



RAMAIAH
UNIVERSITY
OF APPLIED SCIENCES

M.S. Ramaiah University of Applied Sciences

Program Structure and Course Details

Of

Master of Physiotherapy

Batch 2022 onwards


Registrar
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

M.S. Ramaiah University of Applied Sciences

M.S. Ramaiah College of Physiotherapy



Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054



Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

Programme Specifications

Master of Physiotherapy Programme

Programme:
Pediatrics

Department:
Pediatric Physiotherapy



M S Ramaiah College of Physiotherapy
MS Ramaiah University of Applied Sciences

Ravindra

Heelgaoo

Dean - Academic
M.S. Ramaiah University of Applied Sciences
Bangalore - 560029

Contents

University's Vision, Mission and Objectives

3

Section 1: Programme Specifications: Master of Physiotherapy (Pediatric Physiotherapy)

1.	1.1	Title of the Award	4
	1.2	Mode of Study	4
	1.3	Awarding Institution/Body	4
	1.4	Joint Award	4
	1.5	Teaching Institution	4
	1.6	Programme Approved date by the Academic Council of the University	4
	1.7	Next Review Date	4
	1.8	Programme Approving Regulating Body and Date of Approval	4
	1.9	Programme Accreditation Body and Date of Accreditation	4
	1.10	Grade Awarded by the Accreditation Body	4
	1.11	Programme Accreditation Validity Duration	4
	1.12	Programme Benchmark	4
	1.13	Rationale for the Programme	5
	1.14	Programme Objectives	5
	1.15	Programme Outcomes	6
	1.16	Programme Structure	6
	1.17	Course Delivery Structure	6
	1.18	Teaching Learning Methods	7

Section 2: Course Specifications

2.1	Course 1 Code, Title and Outcomes	8
2.2	Course 1 Contents	9
2.3	Course 1 References	12
2.4	Course 2 Code, Title and Outcomes	13
2.5	Course 2 Contents, mapping, references	14
2.6	Course 3 Code, Title and Outcomes	14
2.7	Course 3 Contents, mapping, references	14
2.8	Course 4 Code, Title and Outcomes	22
2.9	Course 4 Contents, mapping, references	22
2.10	Annexure 1	26

Ramiah

Principal and Dean

M.S. Ramalah College of Physiotherapy
M.S. Ramalah University of Applied Sciences
Bangalore-560054

M. S. Ramiah

Dean - Academics

M.S. Ramalah University of Applied Sciences
Bangalore-560054



University's Vision, Mission and Objectives

The M. S. Ramaiah University of Applied Sciences (MSRUAS) will focus on student-centric professional, education and motivates its staff and students to contribute significantly to the growth of technology, science, economy and society through their imaginative, creative and innovative pursuits. Hence, the University has articulated the following vision and objectives.

Vision

MSRUAS aspires to be the premier university of choice in Asia for student centric professional education and services with a strong focus on applied research whilst maintaining the highest academic and ethical standards in a creative and innovative environment

Mission

Our purpose is the creation and dissemination of knowledge. We are committed to creativity, innovation and excellence in our teaching and research. We value integrity, quality and teamwork in all our endeavours. We inspire critical thinking, personal development and a passion for lifelong learning. We serve the technical, scientific and economic needs of our Society.

Objectives

1. To disseminate knowledge and skills through instructions, teaching, training, seminars, workshops and symposia in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences to equip students and scholars to meet the needs of industries, business and society
2. To generate knowledge through research in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences to meet the challenges that arise in industry, business and society
3. To promote health, human well-being and provide holistic healthcare
4. To provide technical and scientific solutions to real life problems posed by industry, business and society in Engineering and Technology, Art and Design, Management and Commerce, Health and Allied Sciences, Physical and Life Sciences, Arts, Humanities and Social Sciences
5. To instil the spirit of entrepreneurship in our youth to help create more career opportunities in the society by incubating and nurturing technology product ideas and supporting technology backed business
6. To identify and nurture leadership skills in students and help in the development of our future leaders to enrich the society we live in
7. To develop partnership with universities, industries, businesses, research establishments, NGOs, international organizations, governmental organizations in India and abroad to enrich the experiences of faculties and students through research and developmental programme

Ravindra

Ms. L. G. Rao

Dean - Academics

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054

Section 1

Programme Specifications: MPT in Pediatrics

College	M S Ramaiah College of Physiotherapy
Department	Pediatric Physiotherapy
Programme	Pediatrics
Dean of College	Prof. Savita Ravindra

1.1 Title of the Award

Master of Physiotherapy in Pediatrics

1.2 Mode of Study

Full Time

1.3 Awarding Institution

M S Ramaiah University of Applied Sciences

1.4 Joint Award

Not Applicable

1.5 Teaching Institution

M S Ramaiah College of Physiotherapy, Ramaiah University of Applied Sciences

1.6 Programme Approved date by the Academic Council of the University14th July 2022**1.7 Next Review Date**

July 2024/ 2025

1.8 Programme Approving Regulating Body and Date of Approval

1.9 Programme Accredited Body and Date of Accreditation

1.10 Grade Awarded by the Accreditation Body

1.11 Programme Accreditation Validity Duration

1.12 Program Benchmark



M2024/20

Approved by the Academic Council at its 26th Meeting held on 14th July 2022

Savita Ravindra

Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

1.13 Rationale for the Programme

As per census 2011, around 7.5 percent of the populations in India with disability are children. This has created a demand for health care professionals and researchers to enhance skills and knowledge for optimal intervention in pediatric population. The needs of these children change as they grow and this requires a dynamic interaction and treatment planning by a multidisciplinary team. Physiotherapists are an integral part of a multidisciplinary team to deliver optimal interventions.

Pediatric patients range from neonates to teenage with problems related to neurological, musculoskeletal and cardio-respiratory conditions. Physiotherapists are required to assess and treat children to reach their maximum potential to function independently and promote active participation at home, school and community. Early identification of delays or deviations and interventions in the formative years is an essential component of pediatric health. In addition to this, a health promotion intervention that targets children and adolescents is a vital aspect of Physiotherapy practice. This has created a huge demand to have a separate specialty of Physiotherapy practice to cater to the diverse needs of children and adolescents. One of the biggest roles of pediatric physiotherapy is to ensure their sessions are fun and captivating to engage children of all ages and motivate them to exercise. A pediatric physiotherapist is also required to provide family education and support including coordination of services, advocacy for inclusion, and assistance with enhancing development.

