness industry	K&C	1
3	Implementing fitness testing procedures to evaluate strength, endurance, flexibility, and cardiovascular health.	K&C	2
4	Explore and implement diverse assessment strategies to evaluate student performance and progress in Fitness	A&E	2
5	Basic Awareness about sports training	A& E	3



6	Basic knowledge about Anatomy	KEUAnA &C	1
7	Awareness about fitness protocols	An,C, I&E	5
8	Engage in reflective practice and continuous professional development to stay current with trends and research in fitness pedagogy.	S,AP I	4
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Module	Units	Course description	Hrs	CO No.
<b>1 Introduction to Health and Fitness</b>	1.1	<b>Introduction to Health and Fitness</b> Definition of Health and Fitness Dimensions of Health and Fitness Physical Health Mental Health Social Health Role of a Trainer Duties of trainer,	2Hrs	1
	1.2	<b>Types of Fitness, Definition with Examples</b> Cardiovascular Fitness Strength Training Flexibility Balance and Coordination Functional Fitness High-Intensity Interval Training (HIIT) Mind-Body Fitness	2hrs	1
	1.3	<b>Practical General Fitness</b>	5Hrs	
	2.1	<b>Initial Assessment for Fitness Trainers</b> Definition of Assessment Concept of Initial Assessment Purpose of initial Assessment Components of initial	2Hr	2&3

<p style="text-align: center;"><b>2</b></p> <p style="text-align: center;"><b>Introduction To Assessment In fitness training</b></p>		assessment		
	2.2	<p><b>Assessment Protocols</b> Health and Medical History Questionnaire PAR-Q (Physical Activity Readiness Questionnaire) Interview Physical Measurements Body Composition Vital Signs</p>	2Hrs	4, 5
	2.3	<p><b>Execution of Initial Assessment Preparation</b> Warm-Up Testing Sequence: Safety Recording Results Interpreting Results</p>	2Hrs	4
	2.4	<b>Practical: Assessment of Fitness Components</b>	12Hrs	
<p style="text-align: center;"><b>3</b></p> <p style="text-align: center;"><b>Anatomical Concept for a fitness trainer</b></p>	3.1	<p><b>Definition of Anatomy</b> Components of Musculoskeletal system Functions of Musculo skeletal system</p>	2 Hrs	5 & 6
	3.2	<p><b>Major Bones of the Human Body</b> Axial Skeleton Skull Vertebral Column Rib Cage Appendicular Skeleton Shoulder Girdle Arm Bones Pelvic Girdle Leg Bones</p>	3 Hrs	3 & 6
	3.3	<p><b>Major Muscle Groups</b> Upper Body Muscles Chest Muscles Back Muscles Shoulders muscles. Arms muscles. Core Muscles</p>	3Hrs	1 & 7

		Abdominal Muscles Lower Back Muscles Lower Body Muscles Hips and Gluteus Muscles Thighs Muscles Calves Muscles		
	3.4	<b>Major Joints their types &amp; functions</b> Movements: Flexion, Extension, Abduction, Adduction, Rotation, Circumduction. Shoulder Joint (Gleno-humeral Joint) Elbow Joint Hip Joint Knee Joint Ankle Joint	3Hrs	8
<b>4</b> <b>Foundations of sports training</b>	4.1	<b>Introduction to Sports Training</b> Principles of Training Specificity, Overload, Progression Reversibility, Individuality Type of Exercise: - Isotonic, Isometric and Isokinetic Exercises	3Hrs	3,5 & 7
	4.2	<b>Periodization in Training</b> Definition Phases of Periodization: Preparatory Phase Pre-Competitive Phase Competitive Phase Transition Phase	3Hrs	1
	4.3	<b>Training Methods</b> Aerobic Training Anaerobic Training Interval Training Strength Training Flexibility Training Plyometric Training	3Hrs	1
	4.4	Practical : General Fitness Training	8 Hrs	
<b>5</b> <b>Teaching Specific Content Practical</b>	5.1	Fitness Program Organizing Zumba, Aerobics, Calisthenics	5 hr	2 & 4

