

STUDY & EVALUATION SCHEME OF BACHELOR OF PHYSIOTHERAPY

(BPT IV Year/ VIII Semester)

[Applicable w.e.f Academic Session 2015-16 till revised]



**INTEGRAL UNIVERSITY, LUCKNOW
DASAULI, P.O. BAS-HA KURSI ROAD,
LUCKNOW – 226026**

Website: www.iul.ac.in

**Syllabus approved by Board of Study, Faculty Board, Academic Council,
Executive Council of the Integral University, Lucknow**

STUDY & EVALUATION SCHEME
BACHELOR OF PHYSIOTHERAPY (BPT)
(w.e.f. July 2015)

IV - Year

VIII - Semester

S. No.	Subject Code	Subject Title	Periods per week			Credits	Evaluation Scheme				Subject Total
			L	T	P		Sessional			Exam	
							CT	TA	Total	ESE	
1.	PT 410	Orthopedics Physiotherapy-II	3	1	0	4	25	15	40	60	100
2.	PT 411	Sports Physiotherapy	3	1	0	4	25	15	40	60	100
3.	PT 412	Community Based Rehabilitation in Physiotherapy	3	1	0	4	25	15	40	60	100
4.	PT 413	Orthopedics Physiotherapy-II Lab	0	0	2	1	30	30	60	40	100
5.	PT 414	Sports Physiotherapy – Lab	0	0	2	1	30	30	60	40	100
6.	PT 415	Project	0	4	0	4	30	30	60	40	100
7.	PT 416	Seminar on clinical Issues	0	2	0	2	25	25	50	-	50
8.	PT 417	Clinical Training	0	0	10	5	25	25	50	-	50
Total			09	09	14	25	215	185	400	300	700

L: Lecture **T:** Tutorials **P:** Practical **CT:** Class Test

TA: Teacher Assessment **ESE:** End Semester Examination

Sessional Total: Class Test + Teacher Assessment

Subject Total: Sessional Total + End Semester Examination (ESE)

SYLLABI

OF

BACHELOR OF PHYSIOTHERAPY

(BPT IV YEAR/ VIII SEMESTER)

SUBJECT: ORTHOPAEDICS PHYSIOTHERAPY-II
SUBJECT CODE: PT 410
(w.e.f. July 2015)

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COURSE OBJECTIVES:

This course is formulated on the “Problem based” method. At the end of the course, the candidate will:

1. Be able to identify, discuss & analyze the Regional Orthopaedic condition in terms of Biomechanical, Kinesiology & Biophysical basis & correlate the same with the provisional diagnosis, routine radiological & Electrophysiological investigations & arrive at appropriate structural and Functional diagnosis with clinical reasoning.
2. Be able to plan & Prescribe as well as acquire the skill of executing short & long term Physiotherapy treatment by selecting appropriate modes of Mobilization / Manipulations, Electro-Therapy, Therapeutic exercise & appropriate Ergonomic advise for the relief of pain, restoration / Maintenance of function & rehabilitation for maximum functional independence in A.D.L. at home & work place.

COURSE DESCRIPTION:

This course involves a description of the assessment and physiotherapy management of patients with Regional Orthopaedic condition on the basis of functional diagnosis according to ICF model.

UNIT-I SHOULDER AND ELBOW:

8 Hours

1. Frozen Shoulder and Rotator Cuff Disease
2. TOS, RSD and Student Elbow
3. Pulled Elbow, Tennis Elbow, Golfer Elbow
4. Pronator Teres Syndrome and Radial Tunnel Syndrome.

UNIT-II WRIST AND HAND:

8 Hours

1. Carpal Tunnel Syndrome and Ulnar Tunnel Syndrome.
2. Dupuetryns Contracture and Madlungs deformity.
3. Dequervains Disease and Ganglion.
4. Trigger finger, Thumb and Mallet finger.

UNIT-III KNEE, ANKLE AND FOOT:

8 Hours

1. Knee Osteo Arthritis and Chondromalacia of patella
2. Genu Varus, Genu Valgus, Genu recurvatum.
3. CTEV, Flat Foot Pes Cavus.
4. Plantar fasciitis, Metatarsalagia,

UNIT-IV HIP AND SPINE:**8 Hours**

1. Hip Osteo Arthritis, Perthe's Disease.
2. Coxa Vara /Valga, CDH.
3. PIVD, Spondylitis,
4. Lumbar canal stenosis, Spondylolisthesis.

UNIT-V RHEUMATOLOGY AND SINAL DEFORMITY:**8 Hours**

1. Gout, Rheumatoid Arthritis.
2. Ankylosing Spondylitis, Psoriatic Arthritis.
3. Flat back, Lordosis, Swayback.
4. Scoliosis, Kyphosis.