There is also a significant need for research in the field of Pediatric Physiotherapy to enhance evidence based practice.

1.14 Programme Aims and Objectives

The course aims to prepare the master student towards professional excellence in specialised skills in the field of Pediatric Physiotherapy. The course is conducted with the prime intention to acquaint the candidate with scope of independent practice, quality care, research and Physiotherapy education.

The course will prepare the student to develop appropriate professional relationships in multidisciplinary hospitals and rehabilitation practice. It also aims to inculcate competent standards in clinical practice and research.

- I. Impart knowledge on theoretical sciences relevant to pediatric Physiotherapy Practice.
- II. Plan and implement multidisciplinary treatment and preventive strategies specific to the needs of the patient.
- III. Incorporate advanced assessment and management strategies in patient management.
- IV. Learn to conduct research in the field of pediatric Physiotherapy.

Ravindra

M/2024/20

Dean - Academics
M.S. Ramiah University of Applied Sciences
Bangalore - 560 054

1.15 Programme Outcomes

At the end of the Masters Programme the student will be able to:

- PT 166 PO1: Demonstrate the ability to independently plan and conduct a structured comprehensive patient-centred physiotherapy assessment and formulate a functional diagnosis
- PT 166 PO2: Demonstrate the ability to use clinical reasoning and critical thinking to establish patient-centred goals and prescribe an individualized plan based on established standards of practice
- PT 166 PO3: Demonstrate evidence-based interventional skills in managing health conditions across lifespan in different settings using reflective practice
- PT 166 PO4: Conduct research work under supervision and communicate the findings
- PT 166 PO5: Display entrepreneurial, pedagogical and leadership skills in a team across various healthcare and academic settings.

1.16 Programme Structure

The postgraduate program is designed as a program, wherein at the end of two years, a programme-end examination will be conducted by the University. The programme will consist of four courses and the student will have to pass all the courses collectively. In addition, the programme will have an ongoing assessment of performance and the student will be required to complete a set of defined prerequisites in order to be eligible for appearing in the programme ending examination.

The following are the courses a student is required to complete to appear in the programme ending examination

S. No	Course title	Course Code
1	Fundamentals in Physiotherapy Practice, Pedagogy and Research	PT F 5 01 A
2	Foundation of Pediatric Physiotherapy	PT C 5 13 A
3	Assessment Approaches and Diagnosis for Pediatric Physiotherapy	PT C 5 14 A
4	Physiotherapy Interventions in Pediatrics	PT C 5 15 A

Students' enrolled in the MPT programme shall also undertake the following electives:

Programme Electives – These electives are mandatory for the MPT Programme.

- Professional Ethics
- Basic Life Support
- Basic course in Biomedical Research

Open Electives – These electives a candidate has to take up a minimum of 1 elective.

- Advanced Life Support
- Medico legal aspects in patient care

Approved by the Academic Council at its 26th Meeting held on 14th July 2022

Page 6 of 26

Ramunda
Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

MeoL4/a0

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

[Signature]
Registrar
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

- Quality management in Healthcare
- Financial Literacy

*Outline of all the electives is provided in the **Annexure 1**

1.17 Course Delivery Structure

The courses will be delivered from Monday to Saturday of a week. The calendar of events of the programme and the courses shall be available at the beginning of the programme. A detailed timetable shall be available to the students at the beginning of each month.

1.18 Teaching Learning Methods

The teaching learning methods will include but not limited to:

1. Lectures
2. Seminars
3. Group discussions
4. Self-directed Learning
5. Journal review meetings
6. Demonstrations and Skill Labs
7. Case Discussion and Presentation
8. Patient Care in various settings
9. Field visits
10. Inter disciplinary meetings and discussions
11. Continuing Professional Development Programs
12. Conferences / Workshop / Symposium programmes
13. Research



Ravindra

Heek 9/20

Dean - Academics
M.S. Ramalah University of Applied Sciences
Bangalore - 560 054

Section 2

**Course
Specification**

Course 1: Fundamentals in Physiotherapy Practice, Pedagogy and Research

Course Title	Fundamentals in Physiotherapy Practice, Pedagogy and Research
Course Code	PT F 5 01 A
Course Type	Core Theory Course
Department	Pediatric Physiotherapy
College	Physiotherapy

1. Course Summary

This fundamental course in physiotherapy is designed to train postgraduate students in principles of professional practice, research methods, biostatistics and ethics. It also provides training in application of exercise physiology and electrophysiology in clinical decision making. Beyond subject knowledge, the course also aims to train the postgraduates in teaching skills, management skills and entrepreneurship

2. Course Size and Credits

Number of Credits	NA
Credit Structure (Lecture: Tutorial: Practical)	NA
Total Hours	As per the Academic Regulations
Number of Weeks	As per the Academic Regulations
Department Responsible	Pediatric Physiotherapy
Total Course Marks	100
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

3. Course Outcomes (COs)

Upon completion of the course, the postgraduate student will be able to:

- PT F 5 01 A CO1: Discuss the principles of professional standards and ethics in evidence-based physiotherapy practice.
- PT F 5 01 A CO2: Analyse and apply appropriate research methods and relevant biostatistics in research
- PT F 5 01 A CO3: Apply the principles of exercise physiology and electrophysiology in clinical decision making
- PT F 5 01 A CO4: Discuss different learning theories and taxonomies.
- PT F 5 01 A CO5: Demonstrate teaching learning methods in microteaching environment.
- PT F 5 01 A CO6: Explain the management processes and responsibilities as applied to principles of physiotherapy practice
- PT F 5 01 A CO7: Discuss the nature of entrepreneurship in rehabilitation

4. Course Contents

Ramunda
Principal and Dean

Approved by the Academic Council at its 26th Meeting held on 14th July 2022.

