



**SMVEC PHYSIOTHERAPY COLLEGE**  
**Minutes of 5<sup>th</sup> Meeting of Board of Studies**

The 5<sup>th</sup> meeting of Board of Studies for college of physiotherapy was held on 25<sup>th</sup> Jan 2024 at 10.30 a.m. in the conference hall.

The following members were present for the BoS meeting,

Sl. No	Name of the member with designation & official address	Members as per UGC norms
1.	Prof. Dr. R. Chidambaram M.P.T., Dean, S.M.V.E.C. - College of Physiotherapy, Madagadipet, Puducherry – 605107. Email: deanphysio@smvec.ac.in	Chairman
2.	Prof. Dr. Balu M.P.T., Professor, School of Physiotherapy, Aarupadai Veedu Medical College & Hospital, Puducherry – 607403. Email: balukhanphysio007@gmail.com	Subject expert (University nominee)
3.	Prof. Dr. A. Dinakaran M.P.T., Principal, Adhiparasakthi College of Physiotherapy, Melmaruvathur – 603319. Email: apcopt1994@gmail.com	Subject expert (Academic council nominee)
4.	Prof. KSI. Dr. Murali Sankar M.P.T., Director, School of Physiotherapy, Aarupadai Veedu Medical College & Hospital, Puducherry – 607403. Email: Director.sptpd@vmu.edu.in	Subject expert (Academic council nominee)
5.	Dr. S. Prabakaran B.P.T., Kiran Physio Clinic, Villupuram - 605401. Email: selvaprabakaran@gmail.com	Representative from industry

6.	Dr. K. Ezhilan M.P.T., ChiefPhysiotherapist, Sri Manakula Vinayagar Medical College &Hospital, Puducherry – 605107. Email: ezhilan.mpt@gmail.com	Member
7.	Dr. M. Nakkiran M.P.T., Assistant Professor, S.M.V.E.C. - College of Physiotherapy, Madagadipet, Puducherry- 605 107. Email.nakkiran.physio@smvec.ac.in	Member
8.	Dr. J. Sathyanarayanan M.D., Associate Professor, Departmentof Medicine, Sri Manakula Vinayagar Medical College &Hospital, Puducherry – 605107. Email: drisathiyannarayanan@gmail.com	Special invitee
9.	Dr. K. Manikandan M.S.(ortho.), Associate Professor, Department of Orthopaedics, Sri Manakula Vinayagar Medical College & Hospital, Puducherry – 605107. Email: manikandan7008@gamil.com	Special invitee
10.	Dr. S. Anbumalar M.E., Ph.D., Dean Academics (Engineering), Sri Manakular Vinayagar Engineering College, Puducherry- 605107. Email: deanacademic@smvec.ac.in	Subject expert (special invitee)
11.	Dr. A. A. Arivalagar M.Tech.,Ph.D., Dean Academics (Schools), Sri Manakula Vinayagar Engineering College, Puducherry -605107. Email: deanacademic1@smvec.ac.in	Subject expert (special invitee)

R. Chidambaram

Prof.R.CHIDAMBARAM, M.P.T(ortho.),  
Dean,  
College of Physiotherapy,  
Sri Manakula Vinayagar Engineering College  
(An Autonomous Institution),  
Madagadipet, Puducherry-605107.

## Agenda of the Meeting

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|-------------------------|---|
| <i>BoS/2024/BPT/5.1</i> | To discuss and confirm the minutes of the 4 <sup>th</sup> BoS meeting, which was held on 06-07-23.                    |
| <i>BoS/2024/BPT/5.2</i> | To discuss and approve the merging of various theory & practical codes.   |
| <i>BoS/2024/BPT/5.3</i> | To discuss and approve the changes in the curriculum and syllabi for III year V and VI semesters.                     |
| <i>BoS/2024/BPT/5.4</i> | To discuss and approve the formation of sub-committees for the courses handled by medical college faculty members.    |
| <i>BoS/2024/BPT/5.5</i> | To discuss the december 2023 end semester examination results.  |
| <i>BoS/2024/BPT/5.6</i> | To discuss and confirm the panel of external examiners to the end semester examination for the academic year 2024-25. |
| <i>BoS/2024/BPT/5.7</i> | To discuss & confirm the panel of question paper setters to the end semester examination for the A.Y. 2024-25.        |
| <i>BoS/2024/BPT/5.8</i> | Any other additional points to be discussed with the permission of chair.   |

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Prof. R. CHIDAMBARAM, M.P.T(ortho.),  
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## Minutes of the Meeting

Dr. R. Chidambaram, Chairperson, BoS opened the meeting by welcoming all the members and the meeting there after deliberated on agenda items that had been approved by the Chairperson.

### Agenda / BoS/2024/BPT/5.1

To discuss and confirm the minutes of the 4<sup>th</sup> BoS meeting, which was held on 06-07-23. The members overviewed the previous meeting discussion and approved.

### Agenda / BoS/2024/BPT/5.2

To discuss and approve the merging of various theory & practical codes

Earlier during framing of regulations R-2021, courses which have both theory and practical component are given separate codes. To provide clarity, a single code is given to the courses which contain both theory and practical components.

**The revised details are available in the Annexure - A**

### Agenda / BoS/2024/BPT/5.3

To discuss and approve the changes in the Curriculum and syllabi for III year V and VI Semesters.

B.P.T. program III year V and VI Semester's curriculum, syllabi and the scheme of examinations have been discussed and suggestion of the members of BoS are taken and modified.

- (i) In V Semester course "Clinical orthopaedics & traumatology for physiotherapy", 20 hours had been added.
- (ii) In V Semester course "General surgery, plastic surgery and OBG", 10 hours had been added.
- (iii) In V Semester course "Community health and rehabilitation", 30 hours had been added.
- (iv) In VI Semester course "Clinical neurology and neuro surgery for physiotherapy", 30 hours had been added.

**The modified curriculum structure, syllabi and scheme of examinations for 5<sup>th</sup> and 6<sup>th</sup> semesters of B.P.T. program is given in the Annexure - B**

### Agenda / BoS/2024/BPT/5.4

To discuss and approve the formation of sub-committees for the courses handled by medical college faculty members.

It is decided to form sub-committee in each year for the courses handled by professors/faculty members of Sri Manakula Vinayagar Medical College and hospital. In sub-committee, the faculty members of medical college handling the courses in respective year besides Dean-College



of Physiotherapy and the Class Advisor of respective year will be the members. The sub-committee will conduct meeting on the academic matters related to those courses handled by them and will be consolidated and recorded. These recorded minutes of meeting will be placed before BoS for further implementation.

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#### **Agenda / BoS/2024/BPT/5.5**

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To discuss the December 2023 end semester examination results

The members of BoS appreciated the end semester examination December 2023 results for 4<sup>th</sup> semester B.P.T. program.

**End Semester Examination December 2023 results for 4<sup>th</sup> semester B.P.T. program is given in the Annexure – C**

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#### **Agenda / BoS/2024/BPT/5.6**

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To discuss and confirm the panel of external examiners to the end semester examination for the academic year 2024-25.

The members of BoS approved the panel of external examiners list submitted by the chairman of BoS.

**The details of the panel of external examiners are available in the Annexure – D**

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#### **Agenda / BoS/2024/BPT/5.7**

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To discuss and confirm the panel of question paper setters to the end semester examination for the academic year 2024-25.

The members of BoS approved the paper setter list submitted by the chairman of BoS.

**The details of paper setter are available in the Annexure – E**

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#### **Agenda / BoS/2024/BPT/5.8**

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Any other additional points to be discussed with the permission of Chair.

(1) The College of Physiotherapy celebrated World Physiotherapy Day 2023 during August 31-September 9, 2023. The members of BoS appreciated the efforts.

**The Details of celebrations are given in the Annexure- F**

*The meeting for fifth BoS Meeting was concluded at 12.45 PM by proposing a vote of thanks by Dr. R.Chidambaram, Chairman, Board of Studies, SMVEC College of Physiotherapy.*

R. Chidambaram 5

Prof. R. CHIDAMBARAM, M.P.T(ortho.),

Dean,

College of Physiotherapy,



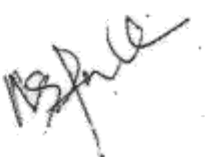
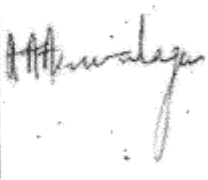


Sri Manakula Vinayagar Engineering College

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**5<sup>th</sup> Board of Studies meeting Attendance Sheet**

Sl. No	Name of the member with designation & official address	Members as per UGC norms	Signature
1	Prof. Dr. R. Chidambaram M.P.T. Dean, College of Physiotherapy, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry – 605107.	Chairman	R. Chidambaram
2	Prof. Dr. Balu M.P.T. Professor, School of Physiotherapy, Arupadaiveedu Medical College, Kirumambakkam, Puducherry – 607403. <u>Email: balukhanphysio007@gmail.com</u>	Subject expert (University Nominee)	B. Balu
3	Prof. Dr. A. Dinakaran M.P.T. Principal, Adhiparasakthi College of Physiotherapy, Melmaruvathur – 603319. <u>Email: apcopt1994@gmail.com</u>	Subject expert (Academic Council Nominee)	A. Dinakaran
4	Prof. KSI. Dr. Murali Sankar M.P.T., Director, School of Physiotherapy, Arupadaiveedu Medical College, Kirumambakkam, Puducherry – 607403. <u>Email: Director.sptpdy@vmu.edu.in</u>	Subject expert (Academic Council Nominee)	M. Sankar
5	Dr. S. Prabakaran, Kiran Physio Clinic, Villupuram - 605401. <u>Email: selvaprabakaran@gmail.com</u>	Representative from industry	S. Prabakaran

