

JHARKHAND RAI UNIVERSITY



Bachelor of Physiotherapy (BPT)

Elective Papers

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DEPARTMENT OF PHYSIOTHERAPY (BPT)

Duration: Four years Six months
Academic Year: 2023 – 2027
Syllabus

Departmental Electives					
V Semester					
	GROUP A	L	T	P	Credit
23ADE01	MEDICAL RECORD KEEPING	2	0	0	2
23ADE02	EMERGENCY CARE	2	0	0	2
23ADE03	FITNESS & HEALTH MANAGEMENT	2	0	0	2
23ADE04	NUTRITION FOR HEALTH	2	0	0	2
VI Semester					
	GROUP B	L	T	P	Credit
23ADE05	STRESS MANAGEMENT BY YOGA	2	0	0	2
23ADE06	PHYSICAL DIAGNOSIS AND PRESCRIPTION	2	0	0	2
23ADE07	CARDIOPULMONARY RESUSCITATION AND REHABILITATION	2	0	0	2
23ADE08	EVALUATION METHOD & OUTCOME MEASURES	2	0	0	2
Open Electives					
VIII Semester					
		L	T	P	Credit
23AOE01	PRINCIPLES OF MANAGEMENT	2	0	0	2
23AOE02	ERGONOMICS & HEALTH PROMOTION	2	0	0	2
23AOE03	UNIVERSAL HUMAN VALUE & ETHICS	2	0	0	2
23AOE04	ENTERPRENEURSHIP IN HEALTH SECTORS	2	0	0	2
23AOE05	DISASTER RISK MANAGEMENT FOR HEALTH	2	0	0	2
23AOE06	PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTMENT	2	0	0	2

Program: Bachelor of Physiotherapy (BPT)

Semester: Fifth

Course: Medical Record Keeping

Course Code: 23ADE01

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: Student will learn benefits of medical record keeping.

CLO2: Student will gain knowledge about consumer complaints and how to respond in such situation

CLO3: Get an idea about regulatory board, laws and nature of court hearing

CLO4: Student will get idea about common human error, creativity in record keeping.

CLO5: Student will get to know about pros and cons of electronic records

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Explain benefits of medical record keeping, functions of investigation board, law etc.

CO2: Explain risk of omission of multi-page medical record.

CO3: Identify common medical record error and make medical record keeping fun activity.

CO4: Describe pros and cons of electronic records

Section 1 – Introduction to Medical Records

Identifies the six reasons medical records need to be viewed as a key ingredient of each practice's most valuable assets • Articulates how entries generate presumptions that what was entered got done and what was not entered did not • Describes the doctors and practices that are most vulnerable to State Board investigations, intervention and discipline

Section 2 – How Board Investigations of Alleged Violations Work

• Explains the process State Boards pursue as they investigate consumer complaints • Learn how to respond to complaints without alienating the complainers

Section 3 – Going to Court is NOT Fun – Paw & Order: The Profession on Trial

• Go to court with Dr. Obermeyer and see first-hand the importance of good recordkeeping after viewing the only veterinary version of the television show Law & Order

Section 4 – What Gets Entered and What Does Not – Case Example

• Identify and explain the risks from the omissions in a multi-page medical record as discussed with students in an Iowa State University veterinary school classroom setting

Section 5 – Board Regulations, Laws of Evidence and Their Effect on Admissibility

• Analyze how the laws of evidence keep information out of trials or allow it in • Discover how easy it is to locate your state's medical record laws among your handouts provided with the course

Section 6 – Common Medical Record Errors

- Identify the most common, key data points that are missing in patient records and info that should versus should not be entered

Section 7 – Creativity Makes Recordkeeping Fun

- Examine the handout provided with the course and see its examples of innovative, efficient recordkeeping ideas

Section 8 – The Nature of Court Hearings and Trials

- Compare and contrast the 4 A's - alterations, amendments, addenda and adulterations and their effect on Board disciplinary actions • Learn the ten reasons clients say no and why documenting that reason is so important

Section 9 – Electronic Medical Records, Client Consents and Course Conclusion

- Learn the pros, cons, difficulties and value of replacing paper with electronic medical records • effectively use the client consents that are included with the course to educate clients, fulfill board requirements and build a legal defense

Program: Bachelor of Physiotherapy (BPT)

Semester: Fifth

Course: Emergency Care

Course Code: 23ADE02

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: Student will gain knowledge about important of first aid during emergency

CLO2: Student will learn about assessment and vitals examination

CLO3: Student will come to know what to do during various emergency

Course Outcome

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

CO1: Acquire knowledge about first aid

CO2: Identify type of emergency and care to be given.