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<b>Teaching and Learning Approach</b>	<b>Classroom Procedure (Mode of transaction)</b> Lecture Method, Discussion Method Demonstration Method Seminars Assignments			
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> Continues Comprehensive Assessment (CCA) Total Mark-25 Practical CCA-15 mark, (Presentation, individual involvement) Theory CCA -10 marks (MCQ- 1x10questions =10 marks)			
	<b>End Semester Examination (ESE)Total Mark-50</b> <b>Mode – MCQ , Time – 1 Hours</b>			
	<b>Question Type</b>	<b>No. of Questions to be answered</b>	<b>Answer word/page limit</b>	<b>Marks</b>
	<b>Section A- Multiple Choice questions</b>	<b>30 out of 32</b>	<b>MCQ</b>	<b>30x1=30</b>
	<b>Section B- Multiple Choice questions</b>	<b>10 out of 12</b>	<b>MCQ</b>	<b>10x2=20</b>
			<b>Total</b>	<b>50 marks</b>

## REFERENCES

Huber, M., Knottnerus, J. A., Green, L., van der Horst, H., Jadad, A. R., Kromhout, D., ... & Smid, H. (2011). How should we define health? *BMJ*, 343, d4163.

<https://doi.org/10.1136/bmj.d4163>

World Health Organization. (1948). Constitution of the World Health Organization. *American Journal of Public Health and the Nation's Health*, 38(11), 1354-1361.

<https://doi.org/10.2105/AJPH.38.11.1354>

American College of Sports Medicine. (2013). *ACSM's guidelines for exercise testing and prescription* (9th ed.). Lippincott Williams & Wilkins.

Howley, E. T., & Thompson, D. L. (2017). *Fitness professional's handbook* (7th ed.). Human Kinetics.

Sassatelli, R. (2010). *Fitness culture: Gyms and the commercialisation of discipline and fun*. Palgrave Macmillan.

IHRSA. (2021). *The 2021 IHRSA global report: The state of the health club industry*.

International Health, Racquet & Sportsclub Association. Retrieved from <https://www.ihrsa.org/publications/the-2021-ihrsa-global-report/>

American Council on Exercise. (2014). *ACE Personal Trainer Manual: The Ultimate Resource for*

Fitness Professionals (5th ed.). San Diego, CA: American Council on Exercise.

Coburn, J. W., & Malek, M. H. (2012). NSCA's Essentials of Personal Training (2nd ed.). Champaign, IL: Human Kinetics.


Biel, A. (2014). Trail Guide to the Body: How to Locate Muscles, Bones and More (5th ed.). Boulder, CO: Books of Discovery.

Thompson, C. W. (2015). The Complete Human Body: The Definitive Visual Guide (2nd ed.). New York, NY: DK Publishing.

Bompa, T. O., & Haff, G. G. (2009). Periodization: Theory and Methodology of Training (5th ed.). Champaign, IL: Human Kinetics.

Baechle, T. R., & Earle, R. W. (Eds.). (2008). Essentials of Strength Training and Conditioning (3rd ed.). Champaign, IL: Human Kinetics.

## SEMESTER II

	<b>Maharajas Govt. Autonomous College Ernakulam</b>
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Program						
Course Name	Exercise Sciences and Fitness Training Program Designing					
Type of Course	MDC					
Course Code	MCE2MDCPHE100					
Course Level	100					
Course Summary	This course equips learners to assist trainees of all ages to get healthier and achieve their fitness goals through structured training program.					
Semester	II	Credits			3	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		2		1		60
Pre-requisites, if any						

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Knowledge of fitness training Program	K	1
2	Designing personalized fitness programs based on assessment data.	C	1
3	Understanding Periodization in fitness training	K&C	2
4	Creating tailored exercise programs for various populations,	A&E	2