6	Dr. K. Ezhilan M.P.T. Chief Physiotherapist, Sri Manakula Vinayagar Medical College & Hospital, Kalitheerthalkuppam, Puducherry – 605107. Email: <a href="mailto:ezhilan.mpt@gmail.com">ezhilan.mpt@gmail.com</a>	Member	
7	Dr. M. Nakkiran M.P.T. Assistant Professor, College of Physiotherapy, Sri Manakular Vinayagar Engineering College, Madagadipet, Puducherry- 605 107. Email: <a href="mailto:nakkiran.physio@smvec.ac.in">nakkiran.physio@smvec.ac.in</a>	Member	
8	Dr. S. Anbumalar M.E., Ph.D. Dean Academics(circuit), College of Physiotherapy, Sri Manakular Vinayagar Engineering College, Madagadipet, Puducherry- 605 107. Email: <a href="mailto:deanacademic@smvec.ac.in">deanacademic@smvec.ac.in</a>	Special Invitee	
9	Dr. A. A. Arivalagar M.Tech., Ph.D. Dean Academics (core), College of Physiotherapy, Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry -605107. Email: <a href="mailto:deanacademic1@smvec.ac.in">deanacademic1@smvec.ac.in</a>	Special Invitee	
10	Dr. J. Sathyanarayanan M.D. Associate Professor, Department of Medicine, Sri Manakula Vinayagar Medical College & Hospital, Kalitheerthalkuppam, Puducherry – 605107. Email: <a href="mailto:drisathyanarayannan@gmail.com">drisathyanarayannan@gmail.com</a>	Subject expert (special invitee)	
11	Dr. K. Manikandan M.S.(ortho.), Associate Professor, Department of Orthopaedics Sri Manakula Vinayagar Engineering College & Hospital, Kalitheerthalkuppam, Puducherry – 605107. Email: <a href="mailto:manikandan7008@gamil.com">manikandan7008@gamil.com</a>	Subject expert (Special Invitee)	

R. Chidambaram

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**CURRICULUM FOR I YEAR / I SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT101	Psychology (General and Health)	130	-	130
2.	U21BPTT102	Sociology	130	-	130
3.	U21BPTT103	Functional english	80	20	100
4.	U21BPTT104	Computer and its applications	40	60	100
<b>Auxiliary Courses*</b>					
5.	U21BPTT105	Physiotherapy orientation*	50	-	50
6.	U21BPTP106	Physical education*	-	40	40
<b>Total Hours</b>					<b>550</b>
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

**CURRICULUM FOR I YEAR / II SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTB207	Anatomy (systemic and regional)	135	60	195
2.	U21BPTB208	Physiology	135	60	195
3.	U21BPTT209	Biomechanics & kinesiology -I	90	30	120
<b>Auxiliary Courses*</b>					
4.	U21BPTT210	Nutrition*	45	-	45
5.	U21BPTT211	Environmental studies*	45	-	45
<b>Total Hours</b>					<b>600</b>
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

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### **CURRICULUM FOR II YEAR / III SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT312	Microbiology & pathology	90	-	90
2.	U21BPTT313	Biochemistry & pharmacology	90	-	90
3.	U21BPTB314	Biomechanics and kinesiology - II	90	60	150
4.	U21BPTB315	Exercise therapy (Basics and soft tissue manipulation)	60	120	180
<b>Auxiliary Courses*</b>					
5.	U21BPTT316	Therapeutic yoga*	15	30	45
6.	U21BPTT317	BLS & first aid*	15	30	45
Total Hours					600
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

### **CURRICULUM FOR II YEAR / IV SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTB418	Exercise therapy – advanced	60	120	180
2.	U21BPTB419	Electrotherapy – I (LF & MF)	60	90	150
3.	U21BPTB420	Electrotherapy – II (HF)	75	90	165
4.	U21BPTT421	Basic physics for physiotherapy	45	-	45
<b>Auxiliary Courses*</b>					
5.	U21BPTT422	Physiotherapy ethics*	15	-	15
6.	U21BPTP423	Clinical observation*	-	45	45
Total hours					600
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

**CURRICULUM FOR III YEAR / V SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT524	Clinical orthopedics & traumatology for physiotherapy**	120	-	120
2.	U21BPTT525	General surgery, plastic surgery and OBG**	100	-	100
3.	U21BPTT526	General medicine, paediatrics & psychiatry**	120	-	120
4.	U21BPTT527	Community health & rehabilitation	90	-	90
<b>Auxiliary Courses*</b>					
6.	U21BPTT528	Diagnostic imaging for physiotherapy*	30	15	45
7.	U21BPTP529	Clinical training*	-	125	125
Total Hours					600
** Viva voce will be conducted as part of ESE					
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

**CURRICULUM FOR III YEAR / VI SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT630	Clinical neurology and neurosurgery for physiotherapy**	120	-	120
2.	U21BPTB631	Physiotherapy in orthopedic conditions	90	90	180
3.	U21BPTB632	Physiotherapy in general medicine and general surgery	90	60	150
<b>Auxiliary Courses*</b>					
4.	U21BPTT633	Principles of management *	30	-	30
5.	U21BPTT634	Health promotion and fitness*	15	15	30
6.	U21BPTP635	Clinical training*	-	90	90
Total Hours					600
** Viva voce will be conducted as part of ESE					
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations.					

### CURRICULUM FOR IV YEAR / VII SEM

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTB736	Physiotherapy in neurological conditions	100	90	190
2.	U21BPTT737	Clinical cardio-respiratory conditions**	90	-	90
3.	U21BPTT738	Community physiotherapy – I	60	-	60
4.	U21BPTT739	Physiotherapy in obstetrics and gynecology	65	15	80
<b>Auxiliary Courses*</b>					
5.	U21BPTT740	Research methodology and bio-statistics*	45	-	45
6.	U21BPTT741	Veterinary physiotherapy*	15	-	15
7.	U21BPTP742	Clinical training*	-	120	120
Total Hours					600
** Viva voce will be conducted as part of ESE * End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

### CURRICULUM FOR IV YEAR / VIII SEM

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTP843	Community physiotherapy – II	-	50	50
2.	U21BPTB844	Physiotherapy in cardio-respiratory conditions	90	90	180
3.	U21BPTT845	Sports physiotherapy	45	15	60
4.	U21BPTT846	Rehabilitation medicine	50	-	50
5.	U21BPTP847	Research project	-	100	100
<b>Auxiliary Courses*</b>					
6.	U21BPTT848	Clinical reasoning and evidence based practice *	30	-	30
7.	U21BPTT849	Education technology*	30	-	30
8.	U21BPTP850	Clinical training*	-	100	100
Total Hours					600
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examinations					

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**CURRICULUM FOR III YEAR / V SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT524	Clinical orthopedics & traumatology for physiotherapy**	120	-	120
2.	U21BPTT525	General surgery, plastic surgery and OBG**	100	-	100
3.	U21BPTT526	General medicine, paediatrics & psychiatry**	120	-	120
4.	U21BPTT527	Community health & rehabilitation	90	-	90
<b>Auxiliary Courses*</b>					
6.	U21BPTT528	Diagnostic imaging for physiotherapy*	30	15	45
7.	U21BPTP529	Clinical training*	-	125	125
Total Hours					600
** Viva voce will be conducted as part of ESE					
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examination					

**CURRICULUM FOR III YEAR / VI SEM**

Sl. No.	Course Code	Course Name	Theory (hours)	Practical (hours)	Total (hours)
<b>Core Courses</b>					
1.	U21BPTT630	Clinical neurology and neurosurgery for physiotherapy**	120	-	120
2.	U21BPTB631	Physiotherapy in orthopedic conditions	90	90	180
3.	U21BPTB632	Physiotherapy in general medicine and general surgery	90	60	150
<b>Auxiliary Courses*</b>					
4.	U21BPTT633	Principles of management *	30	-	30
5.	U21BPTT634	Health promotion and fitness*	15	15	30
6.	U21BPTP635	Clinical training*	-	90	90
Total Hours					600
** Viva voce will be conducted as part of ESE					
* End Semester Examination will be Conducted at the Department and the Marks will be submitted to the Controller of Examination.					



## End Semester Exam Evaluation Pattern for V Semester

Course Code	Course Name	Theory						Practical		Grand total	
		ESE		Internal Max.	Viva	Total		ESE		Theory + Practical	
		Max.	Min.		Max.	Max.	Min.				
U21BPTT524	Clinical orthopaedics & traumatology for physiotherapy** (Theory + Internal + Viva voce)	75	38	25	50	150	75	-	-	150	75
U21BPTT525	General surgery, plastic surgery & OBG** (Theory + Internal + Viva voce)	75	38	25	50	150	75	-	-	150	75
U21BPTT526	General medicine, paediatrics & psychiatry** (Theory + Internal + Viva voce)	75	38	25	50	150	75	-	-	150	75
U21BPTT527	Community health and rehabilitation (Theory + Internal)	75	38	25	-	100	50	-	-	100	50
U21BPTT528	Diagnostic imaging for physiotherapy*					100	50	-	-	100	50
U21BPTP529	Clinical training*	-	-	-	-	-	-	100	50	100	50

## End Semester Exam Evaluation Pattern for VI Semester

Course Code	Course Name	Theory						Practical		Grand total	
		ESE		Internal Max.	Viva Max.	Total		ESE		Theory + Practical	
		Max.	Min.			Max.	Min.	Max.	Min.	Max.	Min.
U21BPTT630	Clinical neurology and neuro surgery for physiotherapy** (Theory + Internal + Viva voce)	75	38	25	50	150	75	-	-	150	75
U21BPTB631	Physiotherapy in orthopaedic conditions (Theory + Internal + Practical)	75	38	25	-	100	50	100	50	200	100
U21BPTB632	Physiotherapy in general medicine and general surgery (Theory + Internal + Practical)	75	38	25	-	100	50	100	50	200	100
U21BPTT633	Principles of management*	75	38	25	-	100	50	-	-	100	50
U21BPTT634	Health promotion and fitness*	-	-	-	-	100	50	-	-	100	50
U21BPTP635	Clinical training*	-	-	-	-	100	50	-	-	100	50

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## CLINICAL ORTHOPAEDICS & TRAUMATOLOGY FOR PHYSIOTHERAPY

COURSE CODE: U21BPTT524

Total hours: 120

### Course description:

This course intends to familiar with principles of orthopaedics along with familiarization with terminology and abbreviation for efficient and effective chart reviewing and documentation. The purpose of this course is to make physiotherapy students aware of various orthopaedics condition so these can be physically managed effectively both pre and post operatively.