RECOMMENDED BOOKS:**TEXT BOOKS**

1. Cash Text books of Orthopaedics and Rheumatology for physiotherapist Jaypee Publication
2. Tidy's Physiotherapy thirteenth edition by Stuart B.Porter
3. Neuromusculoskeletal Examination and assessment fourth edition by Nicola JPetty Churchill Livingstone
4. Therapeutic Exercise fifth edition by Carolyn Kisner F.A Davis Company Philadelphia
5. Physical Rehabilitation Sixth edition by Susan B. O'sullivan Davis Plus
6. Orthopaedic physical assessment third and fifth Edition by David J Magee
7. Essential Orthopaedics third Edition by Maheshwari Mehta publishers
8. Outline of fractures eleventh Edition by Adams and Hamblen Churchill Livingstone
9. Muscles testing and function with posture and pain fifth Edition by F. Peterson Kendall

REFERENCE BOOKS:

1. Apley system of musculoskeletal and fractures ninth edition by Jouis Solomon Arnold publication
2. Clinical Orthopaedic Rehabilitation third Edition by S Brotzman, R Manske Elsevier
3. Rehabilitation for the Post surgical Orthopaedic patient by Lisa Maxey, Jin Magnusson Elsevier
4. Trauma management: An emergency medicine approach Ferrera Colucciello, BMJ publication

SUBJECT: SPORTS PHYSIOTHERAPY
SUBJECT CODE: PT 411
(w.e.f. July 2015)

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Course Objectives

The student will be able to acquire concept of evaluation of sports and Sports injuries, and also will be able to provide Sports Training and Physiotherapy in particular to Sports injuries.

Course Description

This course enables the student to understand about basic principles of Sports Medicine, Sports Nutrition, Common Medical Conditions among athletes and sports Biomechanics. The course provides in depth biomechanical basis & Mechanism of Sports injuries and their management in physiotherapy and sports rehabilitation.

UNIT-I: Prevention, Evaluation, and management of various sports injuries: 8 Hours

1. Pre-participation Evaluation
2. On field evaluation
3. Off field evaluation
4. Introduction to protective gear used for spine, upper limb, and lower limb.
5. Introduction to Emergency care of a sports person.

UNIT-II: Evaluation and Management of various sports injuries: 8 Hours

Mechanism, prevention, assessment and Physiotherapy management of injuries in:

1. Shoulder – Impingement Syndrome, Rotator Cuff tear, Bicep Tendinitis, AC Joint sprain
2. Elbow – Lateral epicondylitis, medial epicondylitis, little league elbow
3. Wrist – Dequervance tenosynovitis, scaphoid fracture
4. Hand – Mallet finger, boxer fracture, boutonniere injuries
5. Spine – Whiplash injuries

UNIT-III: Evaluation and Management of various sports injuries: 8 Hours

Mechanism, prevention, assessment and Physiotherapy management of injuries in:

1. Hip & Groin – Piriformis syndrome, ITBFS, Adductor strain
2. Knee & leg – PFPS, ACL Injury, Hoffas disease, Tennis leg, Shin Splint
3. Foot & Ankle – Ankle Sprain, Planter Fascitis
4. Chest
5. Abdomen

UNIT IV: Sports nutrition, Doping & Medical conditions in Athletes:

8 Hours

1. Doping
2. Basic principles of Resistance Training
3. Sports Nutrition
4. Medical problems in athlete

UNIT V: Introduction to Applied Sports Biomechanics:

8 Hours

1. Biomechanics of Throwing and its clinical implication
2. Biomechanics of Running and its clinical implication
3. Biomechanics of Swimming and its clinical implication

Course Outcomes:

After the completion of this course the student will be able to:

1. Perform appropriate pre participation evaluation.
2. Perform on field and off field evaluation
3. The students will be able to prescribe ideal training program for the athletes
4. The student will be able to understand the role of Nutrition in sports and rehabilitation
5. The students will be able to create awareness & prevention of Doping in sports
6. The students will be able to evaluate sports specific acute and chronic injuries and provide complete sports rehabilitation for return to their respective sports

RECOMMENDED BOOKS:

1. Clinical Sports Medicine – By Karim Khan
2. Physical rehabilitation of a injured athlete – By Andrews & Harrelson
3. Therapeutic Exercise – By Micheal Huggins
4. Athletic & Sports Issues in Musculoskeletal Rehabilitation – By David J Magee

SUBJECT: COMMUNITY BASED REHABILITATION IN PHYSIOTHERAPY
SUBJECT CODE: PT 412
(w.e.f. July 2015)

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COURSE OBJECTIVE:

1. The concept of team approach in Rehabilitation.
2. Observation and Identification of diagnostic features.
3. Medical & surgical aspects of disabling conditions.
4. Identification of residual potentials in patients with partial & total disability.
5. Formulation of appropriate goals in treatment and rehabilitation.