5	Understanding spotting	A& E	3
6	Understanding the ethical responsibilities and professional standards of a fitness trainer.	K E U An A&C	6
7	Awareness about spotting protocols	An, C, I&E	5
8	Developing the ability to think critically about fitness-related problems and devise evidence-based solutions.	S, AP&I	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Module	Units	Course description	Hrs	CO No.
1 Introduction to Integrative Exercise Physiology & Effect of Exercise on different body system	1.1	<b>Fundamentals of Exercise Physiology</b> What is Exercise Physiology? Understand the impact of exercise on the Cardiovascular system	1Hr	1
	1.2	Understand the impact of exercise on the respiratory system	1hrs	1
	1.3	Understand the impact of exercise on the muscular system Impact of exercise on skeletal system	2hrs	1
	1.4	Understand the impact of exercise on the nervous system Impact of exercise on Endocrine system	2hrs	2 & 4
	1.5	Understand the impact of exercise on the Digestive system Understand the Impact of exercise on immune system	2Hrs	2&3
	2.1	<b>Introduction to fitness program design</b> Components of Training Program: Warm-up, Main workout, Cooling down. Exercise Selection Progression Techniques Increasing Resistance: Gradually increasing weight or resistance. Adding Complexity: Progressing from basic to	2Hrs	4, 5

2 Fitness Program Design for Fitness Trainers:  A Practical Approach		advanced exercises. Technical Terms Volume, Intensity: Frequency, sets, repetitions, and Rest		
	2.2	<b>Periodization and Program Organization</b> Periodization Principles Macro-cycles, Meso-cycles, and Micro- cycles: Understanding different phases of training. Preparatory, Competitive, and Transition Phases: Structuring training cycles for peak performance. Program Organization Weekly Schedule: Planning workouts throughout the week. Split Routines: Designing programs targeting specific muscle groups on different days. Balance and Recovery: Incorporating rest days and active recovery sessions.	2Hrs	4, 5 & 6
	2.3	<b>Practical Application and Program Adjustment</b> Practical Session: Designing Sample Programs Group Work: Designing programs for hypothetical clients based on assessment results. Feedback and Adjustment: Reviewing and refining programs based on peer feedback and instructor guidance.	2Hrs	4
	2.4	Implementation and Coaching Techniques Implementation Strategies Demonstrations: Proper form and technique for exercises. Cueing and Coaching: Providing clear instructions and corrections. Adaptations: Modifying exercises for different fitness levels and abilities	2Hrs	3 & 6
	2.5	Practical: Training with equipment in Gym	10	
3 Fitness Training Program Design	3.1	<b>Exercise Techniques &amp; Factors Affecting Training Programs</b> Strength Training Techniques, Types of Strength Training & Core Strength training programs	2Hrs	8
	3.2	<b>Endurance Training Techniques</b> , Types of Endurance Training, Advantages of Endurance training	2hrs	3,5 & 7



	3.3	<b>Speed Training Techniques</b> , Types of Speed Training, Advantages of Speed training	2hrs	1
	3.4	<b>Flexibility Training Techniques</b> , Types of Flexibility Training, Advantages of Flexibility training	2Hrs	1
	3.5	<b>Training Coordinative Abilities</b> Types of Coordinative Abilities, Advantages of training Coordinative Abilities.	2 Hrs	1
	3.6	<b>Practical Training in Gym</b>	10	
<b>4 Rest, Recovery and spotting in Training</b>	4.1	<b>Recovery in Training</b> Role of recovery in training, Need and Importance of Recovery	1hrs	2 & 4
	4.2	<b>Spotting</b> Introduction, Definition, Need and Importance of spotter.	1hrs	2&3
	4.3	<b>Duties and Responsibilities of Spotter</b> Duties of a spotter, Roles and responsibilities of a Spotter, Spotting protocols in gym	1hrs	4, 5
	4.4	<b>Key aspects of spotting in gym</b> Spotting during bench press, spotting during squat, sporting during dead lift, Spotting during other events	1hrs	4, 5 & 6
<b>5 Practical's Teachers Specific</b>	5.1	Zumba, aerobics & Calisthenics	10	8