SECTION I

Introduction to First Aid - Assessment, immediate Actions and the priorities within first aid; Bandages – Types, binders, splints & slings; Examination of Vital Signs; RTA including fractures and spinal cord injuries; Cardiac arrest; Respiratory failure; Burns; Shock- Electric, Hypovolemic and control of Bleeding, Hypothermia and Hyperthermia; Poisoning, Snake Bite.

SECTION II

Medical Triage- concept of Emergency: Definition - Importance and rules, code tags and triage terminology.

Program: Bachelor of Physiotherapy (BPT)

Semester: Fifth

Course: Fitness & Health Management

Course Code: 23ADE03

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: To introduce the fundamental concepts of physical education, health and fitness.

CLO2: To provide a general understanding on nutrition, first aid and stress management.

CLO3: To familiarize the students regarding yoga and other activities for developing fitness.

CLO4: To create awareness regarding hypo-kinetic diseases, and various measures of fitness and health assessment.

COURSE OUTCOME

At the end of the course student will able to

CO1: Differentiate between health and physical fitness

CO2: Describe various component of fitness and well being

CO3: Built concept of nutritional balance food

Modern concept of Health, Physical fitness and Wellness

Components of Physical Fitness Physical fitness components - Speed, Strength, Endurance, Flexibility and Coordinative Abilities Types of Physical Fitness - Health related Physical Fitness - Performance Related Physical Fitness - Cosmetic fitness Fitness Balance

Principles of Exercise Programme Activities for developing Physical Fitness Components Exercise and Heart rate Zones Principles of First Aid Nutritional Balance

Program: Bachelor of Physiotherapy (BPT)

Semester: Fifth

Course: Nutrition for Health

Course Code: 23ADE04

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: Student will learn about basic foods and its macro and micronutrients.

CLO2: Student will gain knowledge about food groups and their preparations

CLO3: Student will learn about meal, balance diet and nutritional status.

COURSE OUTCOME

At the end of the course, the candidate will-

CO1: Able to describe basic food items and nutrients

CO2: Able to describe food and their preparation.

CO3: Student will acquire knowledge about meal, balance diet and nutritional status.

UNIT-I Basic concepts in Food and Nutrition - Food and nutrition, Functions of Food

UNIT-II Nutrients – Macronutrients, Micronutrients

UNIT-III Food groups (process of food selection and preparation) – Cereals, Pulses, Fruits and Vegetables, Milk and milk products, Eggs, Meat poultry and fish, Fats and oils

UNIT-IV Basic Concepts of Meal Planning - Recommended Dietary Intakes, Balanced Diet

UNIT-V Nutritional Status - Assessment of nutritional status, Food habits, Food misinformation

Program: Bachelor of Physiotherapy (BPT)

Semester: Sixth

Course: Stress Management by Yoga

Course Code: 23ADE05

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: To achieve overall health of body and mind.

CLO2: To overcome stress.

COURSE OUTCOME

At the end of course candidate will

CO1: Develop healthy mind in a healthy body thus improving social health also.

CO2: Improve efficiency.

UNIT-I: Definitions of Eight parts of yog. (Ashtanga)

UNIT-II: Yam and Niyam.

UNIT-III: Do`s and Don`t`s in life. i) Ahinsa, satya, astheya, bramhacharya and aparigraha ii) Shaucha, santosh, tapa, swadhyay, ishwarpranidhan

UNIT-IV: Asan and Pranayam

UNIT-V: i) Various yog poses and their benefits for mind & body ii) Regularization of breathing techniques and its effects-Types of pranayam

TEXT BOOKS/ REFERENCES:

1. 'Yogic Asanas for Group Tarining-Part-I': Janardan Swami Yogabhyasi Mandal, Nagpur
2. "Rajayoga or conquering the Internal Nature" by Swami Vivekananda, Advaita Ashrama (Publication Department), Kolkata

Program: Bachelor of Physiotherapy (BPT)

Semester: Sixth

Course: Cardiopulmonary Resuscitation and Rehabilitation

Course Code: 23ADE07

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: Candidate will learn about importance of CPR and its steps.

CLO2: Candidate will gain knowledge about automated external defibrillator.

CLO3: Candidate will learn about foreign body obstruction in airways and how to remove obstruction.

COURSE OUTCOME

At the end of course candidate will

CO1: Able to describe importance of steps of CPR and its importance.

CO2: Explain various parts and how to handle automated external defibrillator machine.

CO3: Acquire knowledge about foreign body and airways obstruction.