M.S. Ramaiah University of Applied Sciences

Bangalore-560054



Meetha

Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

1 Principles and Core Professional Values of Physiotherapy Practice

- a. Definition of Physiotherapy, Scope of Practice
- b. General and Professional competencies
- c. Physiotherapy Knowledge, Skill and Education Framework
- d. Introduction to World Physiotherapy Standards of Physical Therapy Practice Guideline
- e. International Classification of Functioning Disability and Health.
- f. Principles of Evidence Based Practice in Physiotherapy

2 Research Methodology and Biostatistics**Designing Clinical Research: Basic Ingredients**

- a. Getting Started: The Anatomy and Physiology of Clinical Research
- b. Fundamentals of Literature Search and Review
- c. Conceiving the Research Question and Developing the Study Plan
- d. Choosing the Study Subjects: Specification, Sampling, and Recruitment
- e. Planning the Measurements: Precision, Accuracy, and Validity
- f. Hypotheses and Underlying Principles to Estimating Sample Size and Power

Designing Clinical Research: Study Designs

- g. Designing Cross-Sectional, Case-Control and Cohort Studies
- h. Enhancing Causal Inference in Observational Studies
- i. Designing a Randomized Blinded Trial, Alternative Clinical Trial Designs and their Implementation Issues
- j. Designing Studies of Diagnostic Tests
- k. Research Using Existing Data
- l. Fundamentals of Qualitative Research Methods
- m. Fundamentals of Systematic Reviews and Meta-analysis

Ethical Principles in Conducting Research

- n. ICMR Ethical Guidelines for Biomedical Research

Implementation of Clinical Research

- o. Designing Questionnaires, Interviews, and Online Surveys
- p. Implementing the Study and Quality Control
- q. Data Management

Biostatistics

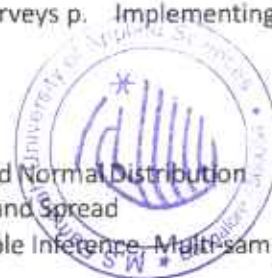
- r. Basic Fundamentals of Biostatistics
- s. Probability and Normal Distribution
- t. Descriptive Statistics: Measures of Central Tendency and Spread
- u. Hypothesis Testing: One-Sample Inference, Two-Sample Inference, Multi-sample Inference,
- v. Hypothesis Testing: Nonparametric Methods, Categorical Data
- w. Regression, Correlation Methods and Diagnostic Tests

Consuming and Disseminating Research

- x. Strategies for following Emerging Evidence, Clinical Practice Guidelines and Clinical pathways
- y. Best Practices in Research Dissemination
- z. Writing a Manuscript for Publication

3 Exercise Physiology

- a. Fundamentals of Human Energy Transfer
- b. Source of Nutrition and Energy, Macro and Micro Nutrients, Food Energy and Optimum Nutrition for Exercise



Heide Gao

Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

- c. Energy Expenditure During Rest and Physical Activity
- d. Body Composition, Its Evaluation, Obesity and Weight Control
- e. Training the Anaerobic and Aerobic Energy Systems

4 Electrophysiology

- a. Instrumentation for neuromuscular electrical stimulation.
- b. Muscles plasticity in response to electrical stimulation.
- c. Electrical stimulation and its effects on various systems.

5 Pedagogy in Physiotherapy Education

- a. Basics of Adult Learning Theories including Learning Styles
- b. Formulating Intended Learning Outcomes.
- c. Teaching Learning Methods
- d. Assessment Methods

6 Management, Entrepreneurship and Leadership in Physiotherapy Practice

- a. Introduction to Management in Physiotherapy: Definition, Principles and Functions
- b. Management Process: Planning, Organizing, Directing, Controlling. Decision making.
- c. Responsibilities of the Physiotherapy Manager
- d. Entrepreneurship in Physiotherapy Practice: Need, Advantages and Opportunities, Challenges and Barriers.
- e. Leadership: Need, Relevance, Competencies and Characteristics

Ramindia

Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

M. Mohan Rao

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054



5. Course Map (CO-PO Map)

Course 1: Fundamentals in Physiotherapy Practice, Pedagogy and Research (PT F 5 01 A)

Program Outcome / Course Outcome	PT 163 PO1	PT 163 PO2	PT 163 PO3	PT 163 PO4	PT 163 PO5
PT F 5 01 A CO1		2			
PT F 5 01 A CO2				2	
PT F 5 01 A CO3	3		2		
PT F 5 01 A CO4				2	2
PT F 5 01 A CO5				2	2
PT F 5 01 A CO6			1		
PT F 5 01 A CO7					1
3: Very Strong Contribution, 2: Strong Contribution, 1: Moderate Contribution					

6. Course Teaching and Learning Methods

The Teaching and Learning Methods will include but not limited to:

Sl. No.	Teaching and Learning Methods	
1	Lectures	✓
2	Seminars	✓
3	Group discussions	✓
4	Self-directed Learning	✓
5	Journal review meetings	✓
6	Demonstrations and Skill Labs	✓
7	Case Discussion and Presentation	✓
8	Patient Care in various settings	✓
9	Field visits	
10	Inter disciplinary meetings and discussions	✓
11	Continuing Professional Development Programs	✓
12	Conferences / Workshop / Symposium programmes	✓
13	Research and Dissertation	✓

Raindra

M/L 9/20



Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 064

7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment is presented in the Academic Regulations document pertaining to the Masters of Physiotherapy (MPT) Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document.