### Course objectives:

At the end of the course, the candidate will

- a) Be able to discuss the aetiology, pathophysiology, clinical manifestation and conservative/surgical management of various orthopaedics conditions.
- b) Gain the skill of clinical examination and interpretation of the pre-operative cases and post-operative cases.
- c) Be able to read and interpret salient features of the X-ray and correlate the radiological findings with the clinical findings.
- d) Be able to interpret pathological studies pertaining to orthopaedic condition.

Unit	Topics	Didactic Hours	Clinical hours	Total hours
I	1. Introduction to orthopaedics: i. Orthopaedic terminologies ii. Clinical examination iii. Common investigative procedures iv. General principles of management	7	6	13
II	1. Healing of fractures 2. Fractures & dislocations of upper limb: i. Causes, clinical features, mechanism of injury, complication, conservative & surgical management for following injuries.  a) fracture of clavicle & scapula. b) fracture of greater tuberosity and neck of humerus. c) fracture of shaft of humerus. d) supracondylar fracture of humerus. e) fracture of capitulum, radial head, olecranon, coronoid & epicondyles. f) fracture both bone of forearm. g) colle's fracture h) smith fracture	2           12	9	23



	i) scaphoid fracture j) fracture of metacarpals k) bennet's fracture l) fracture of the phalanges m) dislocation of shoulder & elbow 3. Fracture & dislocation of lower limb: i. causes, clinical features, mechanism of injury, complication, conservative & surgical management for following injuries.  a) fracture neck, shaft and condyles of femur b) fracture patella c) fracture of tibial condyles & bothbone leg. d) fracture calcaneum. e) dislocation of hip & knee.	10	5	15
III	1. Deformities & Anomalies: i. deformities of the spine. ii. deformation of the lower limb 2. Degeneration of inflammatory condition: i. osteo-orthosis/ arthritis ii. spondylosis iii. spondylolisthesis iv. rheumatoid arthritis v. ankylosing spondylitis. 3. Infective conditions i. septic arthritis ii. osteomyelitis iii. tuberculosis spine 4. Arthroplasty: i. total hip replacement ii. total knee replacement 5. arthroscopy	6  6  6	4  4  4	30
IV	1. Soft tissue lesions: i. sprains & strains ii. capsulitis iii. bursitis iv. tenosynovitis v. tendonitis	8	4	12
V	1. Peripheral nerve lesions: i. radial, median & ulnar nerve lesions ii. sciatic nerve lesions iii. lateral popliteal nerve lesions. 2. Hand injuries: tendon & joint injury 3. Amputation: definition, levels of amputation, indications & complications	14	13	27

	4. Spine: cervical compressive myelopathy with quadriplegia, post traumatic paraplegia & pott's paraplegia.			
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#### **Recommended text books:**

1. Mayil Vahanan Natarajan, "Textbook of Orthopaedics and Traumatology", 8<sup>th</sup> edition, Wolters Kluwer Pvt. Ltd., 2018.
2. Maheswari & Mhaskar, "Essential Orthopaedics", 7<sup>th</sup> edition, Jaypee publishers, 2022.
3. Adam's "outline of fractures", 12<sup>th</sup> edition, Elsevier, 2020
4. Apley's "System of Orthopaedics and fractures", 9<sup>th</sup> edition, CRC, 2017

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# GENERAL SURGERY, PLASTIC SURGERY AND O.B.&G.

Course code: U21BPTT525

Total hours: 100

## Course description:

This course intends to familiarize students with principles of General surgery including various specialties like cardiovascular, thoracic, neurology and plastic surgery as well as to provide introduction to women's health which includes problems related to pregnancy and other disorders specific to women. It familiarizes the students with terminology and abbreviations for efficient and effective chart reviewing and documentation. It explores various conditions needing attention, focusing on epidemiology, pathology as well as primary and secondary clinical characteristics and their surgical and medical management. The purpose of this course is to make physiotherapy students aware of various surgical conditions general surgery and specialty surgeries so these can be physically managed effectively both pre as well as postoperatively.

## Course objectives:

At the end of the course, the candidate will be able to:

- Describe the effects of surgical trauma & anesthesia in general.
- Describe pre-operative evaluation, surgical indications in various surgical approaches, management and post-operative care in above mentioned areas with possible complications.
- Read & interpret findings of the relevant investigations.
- Normal and abnormal physiological events, complications and management of pregnancy (Pregnancy, Labour, Puerperium).
- Normal and abnormal physiological events, complications and management of uro- genital dysfunction (Antenatal, Postnatal and during menopause).

Units	Topics	Didactic Hours	Clinical Hours	Total Hours
I	GENERAL SURGERY	30	20	50
	1. Infection and inflammation: Acute & chronic signs, symptoms, complications & management.	3		
	2. Wounds and ulcers :Classification, healing & management,	2		
II	1. General : i. Anesthesia types, Effect, indications , contraindications and postoperative complications ii. Haemorrhage and Shock, classification, iii. Water & Electrolyte imbalance	12	20	





	<ul style="list-style-type: none"> <li>iii. Surgery for coronary artery disease</li> <li>iv. Valvular surgeries</li> <li>v. Surgery for congenital heart disease</li> <li>vi. Peripheral arterial disorder, burger's disease, raeynaud's disease and aneurysm</li> </ul> <p>gangrene, amputation, DVT</p> <p>Plastic surgery :</p> <p>Skin grafts &amp; flaps – Types, indications with special emphasis to burns, wounds</p> <ul style="list-style-type: none"> <li>i. Ulcers, complications and postoperative care</li> <li>ii. Tendon transfers, with special emphasis to hand, foot &amp; facial paralysis, &amp; repair of flexor &amp; extensor tendon injuries</li> <li>iii. Keloid &amp; hypertrophied scar management</li> <li>iv. Reconstructive surgery of peripheral nerves</li> </ul> <p>micro vascular surgery- reimplantation &amp; revascularization</p>			
	<b>OB&amp;G</b>	<b>15</b>	<b>10</b>	<b>25</b>
<b>IV</b>	<p>1) physiology of pregnancy:</p> <ul style="list-style-type: none"> <li>i. Development of the foetus, normal/ abnormal / multiple gestations,</li> <li>ii. Common complications during pregnancy: <ul style="list-style-type: none"> <li>a. Anaemia,</li> <li>b. P I H</li> <li>c. Eclampsia</li> <li>d. Diabetes,</li> <li>e. Hepatitis, TORCH infection or</li> <li>f. HIV</li> </ul> </li> </ul> <p>2) physiology of labour:</p> <ul style="list-style-type: none"> <li>i. Normal – events of I, II &amp; III stages of labour</li> <li>ii. Complications during labour &amp; management</li> <li>iii. Caesarean section- elective/ emergency &amp; post-operative care</li> </ul>	<b>5</b>		

V	1) Post natal period: i. Puerperium & lactation ii. Complications of repeated child bearing with small gaps iii. Methods of contraception  2) Uro-genital dysfunction:  Uterine prolapse – classification & management (conservative /surgical)  cystocoele, rectocoele, enterocoele, urethrocoele	2	10	
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### Recommended text books:

1. Bailey & Love's "Short Practice of Surgery", 28<sup>th</sup> edition, CRC Press, 2022.
2. S. Das "A Concise Textbook of Surgery", 6<sup>th</sup> edition, Dr. S. Das, 2010.

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## GENERAL MEDICINE, PAEDIATRICS AND PSYCHIATRY

Course code: U21BPTT526

Total hours: 120

### Course description:

This subject follows the basic science subjects to provide the knowledge about relevant aspects of General Medicine, Pediatric and Psychiatry. The student will have a general understanding of the diseases the therapist would encounter in their practice. The objective of this course is that discussion the student will be able to list the etiology, pathology, clinical features and treatment methods for various medical conditions.

### Course objectives:

At the end of the course, the candidate will:

1. Be able to describe etiology, pathophysiology, signs & symptoms & management of the endocrinal, metabolic, geriatric & paediatric & psychiatric, nutrition deficiency conditions.
2. Be able to describe etiology, pathophysiology, signs & symptoms, clinical evaluation & management of the various rheumatologic cardiovascular & respiratory conditions.
3. Acquire skill of history taking and clinical examination of musculoskeletal, respiratory, cardiovascular & neurological system as a part of clinical teaching.
4. Be able to interpret auscultation findings with special emphasis to pulmonary system.
5. Study chest X-ray, blood gas analysis, P.F.T. findings & haematological studies for cardiovascular, respiratory, neurological & rheumatological conditions.
6. Be able to describe the principles of management at the intensive care unit.
7. Be able to acquire the skills of basic life support.