COURSE DESCRIPTION:

This course enables the students to understand the effects of the environment and the community dynamics on the health of the individual with special emphasis on disability limitation, specific protection and rehabilitation

UNIT-I: Introduction to Rehabilitation:

8 Hours

1. Introduction to Rehabilitation Medicine
2. Delivery of Rehabilitation care
3. CBR & its model
4. Planning Management & Evaluation of CBR Program
5. Community & Evaluation of client in community

UNIT-II: Introduction to Health Care System:

8 Hours

1. Health Planning Management & Health Care of Community
2. Resources and agencies involved in CBR
3. Disability Legislation
4. Disability Evaluation
5. Role of International organization in Health Sector

UNIT-III: Introduction to Industrial Therapy:

8 Hours

1. Industrial therapy – Primary rehabilitation team & other rehabilitation discipline
2. Occupational hazards
3. Tool and Designs
4. Manual material handling and material assistive device
5. Employee fitness program

UNIT IV: Introduction of Ergonomics:**8 Hours**

1. Ergonomics and job analysis
2. Job placement assessment and pre employment screening
3. Work conditioning and work hardening
4. Office ergonomics – work station evaluation and design
5. Back injury prevention program

UNIT V: Introduction to Geriatric:**8 Hours**

1. Theories of aging
2. Physiological response to Aging
3. Principles of Geriatric Physical Therapy program
4. Posture Balance and Fall in elderly
5. Ambulation care

RECOMMENDED BOOKS:

1. Community Based Rehabilitation of Person with disabilities – By S. Pruthvish
2. Physiotherapy in Community Health & Rehabilitation – By Waqar Naqvi
3. Principles of Geriatric Physiotherapy – By N. K. Multani, S. K. Verma
4. Text Book of Rehabilitation – By S. Sunder
5. Text Book of Community Medicine & Community Health – By Bhaskar Rao
6. Industrial Therapy – Glenda L.Key

SUBJECT: ORTHOPAEDICS PHYSIOTHERAPY–II LAB

SUBJECT CODE: PT 413

(w.e.f. July 2015)

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COURSE DESCRIPTION:

This course involves a description of the assessment and management of patients with General Orthopaedics condition and traumatology on the basis of functional diagnosis according to ICF model.

COURSE OBJECTIVES:

This course is formulated on the “Problem based” method. At the end of the course, the candidate will:

1. Be able to identify, discuss & analyze, the general orthopaedics condition and musculoskeletal trauma in terms of Biomechanical, Kinesiology & Biophysical basis & correlate the same with the provisional diagnosis, routine radiological & Electrophysiological investigations & arrive at appropriate Functional diagnosis with clinical reasoning.
2. Be able to plan & Prescribe as well as acquire the skill of executing short & long term Physiotherapy treatment by selecting appropriate modes of Mobilization / Manipulations, Electro-Therapy, Therapeutic exercise & appropriate Ergonomic advise for the relief of pain, restoration / Maintenance of function & rehabilitation for maximum functional independence in A.D.L. at home & work place.

COURSE CONTENT:

1. Subjective and Objective Examination
2. Investigation employed in Orthopaedic Trauma
3. Outcome measures, setting of treatment goals and plan
4. Documentation (Writing patient/Client notes)
5. Physiotherapy management of the various post traumatic and post surgical cases

RECOMMENDED BOOKS:

1. Cash Text books of Orthopaedics and Rheumatology for physiotherapist Jaypee Publication
2. Tidys Physiotherapy thirteenth edition by Stuart B.Porter
3. Neuromusculoskeletal Examination and assessment fourth edition by Nicola JPetty Churchill Livingstone
4. Therapeutic Exercise fifth edition by Carolyn Kisner F.A Davis Company Philadelphia
5. Physical Rehabilitation Sixth edition by Susan B. OSullivan Davis Plus
6. Orthopaedic physical assessment third and fifth Edition by David J Magee
7. Essential Orthopaedics third Edition by Maheshwari Mehta publishers
8. Outline of fractures eleventh Edition by Adams and Hamblen Churchill Livingston
9. Muscles testing and function with posture and pain fifth Edition by F. Peterson Kendall

REFERENCE BOOKS

1. Apley system of musculoskeletal and fractures ninth edition by Jouis Solomon Arnold publication
2. Clinical Orthopaedic Rehabilitation third Edition by S Brotzman, R Manske Elsevier
3. Rehabilitation for the Post surgical Orthopaedic patient by Lisa Maxey, Jin Magnusson Elsevier
4. Trauma management: An emergency medicine approach Ferrera Colucciello, BMJ publication

SUBJECT: SPORTS PHYSIOTHERAPY LAB
SUBJECT CODE: PT 414
(w.e.f. July 2015)

COURSE DESCRIPTION: This course involves a description of the assessment and management of patients with Common Sports Condition.