8. Course Resources

1. World Physiotherapy (2019) Description of Physical Therapy: Policy Statement. Available from <https://world.physio/sites/default/files/2020-07/PS-2019-Description-of-physical-therapy.pdf>
2. World Physiotherapy (2011) Physical Therapist Professional Entry Level Education Guideline. (Available from: <https://world.physio/sites/default/files/2020-07/G-2011-Entry-level-education.pdf>)
3. CSP (2011) Physiotherapy Framework: Putting physiotherapy Behaviours, Values, Knowledge & Skills into Practice [updated May 2020](Available from: <https://www.csp.org.uk/professional-clinical/cpd-education/professional-development/professional-frameworks>)
4. Expected Minimum Competencies for an Entry Level Physiotherapist in the Europe Region World Physiotherapy Guidance Document (Available from: https://www.erwcpt.eu/education/expected_minimum_competencies_for_entry_level)
5. Evidence-Based Medicine: How to Practice and Teach EBM, 2nd Edition: By David L. Sackett, Sharon E. Straus, W. Scott Richardson, William Rosenberg, and R. Brian Haynes, Churchill Livingstone, 2000
6. Rob Herbert, Gro Jamtvedt, Kåre Birger Hagen, Judy Mead. Practical Evidence-Based Physiotherapy (Second Edition), Churchill Livingstone, 2011, ISBN 9780702042706,
7. World Physiotherapy (2011) Standards of Physical Therapy Practice Guideline(Available from: <https://world.physio/sites/default/files/2020-06/G-2011-Standards-practice.pdf>)
8. 2017 ICMR National Ethical Guidelines for Biomedical and Health Research involving Human Participant
9. 2020 ICMR Policy on Research Integrity and Publication Ethics (RIPE)
10. Designing Clinical Research 4th Edition. Stephen B. Hulley et al. Published By: Lippincott Williams & Wilkins. ISBN-13: 9781469840543
11. Medical Biostatistics (Chapman & Hall/CRC Biostatistics Series). 4th Edition 2017. Abhaya Indrayan, Rajeev Kumar Malhotra. Chapman and Hall/CRC. ISBN 9781498799539
12. Exercise Physiology Nutrition, Energy, and Human Performance. 8th Edition. William D. McArdle PhD, Frank I. Katch, Victor L. Katch. Lippincott Williams & Wilkins. ISBN/ISSN: 9781451191554
13. Principles of Medical Education. 4th Edition. Tejinder Singh, Piyush Gupta, Daljit Singh. 2013. Jaypee Publishers.
14. Management in Physical Therapy Practices, 2nd Edition. Catherine G. Page PT, MPH, PhD. ISBN-13: 978-0-8036-4033-7
15. Heather A. Current thinking on Leadership and Physiotherapy Practice. 2016. Report Prepared for AGILE Professional Network of the Chartered Society of Physiotherapy (Available from: https://agile.csp.org.uk/system/files/current_leadership_thinking_and_physiotherapy_practice.pdf)

Rainindra

Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

Meetha.9/ao

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

9. Course Organization

Course Code	PT F 5 01 A	
Course Title	Fundamentals in Physiotherapy Practice, Pedagogy and Research	
Course Leader's Name	Dr. Sundar Kumar	
Course Leader's Contact Details	Phone:	9739468755
	E-mail:	sundar.rcp@msruas.ac.in
Course Specifications Approval Date	26.09.2022	
Next Course Specifications Review Date	01.07.2024	
Subsequent Course Specifications Review Date		

Course 2: Foundation of Pediatric Physiotherapy

Course Title	Foundation of Pediatric Physiotherapy
Course Code	PT C 5 13 A
Course Type	Core Theory Course
Department	Pediatrics
College	Physiotherapy

1. Course Summary

This course is designed to develop the knowledge on typical and atypical patterns of development, growth and maturation among pediatric populations. Course will also provide with fundamental frame of motor control, motor learning, neuroplasticity, biomechanics and exercise physiology applicable to pediatric population.

2. Course Size and Credits:

Number of Credits	NA
Credit Structure (Lecture: Tutorial: Practical)	NA
Total Hours of Interaction	As per the Academic Regulations
Number of Weeks	42
Department Responsible	Pediatrics
Total marks	100
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

3. Course Outcomes (COs)

On completion of the course, the postgraduate student will be able to

PT C 5 13 A CO1: Analyse Typical and Atypical Patterns of Growth, Development and Maturation in Children.

PT C 5 13 A CO2: Explain Genetic, Embryological and Environmental Factors that Influence Development of Various Systems.

PT C 5 13 A CO3: Explain the Theoretical Constructs of Motor Control, Motor Learning and

Neuro-plasticity.

PT C 5 13 A CO4: Apply theoretical Basis of Biomedical Factors Affecting Movement and Posture in Typically and Atypically Developing Children.

PT C 5 13 A CO5: Discuss the Principles of Exercise Physiology and Guidelines for Physical Activity in Children and Adolescents.

4. Course Contents

1. Applied Biomechanics in Pediatrics

- Physiological changes in Gait in early years of development
- Physiological changes in Posture in early years of development
- Applied Biomechanics of Musculoskeletal and Cardio-respiratory system

2. Basics of Pediatrics

- Basics of Genetics and Applied Genetics in Pediatrics
- Theories of Pain and its Application in Pediatrics
- Theories of Motor Control and Motor Learning and its Application
- Recovery process in Nervous System and Neural plasticity.

3. Exercise physiology and physical activity in Pediatrics

- Exercise physiology in Children and Adolescents
- Principles and guidelines for Physical activity for Children and Adolescents

4. Fundamentals of Developmental Pediatrics

- Principles of Embryological Development
- Neurophysiological basis of Reflex maturation and Reactions
- Anthropometric changes across Pediatric lifespan

5. Applied Embryology

- Embryological Development-Cardio-respiratory system, Neurological and Musculoskeletal System
- Applied embryology-Cardio-respiratory system, Neurological and Musculoskeletal System

6. Developmental Pediatrics

- Typical and Atypical development (motor, speech and language, cognitive, social, visual, auditory)
- Normal and Applied Development/Maturation Cardio-respiratory system, Nervous System, Musculoskeletal System, Respiratory system and other Systems of Human Body
- Development of Bowel and Bladder function.
- Development of Oromotor function
Development of Balance, Coordination

Ramindia
Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

gc
Registrar
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

Heidi Gao
Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

5. Course Map (CO-PO Map)

Course Outcome	Program Outcomes				
	PT 166 PO1	PT 166 PO2	PT 166 PO3	PT 166 PO4	PT 166 PO5
PT C 5 13 A CO1	3	1			
PT C 5 13 A CO2		2			
PT C 5 13 A CO3		1			
PT C 5 13 A CO4		1			
PT C 5 13 A CO5		1	2		
3: Very Strong Contribution, 2: Strong Contribution, 1: Moderate Contribution					

6. Course Teaching and Learning Methods

The Teaching and Learning Methods will include but not limited to:

Sl. No.	Teaching and Learning Methods	
1	Lectures	✓
2	Seminars	✓
3	Group discussions	✓
4	Self-directed Learning	✓
5	Journal review meetings	✓
6	Demonstrations and Skill Labs	✓
7	Case Discussion and Presentation	✓
8	Patient Care in various settings	✓
9	Field visits	
10	Inter disciplinary meetings and discussions	
11	Continuing Professional Development Programs	
12	Conferences / Workshop / Symposium programmes	
13	Research and Dissertation	

7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Academic Regulations document pertaining to the Masters of Physiotherapy (MPT) Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document.