<b>Teaching and Learning Approach</b>	Classroom Procedure (Mode of transaction) Lecture Method, Discussion Method Demonstration Method Seminars Assignments																		
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>Continues Comprehensive Assessment (CCA) Total Mark-25</b> <b>Practical CCA-15 mark, (Presentation, individual involvement)</b> <b>Theory CCA -10 marks (MCQ- (MCQ- 1x10questions =10 marks)</b>																		
	<b>End Semester Examination (ESE)Total Mark-50</b> <b>Mode – MCQ , Time – 1 Hours</b> <table border="1" data-bbox="485 633 1316 1041"> <thead> <tr> <th data-bbox="485 633 695 734">Question Type</th> <th data-bbox="695 633 906 734">No. of Questions to be answered</th> <th data-bbox="906 633 1115 734">Answer word/page limit</th> <th data-bbox="1115 633 1316 734">Marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="485 734 695 871">Section A- Multiple Choice questions</td> <td data-bbox="695 734 906 871">30 out of 32</td> <td data-bbox="906 734 1115 871">MCQ</td> <td data-bbox="1115 734 1316 871">30x1=30</td> </tr> <tr> <td data-bbox="485 871 695 1008">Section B- Multiple Choice questions</td> <td data-bbox="695 871 906 1008">10 out of 12</td> <td data-bbox="906 871 1115 1008">MCQ</td> <td data-bbox="1115 871 1316 1008">10x2=20</td> </tr> <tr> <td data-bbox="485 1008 695 1041"></td> <td data-bbox="695 1008 906 1041"></td> <td data-bbox="906 1008 1115 1041"><b>Total</b></td> <td data-bbox="1115 1008 1316 1041"><b>50 marks</b></td> </tr> </tbody> </table>			Question Type	No. of Questions to be answered	Answer word/page limit	Marks	Section A- Multiple Choice questions	30 out of 32	MCQ	30x1=30	Section B- Multiple Choice questions	10 out of 12	MCQ	10x2=20			<b>Total</b>	<b>50 marks</b>
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Section B- Multiple Choice questions	10 out of 12	MCQ	10x2=20																
		<b>Total</b>	<b>50 marks</b>																

**REFERENCES**(Following any standard reference format like APA, MLA, Chicago....)

Powers, S. K., & Howley, E. T. (2017). Exercise Physiology: Theory and Application to Fitness and Performance (10th ed.). New York, NY: McGraw-Hill Education.

Wilmore, J. H., Costill, D. L., & Kenney, W. L. (2015). Physiology of Sport and Exercise (6th ed.). Champaign, IL: Human Kinetics.

Baechle, T. R., & Earle, R. W. (Eds.). (2008). Essentials of Strength Training and Conditioning (3rd ed.). Champaign, IL: Human Kinetics.

Fleck, S. J., & Kraemer, W. J. (2014). Designing Resistance Training Programs (4th ed.). Champaign, IL: Human Kinetics.

Delavier, F. (2010). Strength Training Anatomy (3rd ed.). Champaign, IL: Human Kinetics.

Rippetoe, M., & Baker, A. (2012). Starting Strength: Basic Barbell Training (3rd ed.). Wichita Falls, TX: The Aasgaard Company.

Clarkson, P. M., & Hubal, M. J. (2002). Exercise-induced muscle damage in humans. American Journal of Physical Medicine & Rehabilitation, 81(11), S52-S69.

Zatsiorsky, V. M., & Kraemer, W. J. (2006). Science and Practice of Strength Training (2nd ed.). Champaign, IL: Human Kinetics.

Thompson, W. R. (Ed.). (2021). ACSM's Resources for the Personal Trainer (6th ed.). Philadelphia, PA: Wolters Kluwer.

Jones, D. A., & Round, J. M. (1990). Skeletal Muscle in Health and Disease: A Textbook of Muscle Physiology. Manchester, UK: Manchester University Press.

Magee, D. J., Manske, R. C., Zachazewski, J. E., Quillen, W. S., & James, E. W. (2019). Athletic and Sport Issues in Musculoskeletal Rehabilitation. St. Louis, MO: Elsevier.