Unit	Topics	Didactic Hours	Clinical Hours	Total Hours
I	GENERAL MEDICINE			
	INFECTIONS:  Mode of spread, effects of infection in the body – and preventive measures of the following diseases: Bacteria - Tetanus Viral - Herpes simplex, Herpes Zoster, Varicella, Measles, Hepatitis B, AIDS. Protozoal – Filaria.	10	8	18

	<p><b>POISONING:</b></p> <p>Clinical features – general management – common agents in poisoning – pharmaceutical agents – drugs of misuse – chemical pesticides – Envenomation.</p> <p><b>FOOD AND NUTRITION:</b></p> <p>Assessment – Nutritional and Energy requirements. Deficiency diseases – vitamins (A, B, C, D&amp; K) and Minerals (iron, calcium phosphorus, iodine) clinical features and treatment.</p> <p><b>METABOLIC &amp; ENDOCRINE DISEASES:</b></p> <p>Definition, aetiology, types, complications &amp; management of: diabetes mellitus diseases of thyroid &amp; parathyroid, adrenal and pituitary glands, obesity.</p> <p><b>HEMATOLOGY:</b></p> <p>Clinical aspect of anemia: iron deficiency, B12 &amp; folic acid deficiencies, Types of bleeding diathesis, clinical features and management of hemophilia.</p>			
II	<p><b>GIT:</b></p> <ul style="list-style-type: none"> <li>Clinical manifestations of gastrointestinal disease – Etiology, clinical features, diagnosis, complications and treatment of the following conditions: Reflux oesophagitis, achlasia cardia, Carcinoma of oesophagus, GI bleeding, Peptic Ulcer disease, Carcinoma of Stomach, Pancreatitis, Malabsorption syndrome, Ulcerative colitis, Peritonitis, Infections of alimentary tract .</li> <li>Clinical manifestations of liver diseases – Aetiology, clinical features, diagnosis, complications and treatment of the following conditions : Viral hepatitis, Wilson's disease, Alpha1-antitrypsin deficiency, Tumors of the liver, Gall stones, cholecystitis.</li> </ul> <p><b>DERMATOLOGY:</b></p> <p>Examination and clinical manifestations of skin diseases; causes, clinical features and management of the following skin conditions: leprosy, psoriasis, pigmentary anomalies, vasomotor disorders, dermatitis, coccal and fungal parasitic and viral infections.</p>	31	10	41



#### RESPIRATORY DISEASE:

Definition, Etiology, Clinical features, signs and symptoms, complications, management and treatment of following lung disease:

- Chronic bronchitis, Emphysema
- Asthma
- Bronchiectasis, cystic fibrosis
- upper respiratory tract infections
- Pneumonia, tuberculosis, lung abscess, fungal diseases, interstitial lung disease
- Disease of pleura (Pleural effusion, Pneumothorax, Hydropneumothorax, Emphysema)
- Disease of diaphragm and chest wall deformities
- Respiratory failure – definition, types, causes, clinical features, diagnosis and management.

#### NERVOUS SYSTEM:

- CVA – thrombosis, embolism, hemorrhage
- Extrapramidal lesion – Parkinsonism, athetosis, chorea, dystonia.
- Disorders of cerebellar infarction
- Disorders of muscle – myopathy
- Disease of Anterior horn cells: SMA, MND, Syringomyelia, poliomyelitis.
- Multiple sclerosis
- Infections of nervous system – encephalitis, neurosyphilis, meningitis.
- Tetanus, transverse myelitis, tabes dorsalis, TB spine
- Epilepsy

#### CARDIO-VASCULAR SYSTEM :

Definition, aetiology, clinical features & management of: cardiac failure, rheumatic fever, infective endocarditis, ischaemic heart disease, hypertension, pulmonary embolism & pulmonary infarction and deep vein thrombosis.

- Congenital heart disease – ASD, VSD, Fallot's tetralogy, PDA.

III	<p><b>RENAL CONDITION:</b></p> <p>Acute &amp; chronic renal failure urinary tract infections.</p> <p><b>RHEUMATOLOGICAL CONDITION:</b></p> <p>Introduction to autoimmune disease Systemic lupus erythematosus, Polymyositis, Dermatomyositis, Polyarthrits nodosa, Scleroderma, Rheumatoid arthritis, Osteoarthritis.</p> <p><b>ENT:</b></p> <p>Otitis media, otosclerosis, functional achonia and deafness, facial palsy – classification, medical and surgical management.</p> <p><b>OPHTHALMOLOGY:</b></p> <p>Ophthalmologic surgical conditions, refractions, conjunctivitis, glaucoma, corneal ulcer, iritis, cataract, detachment of retina, defects of extra -ocular muscles surgical management.</p> <p><b>GERIATRIC:</b></p> <p>Physiology of aging /degenerative changes – musculoskeletal /neuromotor /cardio-respiratory /metabolic, endocrine, cognitive, immune systems, osteoporosis, alzhemimers, dementia</p> <p>List disease commonly encountered in the elderly population and causing disability</p>	16		16
	<u><b>PAEDIATRICS</b></u>			
UNIT  IV	<p><b>GROWTH AND DEVELOPMENT</b> [from child birth to 12 years]</p> <ul style="list-style-type: none"> <li>• Normal uterine development of foetus .</li> <li>• Growth and development of child – motor, mental, language and social.</li> </ul> <p><b>HIGH RISK PREGNANCY:</b></p> <p>Perinatal, postnatal problems and management (Birth injuries) Neck, shoulder dystocia, brachial plexus injury,</p>			

	<p>fractures, birth asphyxia, inherited disease, maternal infection (viral; bacterial) gestational diabetes, pregnancy induced hypertension, epilepsy, sepsis.</p> <p><b>DEVELOPMENTAL DELAY:</b></p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms.</p> <p><b>CHILD AND NUTRITION :</b></p> <ul style="list-style-type: none"> <li>• Significance of breast feeding.</li> <li>• Problems and management of LBW infants,</li> <li>• Nutritional requirements, malnutrition syndrome, vitamin deficiency disorders.</li> </ul> <p><b>COMMON INFECTIOUS DISEASE IN CHILDREN:</b></p> <p>Tetanus, diphtheria, mycobacterial measles, chicken pox, gastroenteritis, HIV.</p> <p><b>ORTHOPEDIC AND NEUROLOGICAL DISORDERS:</b></p> <ul style="list-style-type: none"> <li>• Cerebral palsy (Define and briefly outline etiology of prenatal, perinatal and postnatal causes: briefly mention pathogenesis, types of cerebral palsy (classification) findings on examination; general examination of C.N.S. Musculoskeletal and respiratory system and management).</li> <li>• Meningitis, encephalitis</li> <li>• Hydrocephalus</li> <li>• Ataxia</li> <li>• Arnold-chiari malformation, dandy walker syndrome</li> <li>• Basilar impression &amp; cerebral malformations</li> <li>• Floppy infant</li> <li>• GBS</li> <li>• Poliomyelitis</li> <li>• Epilepsy</li> <li>• Neural tube defects</li> <li>• Neuropathy, infantile hemilegia.</li> <li>• Still's disease</li> <li>• Limping child</li> <li>• DDH, perthes disease, CTEV, torticollis.</li> </ul>	30	10	40
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#### RESPIRATORY DISEASES :

Bronchiectasis, Bronchopneumonia, Bronchial asthma, Lung abscess, Tuberculosis, SIDS, cystic fibrosis, Acute pediatric respiratory distress syndrome.

#### CARDIOVASCULAR DISORDERS :

Rheumatic heart disease, sub-acute bacterial endocarditis, congenital heart defects -VSD, ASD, PDA, TOF and Transposition of Great Vessels RHD.

#### GENETIC DISORDERS :

- Types of genetic disorder
- Downs syndrome
- Muscular dystrophy -Types Mode of inheritance  
Clinical manifestation Progression and prognosis of disease, evaluation (Genetic screening test), treatment.
- Common genetic disorders.

#### HAEMATOLOGICAL DISORDER :

Iron deficiency anemia, Aplastic anemia, sickle cell disease, hemophilia, thalassemia, leukemia.

#### MISCELLANEOUS :

- Feeding and communication difficulty,
- Sensory disorders – problems due to loss of vision and hearing
- Learning and behavioral problems - Attention Deficit hyperactivity Disorder & autism, Mental retardation.

#### CLINICAL ASSESSMENTS:

- NICU-Overview.
- Neonatal assessment including neonatal reflex.
- Pre-term baby assessment.
- Low birth weight baby assessment.
- Examination of the nervous system
- Examination of respiratory system
- Examination of cardiovascular system
- Community programmes: International (WHO),

	national and local for prevention measures for disease. Outline the immunization schedule for children			
	<u>PSYCHIATRY</u>			
UNIT  V	<ul style="list-style-type: none"> <li>• Psychiatric History, classification and mental status examination.</li> <li>• Organic mental disorders (delirium, dementia, organic amnestic syndrome and other organic mental disorders).</li> <li>• Mood disorders (manic, depressive episodes, bipolar mood disorders).</li> <li>• Neurotic stress related and somatoform disorders (Anxiety disorder, phobic anxiety disorders, obsessive compulsive disorders, adjustment disorders, dissociative disorders, somatoform disorders post-traumatic stress Disorder).</li> </ul>	5		5

#### Recommended reference book:

1. Davidson's "Principles and practice of Medicine", 23<sup>rd</sup> edition, Elsevier, 2018.
2. O.P. Ghai, "Essential Paediatrics", 9<sup>th</sup> edition, CBS Publishers, 2019.
3. Graham Davey, Nick Lake "Clinical Psychology", 2<sup>nd</sup> edition, Taylor & Francis group, 2015.
4. M.S. Bhakia "Short textbooks of Psychiatry", 7<sup>th</sup> edition, CBS Publishers, 2019.