8. Course Resources

- Gallahue, D.L., Ozmun, J.C., & Goodway, J. (2006). Understanding motor development: Infants, children, adolescents, adults, 4/e. McGraw-hill.
- Stamer, M.H. (2015). Posture and movement of the child with cerebral palsy. PRO-ED, Incorporated.
- Rennie, J.M., & Kendall, G. (2013). A Manual of Neonatal Intensive Care, 5/e. CRC Press.
- Illingworth, R.S. (2002). The normal child: some problems of the early years and their treatment, 10/e. WB Saunders Company.
- Illingworth, R.S. (2013). The development of the infant and young child: Normal and abnormal, 10/e. Churchill Livingstone.

Raundia

Meetha Gao



Recommended Journals

1. Pediatric Physical Therapy–Publisher: Lippincott, Williams &Wilkins.
2. Developmental Medicines &child neurology–Publisher: Wiley-Blackwell
3. Physical and Occupational Therapy in Pediatrics–Publisher: Informa
4. Disability and rehabilitation - Publisher: Taylor& Francis.
5. Clinical rehabilitation- Publisher: Sage
6. International journal of developmental disabilities-Publisher: Maney
7. Physical medicine and rehabilitation–Publisher: Austin

9. Course Organization

Course Code	PT C S 13 A		
Course Title	Foundation of Pediatric Physiotherapy		
Course Leader's Name	Ms Kirti Joshi		
Course Leader's Contact Details	Phone:	09686851063	
	E-mail:	Kirtijoshi.rcp@msruas.ac.in	
Course Specifications Approval Date	26.09.2022		
Next Course Specifications Review Date	01.07.2024		
Subsequent Course Specifications Review Date			

Raindra
Principal and Dean
 M.S. Ramaiah College of Physiotherapy
 M.S. Ramaiah University of Applied Sciences
 Bangalore-560054

M. S. Ramaiah
 9/1/20

Dean - Academics
 M.S. Ramaiah University of Applied Sciences
 Bangalore - 560 054



Course 3: Assessment Approaches and Diagnosis for Pediatric Physiotherapy

Course Title	Assessment Approaches and Diagnosis for Pediatric Physiotherapy
Course Code	PT C 5 14 A
Course Type	Core Theory Course
Department	Pediatrics
College	Physiotherapy

1. Course Summary:

This course involves examination of pediatric population based on biopsychosocial framework. It will focus on medical terminology, clinical examination, evaluation, the impact of evolving technology in this area. Students will acquire knowledge and skills of a multidisciplinary approach to assess and functionally diagnose pediatric conditions in the scope of physiotherapy practice.

2. Course Size and Credits:

Number of Credits	NA
Credit Structure (Lecture: Tutorial: Practical)	NA
Total Hours of Interaction	As per the Academic Regulations
Number of Weeks	As per the Academic Regulations
Department Responsible	Pediatrics
Total course marks	100+100 (theory+practical)
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

3. Course Outcomes (COs)

On completion of the course, the postgraduate student will be able to,

PT C 5 14 A CO1: Evaluate Conditions Related to Neonates, Children and Adolescents and Document as per Established Standards.

PT C 5 14 A CO2: Perform and Interpret Appropriate Tests for Evaluating Movement, Posture and Functions in Typically and Atypically Developing Children.

PT C 5 14 A CO3: Identify Red Flags in Clinical Practice and Refer Appropriately.

PT C 5 14 A CO4: Analyse and Interpret Technology-Based Assessments in Pediatric Population.

PT C 5 14 A CO5: Apply and Demonstrate Evidence-Based Outcome Measures Relevant to Various Pediatric Conditions.

Ramudra

4/06/20

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

4. Course Contents**i. Assessment in General Pediatrics****5. Assessment, Physical and Functional Diagnosis of Gait Using**

Various Scales and Interpretation of Instrument -Based Gait Assessment.

6. Assessment, Physical and Functional Diagnosis of Balance and Coordination
7. Motor Control Assessment-Voluntary Control and Selective Motor control.
8. Anthropometric Assessments in Pediatric Population

ii. Basics of Investigations in Pediatrics

9. Interpretation of Investigations including Laboratory, Electrophysiological/Electro-Diagnostic, Radiological Investigations in Pediatric Conditions
10. Prenatal Screening-Tests and Their Clinical Implication

iii. Assessment of Physical fitness and Physical Activity in Pediatrics

11. Physical Activity and Fitness Assessment (Including Exercise Tolerance Testing)
12. Comprehensive School Health Assessment (Mainstream/Integrated/special Schools)

iv. Clinical Reasoning in Pediatric Physiotherapy Practice

13. Differential Diagnosis in Various Pediatric Conditions
14. Identify Red Flags in Clinical Practice

v. Assessment in Developmental Pediatrics:

15. Developmental Screening and Assessment (Norm Referenced, Criterion Referenced, Functional Scales for Screening and Assessment of Various Disorders in Pediatric Population).
16. Assessment of High-Risk Neonates
17. Neurobehavioral Assessment in Neonates
18. Assessment of Developmental Coordination Disorder, Learning Disability, Sensory Dysfunctions and Pervasive Developmental Disorders.
19. Oromotor and Orosensory Assessment

vi. Physical and Functional Assessment Pediatric Conditions:

20. Assessment of Children with Genetic, Neurological, Musculoskeletal and Cardio-Respiratory Conditions
21. Assessment in Pediatric Chronic Conditions (Oncology, Renal Conditions)
22. Assessment of Burns in Pediatrics.
23. Pre and Post-Surgical Assessment in Pediatric Conditions.
24. Pain Assessment in Neonates and Children.
25. Interpretation of Assessments Based on International Classification of Functioning, Disability and Health (ICF) Guidelines in Pediatric Conditions.

vii. Evidence based Assessment and Outcome Measures in Pediatric conditions such as Neurological, Neuromuscular, Cardio-respiratory and Musculoskeletal.