Baechle, T. R., & Earle, R. W. (Eds.). (2008). NSCA's Essentials of Personal Training (2nd ed.). Champaign, IL: Human Kinetics.

## SEMESTER III



### Maharajas Govt. Autonomous College Ernakulam

Programme						
Course Name	Integrative Approaches to Health and Wellness					
Type of Course	MDC					
Course Code	MCE3MDCPHE200					
Course Level	200					
Course Summary	This course equips learners to assist trainees of all ages to get healthier and achieve their fitness goals through integrative approaches.					
Semester	III	Credits			3	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		2		1		60
Pre-requisites, if any						

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Injury Prevention and Management	K	1
2	Identifying common exercise-related injuries and implementing strategies to prevent them.	C	1
3	Applying first aid and CPR in emergency situations.	K&C	2

4	Assessment Strategies: Modifying exercises to accommodate clients with existing injuries or limitations.	A&E	2
5	Developing effective communication skills for interacting with clients and other health professionals.	A&E	3
6	Maintaining confidentiality and professional boundaries	KEUAnA &C	6
7	Managing the business aspects of personal training, including client acquisition and retention.	An,C, I&E	5
8	Professional Development: Engage in reflective practice and continuous professional development to stay current with trends and research in fitness pedagogy.	S,AP<I	4
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

### COURSE CONTENT

Module	Units	Course description	Hrs	CO No.
<b>1 Yoga for fitness trainer</b>	1.1	Introduction to Yoga Definition, History, Development, Objectives and Miss concepts of Yoga	2hrs	1
	1.2	Yoga Practices Types Of Yoga Yoga & Fitness Principles of yoga	1hrs	1
	1.3	Sukshma Vyayama and Sthoola Vyayama (Exercise before yoga practice), Surya Namaskara (12 Positions), Breathing Pattern. Limbs of Yoga, Pranayama	2hrs	1
	1.4	<b>Asanas</b> <b>Standing Asanas</b> 1. Mountain Pose (Tadasana)	3Hrs	2 & 4

		<p>2. Tree Pose (Vrksasana)  3. Warrior I Pose (Virabhadrasana)  4. Triangle Pose (Trikonasana)  5. Half Moon Pose (Ardha Chandrasana)</p> <p><b>Sitting Asanas</b></p> <p>1. Easy Pose (Sukhasana)  2. Lotus Pose (Padmasana)  3. Seated Forward Bend (Paschimottanasana)  4. Hero Pose (Virasana)  5. Fire Log Pose (Agnistambhasana)</p> <p><b>Lying Asanas</b></p> <p>1. Corpse Pose (Savasana)  2. Bridge Pose (Setu Bandhasana)  3. Fish Pose (Matsyasana)  4. Plow Pose (Halasana)  5. Shoulder Stand (Sarvangasana)</p>		
	1.5	<b>Practical Yoga</b>	10hrs	
<b>2 Module Introduction to Rehabilitation</b>	2.1	Introduction to rehabilitation Meaning and objectives of Rehabilitation, Role or rehabilitation in recovery of a sports person, Philosophy of rehabilitation in sports	2hrs	2&3
	2.2	Components of Rehabilitation in sports injury Principles of Rehabilitation, Stages of Rehabilitation, Components of Rehabilitation	2hrs	4, 5
	2.3	Stages of rehabilitation Classification of stages of rehabilitation, Stages of recovery and rehabilitation.	2Hrs	4, 5 & 6
	2.4	Recovery and Rehabilitation Definition of recovery and rehabilitation, Relationship between recovery and rehabilitation.	1Hrs	4
	2.5	Various Rehabilitation Techniques Therapeutic Exercises for major	2 hrs	5 & 6