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# COMMUNITY HEALTH AND REHABILITATION

COURSE CODE: U21BPTT527

Total hours: 90

## Course description:

This course is designed to assist the students to acquire knowledge of the disease and help the students to understand the limitation imposed by the diseases.

## Course objectives:

At the end of the course the candidate shall be able to understand the contents given in the syllabus.

Units	Topics	Didactic Hours	Clinical Hours	Total Hours
I	<p>1. INTRODUCTION</p> <ul style="list-style-type: none"><li>i. natural history of diseases</li><li>ii. influence of social, economic, cultural aspect of health and diseases</li><li>iii. measures of prevention for disease with disability<ul style="list-style-type: none"><li>a. methods of intervention for disease with disability.</li></ul></li></ul> <p>2. HEALTH CARE DELIVERY SYSTEM AND PUBLIC HEALTH ADMINISTRATIVE SYSTEM</p> <ul style="list-style-type: none"><li>i. national level</li><li>ii. state level</li></ul> <p>3. NATIONAL HEALTH PROGRAMME</p> <ul style="list-style-type: none"><li>i. role of social, economic, cultural factors in the implementation of national programmes</li><li>ii. primary health care<ul style="list-style-type: none"><li>a. objectives and implementation.</li></ul></li></ul>	20		20
II	<p>1. OCCUPATIONAL HEALTH</p> <ul style="list-style-type: none"><li>i. definition</li><li>ii. scope</li><li>iii. occupational diseases</li><li>iv. prevention of occupational diseases and hazards</li><li>v. role of E.S.I.<ul style="list-style-type: none"><li>a. employee state</li><li>b. insurance scheme and its benefit.</li></ul></li></ul> <p>2. SOCIAL SECURITY MEASURES</p>	15		15



	<ul style="list-style-type: none"> <li>i. protection of occupational hazards, accidents and diseases</li> <li>ii. workmen compensation act</li> <li>iii. environmental safety.</li> </ul>			
III	<p>1. FAMILY WELFARE PROGRAMME</p> <ul style="list-style-type: none"> <li>i. objectives of family welfare programme</li> <li>ii. family planning methods</li> <li>iii. general idea of advantages and disadvantages</li> <li>iv. concepts of planned pregnancy               <ul style="list-style-type: none"> <li>a. population dynamics.</li> </ul> </li> </ul> <p>2. COMMUNICABLE DISEASES (with reference to reservoir, mode of transmission, route of entry and levels of prevention)</p> <ul style="list-style-type: none"> <li>i. poliomyelitis</li> <li>ii. meningitis</li> <li>iii. encephalitis</li> <li>iv. tuberculosis</li> <li>v. filariasis</li> <li>vi. leprosy</li> <li>vii. tetanus</li> <li>viii. measles</li> <li>ix. malaria</li> </ul> <p>universal immunization programme-ARI, diarrhea &amp; polio control programme.</p>	20		20
IV	<p>1. MENTAL HEALTH</p> <ul style="list-style-type: none"> <li>i. community aspect of mental health.               <ul style="list-style-type: none"> <li>a. role of physiotherapist in mental health problem incerebral palsy, mental retardation.</li> </ul> </li> </ul> <p>2. HEALTH EDUCATION</p> <ul style="list-style-type: none"> <li>i. philosophy</li> <li>ii. main principles and objectives</li> <li>iii. methods and tools of communication</li> <li>iv. health education versus health legislation</li> <li>v. education versus propaganda</li> <li>vi. role of community leader in health education</li> <li>vii. role of health professionals in health education</li> </ul>	20		20

	<p>element of planning a health education programme with special emphasis on community participation</p> <p>3. COMMUNITY BASED REHABILITATION VERSUS INSTITUTIONAL BASED REHABILITATION</p>			
V	<p>1. REVIEW OF</p> <p>i. beliefs, values, norms, habits, taboos</p> <p>a. Their importance in learning and change process</p> <p>2. REVIEW OF</p> <p>i. concept of perception</p> <p>ii. attitudes</p> <p>iii. socialization process</p> <p>iv. learning and theories of learning</p> <p>v. social change and change process</p> <p>a. motivation needs</p> <p>3. VITAL HEALTH STATISTICS</p> <p>i. basic concept</p> <p>ii. mortality and morbidity rate</p> <p>iii. period, age, causes of specific death rate</p> <p>a. role of this rate as</p> <p>b. indicator of health and</p> <p>c. disease.</p>	15		15

**Recommended text book:**

1. K. Park "Textbook of Preventive and Social Medicine", 22<sup>nd</sup> edition, Generic Publisher, 2013.

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## DIAGNOSTIC IMAGING FOR PHYSIOTHERAPY

COURSE CODE: U21BPTP528

Total hours: 45

### Course description:

This course covers the study of common diagnostic and therapeutic imaging tests. At the end of the course students will be aware of the indications and implications of commonly used diagnostic imaging tests as they pertain to patient's management. The course will cover that how X-Ray, CT, MRI, ultrasound and other medical images are created and how they help the health professionals to save lives.

### Course objectives:

The objectives is to train physiotherapy students to become a skilled and competent to interpret various diagnostic / interventional imaging studies both conventional and advanced imaging

Units	Topics	Didactic Hours	Clinical Hours	Total Hours
I	1. IMAGE INTERPRETATION i. Introduction to Radiology ii. Evolution of X Rays iii. Role of medical imaging iv. Radiography( x-rays ) v. Fluoroscopy vi. Computed tomography (CT) vii. Magnetic resonance imaging (MRI) viii. Ultrasound	3	1	4
	1. RADIOGRAPHY i. Equipment components ii. Procedures for radiography iii. Benefits versus risks and costs iv. Indications and contraindications.	3	2	5
	2. MAMMOGRAPHY i. Equipment components ii. Procedures for mammography iii. Benefits versus risks and costs iv. Indications and contraindications.	3	2	5

II	3. FLUOROSCOPY i. What is Fluoroscopy? ii. Equipment used for fluoroscopy iii. Indications and contra indications iv. The Findings in fluoroscopy v. Benefits versus risks and costs.	3	2	5
	4. COMPUTED TOMOGRAPHY (CT) i. What is computed tomography? ii. Equipment used for computedtomography iii. Indications and contra indications iv. The findings in computed tomography v. Benefits versus risks and costs.	5	2	7
III	MAGNETIC RESONANCE IMAGING(MRI)  i. What is MRI? ii. Equipment used for MRI iii. Indications and contra indications iv. The findings in MRI v. Benefits versus risks and costs vi. Functional MRI.	5	2	7
IV	ULTRASOUND i. What is ultrasound? ii. Equipment used for ultrasound iii. Indications and contra indications iv. The findings in ultrasound v. Benefits versus risks and costs. vi. Echocardiography - indications and contraindications	5	2	6
V	NUCLEAR MEDICINE i. What is nuclear medicine? ii. Equipment used for nuclear medicine iii. Indications and contra indications iv. Benefits versus risks and costs	3	2	4

### Recommended reference books:

1. Brant and Helms, Fundamentals of diagnostic radiology, 5<sup>th</sup> edition, Wolters Kluwer, 2019.
2. Chapman & Nakielny's "Aids to Radiological Differential Diagnosis", 7<sup>th</sup> edition, 2019.

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## CLINICAL TRAINING

Course code: U21BPTP529

Total hours: 125

### Course description:

The Student will learn the Subjective data taking procedure.

### Course objectives:

At the end of the course the students will able to

1. Understand the history taking procedure
2. Various procedures in patient's assessments
3. Learn the various treatment procedures

Sl. No	TOPIC
1.	Demographic data Collection Socioeconomic
2.	history collection
3.	Social behavior and its influence on health
4.	Schedule the patients treatment according to their condition

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**CLINICAL NEUROLOGY AND NEUROSURGERY FOR PHYSIOTHERAPY**

Course cord: U21BPTP630

Total hours: 120

**Course description:**

This subject follows the fundamental science subjects to provide the knowledge about relevant aspects of neurology & neurosurgery. The student will have a basic knowledge of the diseases the therapist would encounter in their practice. The objective of this course is that after 90 Hours of lectures and discussion the student will be able to list the etiology, pathology, clinical features and ways for treating various neurological conditions.