5. Course Map (CO-PO Map)

Raminda
Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

H. L. Gao
Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054



Course Outcome	Program Outcomes				
	PT 166 PO1	PT 166 PO2	PT 166 PO3	PT 166 PO4	PT 166 PO5
PT C 5 14 A CO1	3	1			
PT C 5 14 A CO2	3	2	1		
PT C 5 14 A CO3		2	2		
PT C 5 14 A CO4	2	1	3		
PT C 5 14 A CO5		2	2	2	
3: Very Strong Contribution, 2: Strong Contribution, 1: Moderate Contribution					

6. Course Teaching and Learning Methods

The Teaching and Learning Methods will include but not limited to:

Sl. No.	Teaching and Learning Methods	
1	Lectures	✓
2	Seminars	✓
3	Group discussions	✓
4	Self-directed Learning	✓
5	Journal review meetings	✓
6	Demonstrations and Skill Labs	✓
7	Case Discussion and Presentation	✓
8	Patient Care in various settings	✓
9	Field visits	✓
10	Inter disciplinary meetings and discussions	✓
11	Continuing Professional Development Programs	✓
12	Conferences / Workshop / Symposium programmes	✓
13	Research and Dissertation	✓

7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Academic Regulations document pertaining to the Masters of Physiotherapy (MPT) Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document.

8. Course Resources

1. Jenson, H.B, Kliegman, R. M., Behrman, R.E. (2019). Nelson Textbook of Pediatrics, 21st Edition, Elsevier Health Sciences.
2. Effgen, S.K. (2012). Meeting the physical therapy needs of children, 2nd Edition, FADavis.
3. Armstrong, N., & Van Mechelen, W. (Eds.). (2008). Pediatric exercise science and medicine. 2nd Edition Oxford University Press
4. Long, T. (2019). Hand book of pediatric physical therapy, 3rd Edition, Lippincott Williams & Wilkins.
5. Fenichel, G.M. (2019). Clinical pediatric neurology: a signs and symptoms approach, 8th Edition.



Handwritten signature: H. Rohan

Handwritten text: Dean - Academics, M.S. Ramaiah University of Applied Sciences, Bangalore - 560 054

Handwritten signature: R. Ramesh

6. Parthasarathy,A.(2019). IAP Text book of pediatrics,7th Edition. JP Medical Ltd.
7. Bly,L.(1994). Motor skills acquisition in the first year: an illustrated guide to normal development. Psychological Corp.
8. Dubowitz, L.M.,Dubowitz,V., &Mercuri, E. (2000). The neurological assessment of the Preterm and full-termnew-borninfant,2nd Edition. Cambridge University Press.
9. Pountney,T.(2007). Physiotherapy for children. 1st Edition Elsevier Health Sciences.
10. DeGangi, G.A. (2017).Pediatricdisorders of regulation in affect and behaviour: A therapist's guide to assessment and treatment. Academic Press.
11. Campbell,S.K.,Palisano, R.J., &Vander Linden,D. W.(2006). Physical therapy for children, 4th Edition. Saunders.
12. Haddad, G. G., Abman,S.H., &Chernick,V.(2002). Chernick-Mellins basic mechanisms of pediatric respiratory disease, 2nd Edition.PMPH-USA.
13. Manu L Kothari,Lopa M Mehta, Sadhana S Roychoudhary Essentials of Human Genetics, 5thedition Universities press
14. Lane Donnelley. Paediatric Imaging: The Fundamentals; (2021)Illustrated 3rd Edition,Elsevier Health Sciences, Suzann K. Campbell Decision Making
15. in Paediatric Neurologic Physical Therapy, (Clinics in Physical Therapy)1st Edition, Churchill Livingstone
16. Roberta B Shepherd. Physiotherapy in Paediatrics ;(1995)3rd Edition Heinemann Medical Books
17. Jan Stephen Tecklin. Paediatric Physical Therapy;(2015); 5th edition Lippincott Williams and Wilkins
18. Donna Frownfelter& Elizabeth Dean (2012)Cardiovascular and Pulmonary Physical Therapy: Evidence to Practice; 5thEd, Mosby
19. Jennifer A. pryor, S. Ammani Prasad (2014) Physiotherapy for Respiratory & Cardiac Problems 4thEdition, Elsevier Health
20. Eleanor Main & Linda Denehy; (2016)Cardio-respiratory Physiotherapy: Adults and paediatrics.5thEdition, Elsevier
21. Levitt, S.,& Addison, A. (2018).Treatment of cerebralpalsyandmotordelay,6th Edition. Wiley-Blackwell.
22. Connolly, B. H.,& Montgomery, P. (2005).Therapeutic exercise in developmental disabilities,3rd Edition. Slack Incorporated.
23. Stamer, M.H.(2015).Posture and movement of the child with cerebral palsy, 2nd Edition. PRO-ED, Incorporated.
24. Bly, L.(2001). Baby treatment based on NDT principles. Therapy Skill Builders.
25. Dubowitz, V.(1980). Thefloppyinfant,2nd Edition. Cambridge University Press.
26. Scherzer,A.L. (2000).Early diagnosis and interventional therapy in cerebral palsy: an interdisciplinary age-focused approach,3rd Edition. CRC Press.
27. Kimura, J.(2001). Electro-diagnosis in diseases of nerve and muscle: principles and practice,4th Edition. Oxford university press.
28. Shumway-Cook,A.,& Woollacott, M. H. (2011). Motor control: translating research into clinical practice,4th Edition. Lippincott Williams& Wilkins.
29. Bundy, A. C., Lane,S.J.,&Murray, E. A.(2019). Sensory integration: Theory and practice, 3rd Edition. FADavis.
30. Latash, M.L. (2008). Neurophysiological basisofmovement.2nd Edition, Human Kinetics.
31. Barnes,M. P.,&Johnson,G. R. (Eds.). (2009). Upper motor neuron syndrome and spasticity:



Handwritten signature: *Meetha Rao*

Ramundia
Principal and Dean

M.S. Ramaiah College of Physiotherapy

M.S. Ramaiah University of Applied Sciences

Bangalore-560054

Approved by the Academic Council at its 26th Meeting held on 14th July 2022

M.S. Ramaiah University of Applied Sciences

Page 20 of 26

Bangalore-560054

clinical management and neurophysiology, 2nd Edition. Cambridge University Press.