COURSE OBJECTIVES: This course is formulated on the “Problem based” method. At the end of the course, the candidate will:

1. Be able to identify, discuss & analyze, the Regional sports condition in terms of Biomechanical, Kinesiology & Biophysical basis & correlate the same with the provisional diagnosis with clinical reasoning.
2. Be able to plan & prescribe as well as acquire the skill of executing on field and off field Physiotherapy treatment by selecting appropriate modes of Mobilization/ Manipulations, Electro-Therapy, Therapeutic exercise & advise for the relief of pain, restoration / maintenance of function & rehabilitation for return to sports.

Course Content:

1. Agility Test
2. Plyometrics – Upper Limb and Lower Limb
3. Different techniques used in Common sports condition
4. Special Test in Sports
5. Demonstration of On field and off field management

RECOMMENDED BOOKS:

1. Clinical Sports Medicine – By Karim Khan
2. Physical rehabilitation of a injured athlete – By Andrews & Harrelson
3. Therapeutic Exercise – By Micheal Huggins
4. Athletic & Sports Issues in Musculoskeletal Rehabilitation – By David J Magee

SUBJECT: PROJECT
SUBJECT CODE: PT 415
(w.e.f. July 2015)

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These will serve as a platform for students to integrate various components of patient management and debate contentious issues in the efficacy of Physiotherapy techniques. Students will give presentations on topics provided to them.

CONTINUOUS EVALUATION OF PROJECT WORKS BY GUIDE

Course:

Year/Sem:

Name of unit Head/ Supervisor:

S. No.	Point to be Considered	Poor (0)	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
1.	Periodic Consultation with guide						
2.	Regular collection of case material						
3.	Depth of analysis/discussion						
4.	Departmental prescription of finding						
5.	Quality of final output						
	Review all heading						
6.	Introduction						
7.	Review of literature						
8.	Aims and objectives of study						
9..	Material & methods						
10.	Observation						
11.	Discussion						
12.	Conclusion						
13.	Bibliography						
14.	Tables & diagram						
15.	Annexure (if any) statistical analysis master chart						
	TOTAL SCORE						

Name & Signature of the Faculty/ Observer:

HoD,
 Department of Physiotherapy

SUBJECT NAME: SEMINAR ON CLINICAL ISSUES
SUBJECT CODE: PT 416
(w.e.f. July 2015)

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These will serve as a platform for students to integrate various components of patient management and debate contentious issues in the efficacy of Physiotherapy techniques used in musculoskeletal, neurological, cardiopulmonary, & Sports rehabilitation. Students will present on topics provided to them.

CHECK LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the students:

Date:

Topic:

Marks: 50

S. No.	Item for observation during presentation	Poor (0)	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
1.	Introduction						
2.	Review of Literature						
3.	Recent Development						
4.	Clarity of presentation						
5.	Understanding of subject						
6.	Ability to answer the questions						
7.	Time management						
8.	Appropriate use of audio/ visual aids						
9.	Overall performance						
10.	Any other observations						

Comments:

Name & Signature of the Faculty/ Observer:

HoD,
Department of Physiotherapy

SUBJECT NAME: CLINICAL TRAINING
SUBJECT CODE: PT 417
(w.e.f. July 2015)

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Students will engage in clinical practice in Physiotherapy departments in the musculoskeletal, neurology, cardiopulmonary, sports settings to enhance their clinical skills and apply contemporary knowledge gained during teaching sessions.

CHECKLIST FOR EVALUATION OF CLINICAL TRAINING

Name of Student:

Month:

Name of Faculty/ Supervisor:

Date:

Marks: 50

S. No.	Point to be considered	Poor (0)	Below Average (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)
1.	Punctuality						
2.	Interaction with colleagues and supporting staff						
3.	Maintenance of case records						
4.	Presentation of case during rounds						
5.	Investigation work up						
6.	Bedside Manners						
7.	Rapport with patients						
8.	Treatment approach & technique						
9.	Discipline						
10.	Overall quality of clinical work						
Total Score							

Comments:

Name & Signature of the Faculty/ Observer:

HoD,
 Department of Physiotherapy