**Course objectives:**

At the end of the course, the candidate will:

1. Be able to describe aetiology, pathophysiology, signs & symptoms & management of the various neurological conditions (or) diseases.
2. Acquire skill of history taking and clinical examination of neurological patients as a part of clinical teaching.
3. Be able to describe neuromuscular, musculoskeletal, cardio-vascular & immunological conditions, nutritional deficiencies, infectious diseases, & neuro transmitted conditions.
4. Acquire skill of clinical examination of a neonate / child with respect to the neurological condition

Unit	Topic	Didactic Hours	Clinical Hours	Total Hours
I	1. GENERAL NEUROLOGICAL ASSESSMENT i. Nervous system- history and examination ii. Conscious level assessment iii. Higher nutral function iv. Cranial nerve examination v. Motor, sensory, cerebellar & gait examination vi. Examination of the unconscious patients vii. The neurological observation charts			
	2. NEUROLOGICAL INVESTIGATIONS i. investigation of the central and peripheral nervous systems ii. skull x-ray iii. computerized tomography scanning {CT} iv. magnetic resonance imaging {MRI}			



	<ul style="list-style-type: none"> <li>v. ultrasound</li> <li>vi. angiography</li> <li>vii. radionuclide imaging</li> <li>viii. electroencephalography {EEG}</li> <li>ix. intracranial pressure monitoring</li> <li>x. evoked potentials</li> <li>xi. lumbar puncture</li> <li>xii. cerebrospinal fluid {CSF}</li> <li>xiii. electromyography/ nerve conduction studies</li> <li>xiv. neuro - otological test</li> </ul> <p>3. CEREBRO –VASCULAR ACCIDENTS:</p> <p>Define stroke, TIA, RIA, stroke in evolution, multi infarct dementia and Lacunar infarct. Classification of stroke – Ischemic, hemorrhagic, venous infarcts. Risk factors, cause of ischemic stroke, causes of hemorrhagic stroke. Classification of hemorrhagic stroke, classification of stroke based on symptoms, stroke syndrome, investigations, differential diagnosis, medical and surgical management.</p> <p>4. HEAD INJURY:</p> <p>Etiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, surgical management and complications.</p> <p>5. BRAIN TUMORS AND SPINAL TUMORS:</p> <p>Classification, clinical features, investigations, medical and surgical management.</p> <p>6. INFECTIONS OF BRAIN AND SPINAL CORD:</p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, surgical management and complications of following disorders:</p> <ul style="list-style-type: none"> <li>i. Meningitis, Encephalitis</li> <li>ii. Neurosyphilis, HIV infection</li> <li>iii. Herpes, Leprosy, Tetanus</li> <li>iv. Poliomyelitis and Post-polio syndrome</li> </ul>	20	11	31
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	<p><b>7. COMPLICATIONS OF SYSTEMIC INFECTIONS ON NERVOUS SYSTEM</b></p> <p>Septic encephalopathy, AIDS, Rheumatic fever, Brucellosis, tetanus, and pertussis.</p> <p><b>8. MOVEMENT DISORDERS:</b></p> <p>Definition, etiology, risk factors, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, surgical management and complications of following disorders:</p> <ol style="list-style-type: none"> <li>Parkinson's disease</li> <li>Dystonia, Chorea</li> <li>Ballism's, Athetosis</li> <li>Tics, Myoclonus</li> <li>Wilson's disease</li> </ol> <p><b>9. CEREBELLAR AND COORDINATION DISORDERS:</b></p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, management.</p> <ol style="list-style-type: none"> <li>Congenital ataxia</li> <li>Friedreich's ataxia</li> <li>Ataxia telangiectasia</li> <li>Metabolic ataxia</li> <li>Hereditary cerebellar ataxia</li> <li>Tabes dorsalis</li> <li>Syphilis</li> </ol>			
II	<p><b>1. POLYNEUROPATHY:</b></p> <p>Classification of Polyneuropathies, Hereditary motor sensory neuropathy, hereditary sensory and Autonomic neuropathies, Amyloid neuropathy, acute idiopathic polyneuropathies.</p> <p>Guillain-Barre syndrome – Causes, clinical features, management of GBS, chronic idiopathic polyneuropathies, diagnosis of polyneuropathy, nerve biopsy.</p> <p><b>2. DISORDERS &amp; DISEASES OF MUSCLE:</b></p> <p>Classification, etiology, signs &amp; symptoms, investigations, imaging methods, muscle biopsy, genetic</p>			

	<p>counselling &amp; management of muscle diseases emphasis</p> <ol style="list-style-type: none"> <li>Muscular dystrophy</li> <li>Myotonic dystrophy</li> <li>Myopathy</li> <li>Non-dystrophic myotonia</li> </ol> <p>3. MOTOR NEURON DISEASES:</p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management and complications of following disorders:</p> <ol style="list-style-type: none"> <li>Amyotrophic lateral sclerosis</li> <li>Spinal muscular atrophy</li> <li>Hereditary bulbar palsy</li> <li>Neuromyotonia</li> <li>Post-irradiation lumbosacral polyradiculopathy</li> </ol> <p>4. MULTIPLE SCLEROSIS:</p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, and complications</p> <p>5. DISORDERS OF MYONEURAL JUNCTION:</p> <p>Etiology, classification, signs &amp; symptoms, investigations, management of following disorders:</p> <ol style="list-style-type: none"> <li>Myasthenia gravis</li> <li>Eaton-lambert syndrome</li> <li>Botulism</li> </ol> <p>6. SPINAL CORD DISORDERS:</p> <p>Anatomy and Functions of tracts, definition of spinal cord disorders, etiology, risk factors, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, surgical management and complications of following disorders:</p> <ol style="list-style-type: none"> <li>Spinal cord injury</li> <li>Inter vertebral disc prolapse</li> <li>Spinal epidural abscess</li> <li>Transverse myelitis</li> <li>Viral myelitis, syringomyelia</li> <li>Spina bifida</li> <li>Sub-acute combined degeneration of the cord</li> <li>Hereditary spastic paraplegia</li> <li>Radiation myelopathy</li> </ol>	20	11	31
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	<ul style="list-style-type: none"> <li>x. Progressive encephalomyelitis</li> <li>xi. Conus medullaris syndrome</li> <li>xii. Bladder &amp; bowel dysfunction</li> <li>xiii. Sarcoidosis.</li> </ul>			
III	<p><b>1. DISORDERS OF LOWER CRANIAL NERVES&amp; SPECIAL SENSES</b></p> <p>Etiology, clinical features, investigations, and management of following disorders</p> <ul style="list-style-type: none"> <li>i. lesions in trigeminal nerve</li> <li>ii. trigeminal neuralgia</li> <li>iii. trigeminal sensory neuropathy</li> <li>iv. lesions in facial nerve</li> <li>v. facial palsy</li> <li>vi. bell's palsy</li> <li>vii. hemi facial spasm</li> <li>viii. Glossopharyngeal neuralgia</li> <li>ix. lesions of vagus nerve</li> <li>x. lesions of spinal accessory nerve</li> <li>xi. lesions of hypoglossal nerve</li> <li>xii. Dysphagia – swallowing mechanisms, causes of dysphagia, symptoms, examination, and management of dysphagia.</li> </ul> <p><b>2. HIGHER CORTICAL, NEURO PSYCHOLOGICAL AND NEUROBEHAVIOURALDISORDERS</b></p> <ul style="list-style-type: none"> <li>i. Epilepsy, physiology, classification, clinical features, investigations, medical&amp; surgical management of following disorders – non-epileptic attacks of childhood, Epilepsy in childhood, seizures and epilepsy syndromes in adult.</li> <li>ii. Classification &amp; clinical features of dementia, Alzheimer's disease.</li> <li>iii. Causes &amp; investigations of coma, criteria for diagnosis of brain death.</li> </ul> <p><b>3. PSYCHIATRY IN NEUROLOGY:</b></p> <ul style="list-style-type: none"> <li>i. Psychiatric History, classification and mental status examination</li> <li>ii. Organic mental disorders (delirium, dementia, organic amnestic syndrome and other organic mental disorders)</li> <li>iii. Mood disorders (manic, depressive episodes, bipolar mood disorders)</li> <li>iv. Schizophrenia, delusional disorders and</li> </ul>	20	11	31

	<p>schizoaffective disorders</p> <p>v. Child psychiatry (mental retardation, developmental disorders, attention deficit, hyperkinetic disorder, enuresis, conduct disorders)</p> <p>vi. Disorders of adult personality and behaviour (specific personality disorders, habit and impulse disorders, gender identity disorders)</p> <p>vii. Stress, psychosomatic disorders, suicide,</p> <p>4. PERIPHERAL NEUROPATHY:</p> <p>Clinical diagnosis of focal neuropathy, neurotmesis, Axonotmesis, Neuropraxia. Etiology, risk factors, classification, neurological signs &amp; symptoms, investigations, management, of following disorders – RSD, Nerve tumors, Brachial plexus palsy, Thoracic outlet syndrome, Lumbosacral plexus lesions, Phrenic &amp; Intercostal nerve lesions, Median nerve palsy, Ulnar nerve palsy, Radial nerve palsy, Musculocutaneous nerve palsy, Anterior &amp; Posterior interosseous nerve palsy, Axillary nerve palsy, Long thoracic nerve palsy, Suprascapular nerve palsy, Sciatic nerve palsy, Tibial nerve palsy, Common peroneal nerve palsy, Femoral nerve palsy, Obturator nerve palsy, Pudental nerve palsy.</p>			
IV	<p>1. TOXIC, METABOLIC AND ENVIRONMENTAL DISORDERS:</p> <p>Etiology, risk factors, classification, neurological signs &amp; symptoms, investigations, management, of following disorders – Encephalopathy, Alcohol toxicity, Recreational drug abuse, Toxic gases &amp; Asphyxia, Therapeutic &amp; diagnostic agent toxicity, Metal toxicity, Pesticide poisoning, Environmental &amp; physical insults, Plant &amp; Fungal poisoning, Animal poisons, &amp; Complications of organ transplantation.</p> <p>2. INTRODUCTION, INDICATIONS AND COMPLICATIONS OF FOLLOWING NEUROSURGERIES:</p> <p>Craniotomy, Cranioplasty, Stereotactic surgery, Deep brain stimulation, Burr-hole, Shunting, Laminectomy, Hemilaminectomy, Rhizotomy, Microvascular decompression surgery, Endarterectomy, Embolization, Pituitary surgery, Ablative surgery -</p>	7	8	15