32. Schmidt, R.A., Lee, T. D., Winstein, C., Wulf, G., & Zelaznik, H.N. (2018). Motor control and learning: A behavioural emphasis, 6th Edition, Human kinetics.
33. Schmidt, R.A., & Wrisberg, C. A. (2008). Motor learning and performance: A situation-based learning approach, 4th Edition. Human kinetics
34. Holmes, G.L., Jones, H.R., & Moshé, S. L. (2006). Clinical neuro physiology of infancy, childhood, and adolescence, 1st Edition, Elsevier Inc.

Recommended Journals

1. Pediatric Physical Therapy—Publisher: Lippincott, Williams & Wilkins.
2. Developmental Medicines & child neurology—Publisher: Wiley-Blackwell
3. Physical and Occupational Therapy in Pediatrics—Publisher: Informa
4. Disability and rehabilitation - Publisher: Taylor & Francis.
5. Clinical rehabilitation- Publisher: Sage
6. International journal of developmental disabilities—Publisher: Maney
7. Physical medicine and rehabilitation—Publisher: Austin

9. Course Organization

Course Code	PT C 5 14 A		
Course Title	Assessment Approaches and Diagnosis for Pediatric Physiotherapy		
Course Leader's Name	Ms. Kirti Joshi		
Course Leader's Contact Details	Phone:	9686851063	
	E-mail:	Kirtijoshi.rcp@msruas.ac.in	
Course Specifications Approval Date	26.09.2022		
Next Course Specifications Review Date	01.07.2024		
Subsequent Course Specifications Review Date			

Rainda

Heeky/ao

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

Principal and Dean

Course 4: Physiotherapy Interventions in Pediatrics

Course Title	Physiotherapy Interventions in Pediatrics
Course Code	PT C 5 15 A
Course Type	Core Theory Course
Department	Pediatrics
College	Physiotherapy

1. Course Summary

This course builds on the knowledge of etiology and clinical features of pediatric conditions to plan goal directed management. The ICF framework will continue to be the foundation of planning management through a multidisciplinary approach. Learning will focus on critical reasoning, patient oriented treatment planning and use of evidence based approach in treating pediatric conditions.

2. Course Size and Credits:

Number of Credits	NA
Credit Structure (Lecture: Tutorial: Practical)	NA
Total Hours of Interaction	As per the Academic Regulations
Number of Weeks	As per the Academic Regulations
Department Responsible	Pediatrics
Total Marks	100+100 (theory+practical)
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

3. Course Outcomes (COs)

On completion of the course, the postgraduate student will be able to

PT C 5 15 A CO1: Plan Interventions in Conditions Related to Neonates, Children and Adolescents as per Established Standards.

PT C 5 15 A CO2: Demonstrate Appropriate Handling Skills in Various Pediatric Conditions.

PT C 5 15 A CO3: Incorporate Health Promotion in Pediatric Population in Various Settings.

PT C 5 15 A CO4: Display Effective Communication with Patients, Caregivers and Healthcare Providers.

PT C 5 15 A CO5: Incorporate Evidence-Based Intervention into Clinical Practice

4. Course Contents**1. Physiotherapy Interventions in General Pediatrics**

- Physiotherapy Interventions for Dysfunctions of Function, Posture and Gait
- Prescription and Application of Orthosis, Prosthesis, Assistive and Adaptive Devices, Seating Systems and Mobility Devices

- c. Technology Based Intervention in Pediatric Physiotherapy.
- d. Neonatal and Pediatric Advanced Life Support (NALS and PALS)

2. Health Promotion in Pediatrics

- a. School Health Interventions in Mainstream, Integrated and Special Schools.
- b. Health Promotion in Typically and Atypically Growing Children and Adolescents
- c. Exercise Prescription in Typically and Atypically Growing Children and adolescents

3. Physiotherapy Intervention in Developmental Pediatrics:

- a. Developmental and Genetic Disorders, Including inborn Errors Of Metabolism and Neuro Muscular Disorders
- b. Early Intervention and High Risk Follow up in Neuro-developmental Disorders
- c. Developmental Coordination Disorder, Sensory Dysfunction, Learning Disability and Pervasive Developmental Disorders
- d. Oromotor and Orosensory Dysfunctions.

4. Physiotherapy Intervention in Pediatric Conditions

- a. Neonatal Intensive Care Unit (NICU), Pediatric Intensive Care Unit (PICU) and High-Risk Babies.
- b. Neuro-Pediatric, Cardio-Respiratory, Metabolic and Musculoskeletal Conditions
- c. Pediatric Conditions—Oncology, Burns, Non-Communicable Diseases, Integumentary Systems, Amputations
- d. Pain in Neonates and Children
- e. Myopathic and Neuropathic Conditions

5. Basics of Clinical Practice

- a. Goal Setting and Treatment Guidelines Based on International Classification of Functioning, Disability and Health (ICF) Guidelines in Pediatric Conditions.
- b. Ethical and Reflective Practices in Pediatric Rehabilitation
- c. Family Centered Care in Pediatric Physiotherapy Practice
- d. Indian Public Health Initiatives for Child Health (related to child development)

6. Translating research evidence to Pediatric Physiotherapy practice.



5. Course Map (CO-PO Map)

Course Outcome	Program Outcomes				
	PT 166 PO1	PT 166 PO2	PT 166 PO3	PT 166 PO4	PT 166 PO5
PT C 5 15 A CO1		3	2		
PT C 5 15 A CO2		3	2		
PT C 5 15 A CO3					2
PT C 5 15 A CO4				2	3
PT C 5 15 A CO5		2	3		
3: Very Strong Contribution, 2: Strong Contribution, 1: Moderate Contribution					