		muscle and bone injuries, Manual therapy for muscle injury, Sports specific rehabilitation		
	2.6	Fitness Therapy ( Practical)	5hr	4&5
<b>3 Nutrition &amp; Fitness</b>	3.1	Nutrition & Fitness Definition of Nutrition, Importance of Nutrition, Factors influencing Malnutrition problems	2hrs	7&8
	3.2	Key Nutrients for fitness Vitamins and Minerals, Major Vitamins and Minerals, Sources of Major Various Vitamins and Minerals. Role of Vitamins and minerals in fitness development	2hrs	8
	3.3	Nutrition for specific fitness goals Muscle Building, Weight Loss, Performance enhancement.	2hrs	5,7&8
	3.4	Pre- and post-Training Nutrition Need and Importance of Pre and Post Meals, Role of Pre and post meals in performance	2hrs	5,7&8
	3.5	Nutrition Deficiency disorders Reasons for Nutrition Deficiency disorders. Factors effecting Nutrition Deficiency disorders, Major Nutrition Deficiency disorders.	2hrs	4&7
	3.6	Nutrition and Fitness (practical) Weight loss & weight gain	5hrs	2,5 &7
<b>4 Fitness Entrepreneurship</b>	4.1	<b>Key Areas of Entrepreneurship for Fitness Trainers</b> Business Planning Creating a Business Plan: Defining Your Niche: Location: Staffing: Technology Integration Professional Development Business Scaling	1Hr	1,2,5

	4.2	Financial Management Budgeting: Pricing Strategies Financial Tracking:	2hrs	1,2,3
<b>5 Teacher Specific</b>	5.1	Basic Kalaripayattu techniques for fitness trainer Basic Steps of kallari Basic stretching of kallari Basic posters of kallari Punching & kicking techniques in kallari	10 hrs	2,4,7&8

<b>Teaching and Learning Approach</b>	Classroom Procedure (Mode of transaction) Lecture Method, Discussion Method Demonstration Method Seminars Assignments Project			
<b>Assessment Types</b>	<b>MODE OF ASSESSMENT</b> <b>Continues Comprehensive Assessment (CCA) Total Mark-25</b> <b>Practical CCA-15 mark, (Presentation, individual involvement)</b> <b>Theory CCA -10 marks (MCQ- (MCQ- 1x10questions =10 marks)</b>			
	<b>End Semester Examination (ESE) Total Mark-50</b> <b>Mode – MCQ , Time – 1 Hours</b>			
	<b>Question Type</b>	<b>No. of Questions to be answered</b>	<b>Answer word/page limit</b>	<b>Marks</b>
	<b>Section A- Multiple Choice questions</b>	<b>30 out of 32</b>	<b>MCQ</b>	<b>30x1=30</b>
<b>Section B- Multiple Choice questions</b>	<b>10 out of 12</b>	<b>MCQ</b>	<b>10x2=20</b>	
		<b>Total</b>	<b>50 marks</b>	

*(Following any standard reference format like APA, MLA, Chicago....)*

## REFERENCES

Iyengar, B. K. S. (2005). *Light on life: The yoga journey to wholeness, inner peace, and ultimate freedom*. Rodale Books.

Fishman, L. M., & Saltonstall, E. (2008). *Yoga for Osteoporosis: The Complete Guide*. New York, NY: W. W. Norton & Company.

Lasater, J. H. (2011). *Relax and Renew: Restful Yoga for Stressful Times* (2nd ed.). Berkeley, CA: Rodmell Press.

American Red Cross. (2011). *American Red Cross First Aid/CPR/AED Participant's Manual*. Yardley, PA: StayWell.

McGill, S. M. (2016). *Back Mechanic: The Step-by-step McGill Method to fix back pain*. Waterloo, Canada: Backfitpro Inc.

Casa, D. J., & Stearns, R. L. (2016). *Preventing Sudden Death in Sport and Physical Activity*. Champaign, IL: Human Kinetics.

Manore, M., Thompson, J., & Butterfield, G. (2009). *Sport Nutrition for Health and Performance* (2nd ed.). Champaign, IL: Human Kinetics.

DiBenedetto, M. (2018). *The Business of Personal Training*. Champaign, IL: Human Kinetics.

Alexander, M. P., & Barrett, D. R. (2015). *Entrepreneurship for the Rest of Us: How to Create Innovation and Opportunity Everywhere*. New York, NY: Routledge.