	<p>Thalamotomy and Pallidotomy, coiling of aneurysm, Clipping of aneurysm, and Neural implantation.</p> <p>3. DEAFNESS, VERTIGO, AND IMBALANCE:</p> <p>Physiology of hearing, disorders of hearing, examination &amp; investigations of hearing, tests of vestibular function, vertigo, peripheral vestibular disorders, central vestibular vertigo.</p> <p>4. NEURO-OPHTHALMOLOGY:</p> <p>Assessment of visual function – acuity, field, colour vision, Pupillary reflex, accommodation reflex, abnormalities of optic disc, disorders of optic nerve, tract, radiation, occipital pole, disorders of higher visual processing, disorders of pupil, disorders of eye movements, central disorders of eye movement</p>			
V	<p>1. PEDIATRICS IN NEUROLOGY:</p> <ul style="list-style-type: none"> <li>i. Normal development &amp; growth</li> <li>ii. Breast feeding and immunization</li> <li>iii. Perinatal, Postnatal problems and management (Birth injuries) Neck, shoulder dystocia, Brachial plexus injury, Fractures</li> <li>iv. Congenital abnormalities and its management Problems and management of LBW infants</li> </ul> <p>2. DEVELOPMENTAL DELAY:</p> <p>Etiology, pathophysiology, classification, clinical signs &amp; symptoms, investigations, differential diagnosis, medical management, surgical management and complications</p> <p>3. RESPIRATORY CONDITIONS OF CHILDHOOD:</p> <p>Pneumonia – Bacterial &amp; Tubercular, Empyema, Asthma</p> <p>4. ORTHOPEDIC AND NEUROLOGICAL DISORDERS IN CHILDHOOD, CLINICAL FEATURES AND MANAGEMENT:</p> <ul style="list-style-type: none"> <li>i. Cerebral palsy</li> <li>ii. Meningitis, encephalitis</li> </ul>	5	7	12



	iii. Hydrocephalus iv. Ataxia v. Arnold-Chiari malformation, Dandy walkersyndrome vi. Basilar impression & cerebral malformations vii. Down's syndrome viii. Floppy infant ix. GBS x. Poliomyelitis xi. Epilepsy xii. Neural tube defects xiii. Muscular dystrophies xiv. Neuropathy  5. NUTRITIONAL DISORDERS OF CHILDHOOD  Rickets and scurvy, PEM (Kwashiorkor and Marasmus) INFECTIONS – Congenital & neonatal, Mental retardation, Coma in Paediatrics and acute rheumatic fever			
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#### Recommended text books:

1. Davidson's "Principles and practice of Medicine", 23<sup>rd</sup> edition, Elsevier, 2018.
2. Sandhya A.Kamath, "API Textbook of Medicine", 12<sup>th</sup> edition, Jaypee Publishers, 2022.
3. P.J. Mehta's, "Practical Medicine", 21<sup>st</sup> edition, National Publications, 2018.
4. O.P. Ghai, "Essential Paediatrics", 9<sup>th</sup> edition, CBS Publishers, 2019.

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## PHYSIOTHERAPY IN ORTHOPEDIC CONDITIONS

Course Code: U21BPTB631

Total hours: 180

### Course description:

The subject serves to integrate the knowledge gained by the students in orthopedics with skills to apply these in clinical situations of dysfunction and musculoskeletal pathology.

Physiotherapy in Orthopedic condition focuses on maximizing functional independence and well-being. The course uses a patient-centered model of care with multi-system assessment, evidence based interventions and a significant patient education component to promote a healthy, active lifestyle and community-based living.

### Course objectives:

The objective of the course is that after the specified hours of lectures and demonstrations the student will be able to identify disabilities due to musculoskeletal dysfunction, plan and set treatment goals and apply the skills gained in exercise therapy and electrotherapy in these clinical situations to restore musculoskeletal function.

### SYLLABUS

Unit	Topic	Didactic Hours	Clinical Hours	Total Hours
I	1. Fractures & Dislocations i. fractures and dislocation of the spine & extremities – classification, complications, PT management of following: a) upper limb fractures & dislocations. b) lower limb fractures and dislocations including pelvis. c) spinal fractures ii. PT management in complications - early & late - shock, compartment syndrome, VIC, fat embolism, delayed and mal-union, RSD, myositis ossificans, AVN, pressure sores etc. iii. dislocation of shoulder, elbow, hip & knee	20	10	30

II	1. Soft tissue injuries <ul style="list-style-type: none"> <li>(i) synovitis</li> <li>(ii) capsulitis</li> <li>(iii) tendonitis</li> <li>(iv) rupture of tendons</li> <li>(v) cartilage &amp; meniscal injuries</li> <li>(vi) fasciitis</li> <li>(vii) burns</li> </ul> 2. Deformities <ul style="list-style-type: none"> <li>(i) congenital: CTEV, CDH, torticollis, pes planus, pes cavus and other common deformities.</li> <li>(ii) acquired: scoliosis, kyphosis, coxa vara, genu varum, valgum and recurvatum.</li> </ul>	10	10	20
III	1. Infectious diseases of the bone & joints <ul style="list-style-type: none"> <li>(i) osteomyelitis – acute and chronic</li> <li>(ii) septic arthritis and pyogenic arthritis</li> <li>(iii) TB spine and major joints - knee and hip</li> </ul> 2. Degenerative and inflammatory conditions <ul style="list-style-type: none"> <li>(i) osteoarthritis - emphasis on knee, hip and hand</li> <li>(ii) rheumatoid arthritis, ankylosing spondylitis</li> <li>(iii) gout, perthes disease</li> </ul>	20	10	30
IV	1. Peripheral Nerve Injury physiotherapy management for peripheral nerve injuries. 2. Amputation definition, levels, indications, types, PT management for various levels of amputations.	10	20	30
	1. Regional conditions <ul style="list-style-type: none"> <li>(i) spine complex <ul style="list-style-type: none"> <li>(a) cervical &amp; lumbar spondylosis</li> <li>(b) intervertebral disc prolapses</li> <li>(c) spinal canal stenosis</li> <li>(d) spondylolysis, spondylolisthesis</li> <li>(e) coccydynia</li> <li>(f) sacro-iliac joint dysfunction</li> <li>(g) sacralisation, lumbarisation</li> </ul> </li> </ul>			

V	<p><b>(ii) Shoulder complex</b> Shoulder instabilities, thoracic outlet syndrome (TOS), reflex sympathetic dystrophy (RSD), and impingement syndrome - conservative and post-operative PT management. Total shoulder replacement and post-operative PT management. acromio clavicular joint injuries - rehabilitation. Rotator cuff tears-conservative &amp; surgical repair. Subacromial decompression - post-operative PT management, subacromial bursitis.</p> <p><b>(iii) Elbow Complex</b> Tennis and golfer's elbow. Excision of radial head- post operative PT management. Total elbow arthroplasty- post operative PT management.</p> <p><b>(iv) Wrist and hand complex</b></p> <ul style="list-style-type: none"> <li>(a) wrist sprains</li> <li>(b) dequervain's tenosynovitis, trigger and mallet finger</li> <li>(c) repair of ruptured flexor and extensor tendons</li> <li>(d) carpal tunnel syndrome.</li> </ul>			
	<p><b>(v) Hip Complex</b> joint surgeries - hemi and total hip replacement - post operative PT management management.</p> <p><b>(vi) Knee Complex</b></p> <ul style="list-style-type: none"> <li>(a) ACL, PCL and MCL reconstruction surgeries - post-operative rehabilitation</li> <li>(b) meniscectomy and meniscal repair - post operative management.</li> <li>(c) pre patellar.</li> <li>(d) anterior knee pain: PFPS, plica syndrome, patellar dysfunction and hofa's syndrome etc. - conservative management</li> <li>(e) TKR- rehabilitation protocol</li> <li>(f) patellar tendon ruptures and patellectomy-rehabilitation</li> </ul> <p><b>(vii) Ankle and foot complex</b></p> <ul style="list-style-type: none"> <li>(a) ligamentous tears- post operative management</li> <li>(b) TA rupture</li> <li>(c) plantar fasciitis, metatarsalgia, hammer toe</li> </ul>	40	30	70

### Recommended text books:

1. Jayant Joshi, Prakash Kotwal, "Essentials of Orthopaedic & Applied Physiotherapy", 3<sup>rd</sup> edition, Elsevier Publications, 2016.
2. David J. Magee, Robert C. Manske, "Orthopaedic Physical Assessment", 7<sup>th</sup> edition, Elsevier Publications, 2021.
3. Carrie M. Hall, Lori Thein Brody "Therapeutic Exercise: Moving towards Function", 4<sup>th</sup> edition, Wolters Kluwer, 2017.

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# PHYSIOTHERAPY IN GENERAL MEDICINE AND GENERAL SURGERY

Course Code: U21BPTP632

Total hours: 150

## Course description:

Physiotherapy in General Medicine & General surgery emphasizes the management of techniques based on the best available evidence. Physiotherapy strategies for assessment and treatment address structural & functional impairments and activity limitation of individuals. The therapeutic approach is patient and family focused.

## Course objectives:

At the end of the course the candidate will be able to:

1. Describe physiotherapy management of the various metabolic & nutrition deficiency condition.
2. Describe physiotherapy management of the various cardiovascular and respiratory condition.
3. Describe the principles of management at the MICU & SICU.