Saurdia

Heelgao

Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

6. Course Teaching and Learning Methods

The Teaching and Learning Methods will include but not limited to:

Sl. No.	Teaching and Learning Methods	
1	Lectures	✓
2	Seminars	✓
3	Group discussions	✓
4	Self-directed Learning	✓
5	Journal review meetings	✓
6	Demonstrations and Skill Labs	✓
7	Case Discussion and Presentation	✓
8	Patient Care in various settings	✓
9	Field visits	✓
10	Inter disciplinary meetings and discussions	✓
11	Continuing Professional Development Programs	✓
12	Conferences / Workshop / Symposium programmes	✓
13	Research and Dissertation	✓

7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Academic Regulations document pertaining to the Masters of Physiotherapy (MPT) Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document.

8. Course Resources

1. Vergara, E., & Bigsby, R. (2004). Developmental and therapeutic interventions in the NICU. Brookes Pub.
2. Kenner, C., & McGrath, J. (Eds.). (2004). Developmental care of new-borns & infants: A guide for health professionals. Mosby Incorporated.
3. Armstrong, N. (Ed.). (2007). Paediatric exercise physiology. Elsevier Health Sciences.
4. Singh, M. (2017). Care of the newborn, 8/ed. CBS Publishers & Distributors Private Limited.
5. Rennie, J.M., Hagmann, C.F., & Robertson, N.J. (2008). Neonatal cerebral investigation. Cambridge University Press
6. Umphred, Darcy Ann, Rolando T. Lazaro, Margaret Roller, and Gordon Burton, eds. (2013). Neurological rehabilitation, 6/e. Elsevier Health Sciences.
7. Lee, H.J., & DeLisa, J. A. (2005). Manual of nerve conduction study and surface anatomy for needle electromyography, 3/e. Lippincott Williams & Wilkins.
8. Taly, A.B., Nair, K.S., & Murali, T. (2001). Neurorehabilitation Principles & Practice, 2/e.

Approved by the Academic Council at its 26th Meeting held on 14th July 2022

Page 24 of 26

Ahuja Book Company Pvt. Ltd.

9. Herdman, S.J., & Clendaniel, R. (2014). Vestibular rehabilitation, 2/e. F.A. Davis.
10. Shacklock, M. (2005). Clinical neuro dynamics: a new system of neuro musculoskeletal treatment. Elsevier Health Sciences.
11. Gillen, G. (2008). Cognitive and perceptual rehabilitation: Optimizing function. Elsevier Health Sciences.
12. Christa Einspieler, Heinz R.F. Precht (2008) Precht's Method on the Qualitative Assessment of General Movements in Preterm, Term and Young Infants (Clinics in Developmental Medicine) Mac Keith Press

Recommended Journals

1. Pediatric Physical Therapy–Publisher: Lippincott, Williams & Wilkins.
2. Developmental Medicine & Child Neurology–Publisher: Wiley-Blackwell
3. Physical and Occupational Therapy in Pediatrics–Publisher: Informa
4. Disability and Rehabilitation - Publisher: Taylor & Francis.
5. Clinical Rehabilitation- Publisher: Sage
6. International Journal of Developmental Disabilities–Publisher: Maney
7. Physical Medicine and Rehabilitation–Publisher: Austim

9. Course Organization

Course Code	PT C 5 15 A	
Course Title	Physiotherapy Interventions in Pediatrics Physiotherapy	
Course Leader's Name	Ms. Kirti Joshi	
Course Leader's Contact Details	Phone:	9686851063
	E-mail:	Kirtijoshi.rcp@msruas.ac.in
Course Specifications Approval Date	26.09.2022	
Next Course Specifications Review Date	01.07.2024	
Subsequent Course Specifications Review Date		



Ravindra

Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

Heal9/20

Dean - Academics
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

Annexure 1

Program elective

Biomedical research (PT E 5 01 A) - Encompasses application such as devices, drug trials which are not covered under research syllabus as they are not integral to the programme outcomes. This course aims to provide the student an opportunity to understand research applications in the fields of the bio-physical sciences as well as an insight into clinical research.

Basic Life Support (PT E 5 02 A) - As a clinician in the field, a physiotherapist is expected to be competent in all life saving procedures. As the syllabus is more focussed towards the practice of physiotherapeutics, this course shall ensure that a physiotherapist is competent to deliver basic life support in case of an emergency. Furthermore, the certification is required to be a independent clinical practitioner.

Professional Ethics (PT E 5 03 A) - This module aims to augment the practice of ethics and professionalism as delivered in the main course. This course shall be done on a continuous basis along with other courses so as to leverage the experience gain by the students in clinical postings toward further development of professional ethics.

Open elective

Advanced Life Support (PT O 5 01 A)- This course aims to provide training on a set of life saving skills that extends beyond BLS. It is for health care professionals who either direct or participate in the management of cardiac emergencies such as cardiac arrest, stroke, myocardial infarction. It is provided by American Heart Association.

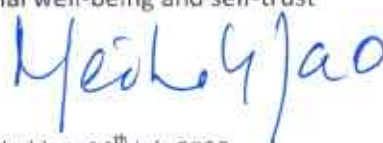
Medico legal aspects in patient care (PT O 5 02 A)- The course aims to equip the students in the basic understanding of medico legal jurisprudence so as to improve the understanding of the legal implications of day-to-day practice and the knowledge of consumer laws.

Quality management in health care (PT O 5 03 A)- This course aims to provide an overview of design, policies and processes that can minimize harm and optimize patient care and outcome.

Financial Literacy (PT O 5 04 A)- This course aims to provide the foundation for effective financial decision making with their financial resources. Financial literacy makes the student confident in understanding the concepts of saving, investing and debt that leads to an overall sense of financial well-being and self-trust


Principal and Dean

M.S. Ramaiah College of Physiotherapy
M.S. Ramaiah University of Applied Sciences
Bangalore-560054


Dean - Academics

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054