Units	Topics	Didactic Hours	Clinical Hours	Total Hours
	GENERAL SURGERY			
I	1. Physiotherapy in mother and child care – ante and post- natal management, early intervention and stimulation therapy in child care (movement therapy) 2. Geriatrics – handling of old patients and their problems. Complication common to all operations 3. Abdominal incisions. 4. Physiotherapy in pre and post-operative stages. Operations on upper G.I.T.- oesophagus, stomach, duodenum 5. Operations on large and small intestine – Appendisectomy, cholecystectomy, partial colectomy, ileostomy, hernia and herniotomy, hernioraphy, hernioplasty. 6. Physiotherapy in dentistry	12	15	27
II	Burns and its treatment – physiotherapy burns, skin grafts, and reconstructive surgeries.	10	15	25



III	<p>1. Management of wound ulcers- Care of ulcers and wounds - Care of surgical scars-U.V.R. and other electro therapeutics for healing of wounds, prevention of hyper- granulated scars keloids,</p> <p>2. Electrotherapeutics measures for relief of pain during mobilization of scars tissues.</p>	12	15	27
IV	<p>1. Physiotherapy in dermatology - Documentation of assessment, treatment and follow up skin conditions. U.V.R therapy in various skin conditions; Vitiligo; Hair loss; Pigmentation; Infected wounds ulcers. Faradic foot bath for Hyperhidrosis.</p> <p>2. Massage maneuvers for cosmetic purpose of skin; use of specific oil as medium; Care of anesthetic hand and foot; Evaluation, planning and management of leprosy- prescription, fitting and training with prosthetic and orthotic devices.</p>	12	25	37
V	<p>1. Physiotherapy intervention in the management of Medical, surgical and radiation oncology cases</p> <p>2. ENT – sinusitis, non-suppurative and chronic suppurative otitis media, osteosclerosis, labyrinthitis, mastoidectomy, chronic rhinitis, laryngectomy, pharyngeal – laryngectomy, facial palsy.</p>	14	20	34

### Recommended text books:

1. O' Sullivan "Physical Rehabilitation", 7<sup>th</sup> edition, F.A. Davis, 2019.
2. William E. Prentice, "Therapeutic Modalities", 6<sup>th</sup> edition, MC Graw hill, 2021.
3. Joan E. Cash, "Textbook of Physiotherapists", 4<sup>th</sup> edition, Mosby, 1987.

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# PRINCIPLES OF MANAGEMENT

Course Code: U21BPTP633

Total hours: 30

## Course description:

This course is designed to students to acquire understanding the principles & methods of management in physiotherapy services & educational programmes.

## Course objectives:

At the end of the course the student will

1. Learn the management basics in fields of clinical practice, teaching, research and Physiotherapy practice in the communicating.
2. Acquire communications skills in relation with patients, seniors and other professionals.

Unit	Topics	Didactic Hours	Practical Hours	Total Hours
I	Introduction to Management  Definition, Science or Art, Manager Vs. Entrepreneur, types of managers, managerial roles and skills, Evolution of management, Principles, Functions of management, Current trends and issues in management.	6	-	6
II	Management Process  Planning, types of planning, motivation theories, leadership styles, Formal and informal organization, Line and staff authority, communication, process of communication, barrier in communication, effective communication, communication and IT.	6	-	6
III	Management of Physiotherapy Services  (i) Planning: Patient care units, emergency management (ii) Human resources management: Recruiting, selecting, deploying, retaining, promoting. Patient classification system, Staff development & welfare (iii) Budgeting: Proposal, staff, equipment & supplies requirements	6	-	6

	(iv) Material management : Procurement, inventory control, Auditing & maintenance. (v) Directing & Leading: Delegation, participatory management, staff development, discipline maintenance (vi) Controlling / Evaluation: Physiotherapy rounds & visits, Quality assurance model, document of records & reports, performance appraisal			
IV	Organizational behaviour & human relations (i) Human resource management, HR planning, recruitment, selection, training and development & group dynamics. (ii) Public relations: Professional, clinical & social, trade unions, collective bargaining.	6	-	6
V	Management of educational institutions (i) Physiotherapy institution (ii) College & Hostel: structure, committees & management of equipments, clinical & transport facilities, institutional records & reports	6	-	6

### Recommended text books:

1. C.B. Gupta, "Business Management", Sultan Chand Sons, 9<sup>th</sup> Edition, 2018.
2. L. M. Prasad, "Principles and Practice of Management", Sultan Chand & Sons, 10<sup>th</sup> Edition 2019.
3. Koontz O'Donnell, "Essentials of Management", Tata McGraw Hill, 9<sup>th</sup> Edition, 2012.
4. P C Tripathi, "Principles of Management", McGraw Hill, 6<sup>th</sup> Edition, 2017.
5. Catherine G. Page, "Management in physical Therapy Practices", F. A. Davis, 2<sup>nd</sup> Edition, 2015.

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# HEALTH PROMOTION AND FITNESS

Course Code: U21BPTP634

Total hours: 30

## Course description:

This course includes discussion on the theories of health and wellness, including motivational theory, locus of control, public health initiative, and psycho-Social, spiritual and cultural consideration. Health risks, screening, and assessment considering epidemiological principles are emphasized. Risk reduction strategies for primary and secondary prevention, including programs for special populations are covered.

## Course objectives:

- Students will be able to know the principles and components of primary health care and the national health policies to achieve the goal of 'Health for All'.
- Learning Physiological changes occurring in various conditions in Women's Health relevant to Physiotherapy, and plan physiotherapy management for fitness
- Advice with clinical reasoning at urban, rural and community level for achieve physical fitness.
- Exploring physical fitness with students using this lesson plan can create personal fitness plan.
- Students will be able to explain the benefits of physical activity and nutrition for health, wellness, quantity & quality of life.

Units	Topics	Didactic Hours	Clinical Hours	Total Hours
I	1. PREVENTION PRACTICE:  A holistic perspective for physiotherapy i. Define Health ii. Predictions of Health Care iii. Comparing Holistic Medicine and Conventional Medicine iv. Distinguishing Three Types of Prevention Practice. 2. HEALTHY PEOPLE:  i. Definition of healthy people ii. Health education Resources iii. Physiotherapist role for a healthy community.	4	4	8

II	<p>1. KEY CONCEPTS OF FITNESS :</p> <ul style="list-style-type: none"> <li>i. Defining &amp; Measuring Fitness</li> <li>ii. Assessment of Stress with a Survey</li> <li>iii. Visualizing Fitness</li> <li>iv. Screening for Mental and Physical Fitness</li> <li>v. Body Mass Index calculations.</li> <li>vi. Exercise testing.</li> <li>vii. Agility test.</li> </ul> <p>2. FITNESS TRAINING :</p> <ul style="list-style-type: none"> <li>i. Physical Activities Readiness</li> <li>ii. Physical Activities Pyramid</li> <li>iii. Exercise Programs</li> <li>iv. Evidence-Based Practice.</li> </ul>	4	4	8
III	<p>1. CHILD AND WOMENS HEALTH:</p> <ul style="list-style-type: none"> <li>i. Health, fitness, and wellness issues during childhood and adolescence, Health, fitness, and wellness during adulthood.</li> <li>ii. Women's health issues: focus on pregnancy</li> </ul>	3	3	6

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IV	<p>PREVENTION:</p> <p>i. Resources to optimize health and wellness, Health protection, Prevention practice for older adults.</p> <p>ii. Prevention practice for musculoskeletal conditions, cardiopulmonary conditions</p>	2	2	4
V	<p>PREVENTION:</p> <p>i. Prevention practice for neuromuscular conditions, integumentary disorders.</p> <p>ii. Prevention practice for individuals with developmental disabilities, Marketing health and wellness</p>	2	2	4

#### Recommended text book:

- Roberta L. Duyff, "Academy of nutrition and dietetics complete food and nutrition guide", 5<sup>th</sup> edition, Harvest Publisher, 2017.
- Nicholas Bjorn "Fitness Nutrition", 5<sup>th</sup> edition, Lulu Publisher, 2019.
- Randall R. Cottrell, "Principles of Health Education and Promotion", Jones & Bartlett Publishers, 8<sup>th</sup> Edition, 2021
- James F. McKenzie, Brad L. Neiger, "Health Promotion Programs", Jones & Bartlett Publishers, 8<sup>th</sup> Edition, 2022

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## CLINICAL TRAINING

Course code: U21BPTP635

Total hours: 90

### Course description:

The Student will learn the subjective and objective data taking procedure.

### Course objectives:

End of the course the students will able to

1. Understand the history taking procedure
2. Various procedures in patient's assessments
3. Learn the various treatment procedures

Sl. No	TOPIC
1.	Demographic data collection
2.	Socio economic history collection
3.	Social behavior and its influence on health
4.	Schedule the patients treatment according to their condition

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## DECEMBER 2023 END SEMESTER EXAMINATION RESULTS

Name of the Course: Exercise therapy Advanced		
Course Code: (U21BPPT422)		
Number of Students Appeared	92	
Number of Students Absent	NIL	Pass%
Number of Students Pass	90	98
Number of Students Fail	2	
Name of the Course: Electrotherapy - I (LF & MF)		
Course Code: (U21BPPT423)		
Number of Students Appeared	92	
Number of Students Absent	NIL	Pass%
Number of Students Pass	90	98
Number of Students Fail	2	
Name of the Course: Electrotherapy - II (HF)		
Course Code: (U21BPPT424)		
Number of Students Appeared	92	
Number of Students Absent	NIL	Pass%
Number of Students Pass	92	100
Number of Students Fail	0	

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## 2023 World Physiotherapy Day celebrations

Sl.No.	Date	Name of the activity	Activity co-ordinator
1.	31-08-23	Blood donation	Dr. P. Nandhini (Asst. Prof.)
2.	01-09-23	Guest lecture on “Overview of manual therapy.”	Dr. R. Murali (Asst. Prof.)
3.	02-09-23	Guest lecture on “Physiotherapy – what? how? which? where? when?”	Dr. R. Prabakaran (Asst. Prof.)
4.	05-09-23 & 06-09-23	Intra – college sports events.	Dr. M. Nakkiran (Asst. Prof.), Mr.B.R. Venkadesan (Physical director)



Blood donation



Guest lecture on “Overview of manual therapy”.



Intra – college sports events.



Guest lecture on “Physiotherapy – what? how? Which? where? When?”

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