UNIT 1: Importance of high-quality CPR and its impact on survival,

Steps of the Chain of Survival, BLS concepts of the Chain of Survival, Recognizing signs of someone needing CPR, How to do high-quality CPR for an adult.

UNIT 2: The importance of early use of an automated external defibrillator (AED), the use of an AED, Perform high-quality CPR for a child, Perform high-quality CPR for an infant, and describe the importance of teams in multi-rescuer resuscitation, Perform as an effective team member during multi-rescuer CPR.

UNIT 3: Rescue breathing, Airway assistive devices, Provide effective ventilations by using different barrier device, describe the technique for relief of foreign-body airway obstruction for an adult or child, describe the technique for relief of foreign-body airway obstruction for an infant.

Program: Bachelor of Physiotherapy (BPT)
Semester: Sixth
Course: Evaluation Method & Outcome Measures
Course Code: 23ADE08

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE:

CLO1: Candidate will get an idea about measurement and evaluation.

CLO2: Candidate will learn cognitive, affective and psychomotor measurements

CLO3: Candidate will learn about different measurement tools

CLO4: Candidate will gain knowledge about assessment of learning outcome

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Describe method of measurement and evaluation.

CO2: Acquire knowledge about different measurement tools.

CO3: Explain learning outcome.

The concepts of measurement and evaluation as applied to behavioral sciences. How to measure outcome of the teaching-learning process in Computer Education. Cognitive, affective and psychomotor measurements. Teacher-made and standardized tests for Computer Education. Interpretation and treatment of the outcomes of the measurements. Basic descriptive statistics. Formative and summative evaluation. Alternative evaluation strategies. Using measuring tools to find desired properties (reliability, validity, usefulness). The measurement approaches based on traditional tools (written exams, short response examinations, multiple-choice tests, oral poll and homework). Measurement on multi-dimensional tools (observations, interviews, research papers, research projects, self-assessment, attitudes scales). Assessment of learning outcomes.

Program: Bachelor of Physiotherapy (BPT)

Semester: Eight

Course: Principles of Management

Course Code: 23AOE01

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE:

CLO1: The purpose of this course is to introduce the student to the roles and responsibilities of managers in organizations.

CLO2: The class emphasizes experiential learning and self-inquiry to explore the job of a manager.

CLO3: The course will give knowledge of the managerial environment, decision-making, effective communications, and management ethics.

COURSE OUTCOME

At the end of the course student will able to

CO1: Examine the functions of planning, organizing, leading, staffing and controlling.

CO2: Evaluate and anticipate the potential effectiveness of various management styles, communications, and decisions for a given situation.

History and growth of management science

Traditional management vs. modern health care management

Evolution of management theory Healthcare management as a profession

Evaluation of Management Concepts Management components i.e. Planning, Organizing, Staffing, Motivating, Leading, Co-ordination and Controlling.

Modern Management concept and its implication in health sector

Suggested Reading:

Principles of Management - L. M. Prasad - S. Chand

Essential Management - Koontz - Tata McGraw Hill Management - Peter Drucker

Program: Bachelor of Physiotherapy (BPT)

Semester: Eight

Course: Ergonomics & Health Promotion

Course Code: 23AOE02

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: To increase awareness of the need for and role of ergonomics in occupational health.

CLO2: To obtain basic knowledge in the application of ergonomic principles to design of industrial workplaces and the prevention of occupational injuries.

CLO3: To understand the breadth and scope of occupational ergonomics.

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Acquire knowledge about ergonomics, assessment process of equipment and posture; able to identify risk posture and its prevention.

CO2: Describe anthropometry and workspace design and body demands.

CO3: Explain Various Work related musculoskeletal disorders.

CO4: Explain basic concept of health and health promotion work.

UNIT 1: Introduction to Ergonomics and risk factors. Introduction to Ergonomics, Definition and History of Ergonomics, Assessment of task, equipment evaluation, Observation of work site, Identify various ergonomic risk factors, Explain WRMSD'S causes, prevention.

UNIT II: Anthropometry and Workspace Design. Anthropometry and Workspace Design Muscular work including dynamic and static work, nervous control of movement, skilled work and ways to improve work efficiency. Anthropometry is the study of the size and shape of the human body. Principles of workspace design, including seated work, standing work, work reaches and working heights, the office environment and visual work.

UNIT III: Work related musculoskeletal disorders Explain Various Work related musculoskeletal disorders, Discuss in detail about causes and ergonomics specific to different professions- Physiotherapist, dentist, teacher, computer operator, house wife, farmers, driver.

UNIT IV: Health promotion focused on Work Place and Physical Activity Basic concepts in public health and health psychology. Theoretical knowledge how a health promotion work can be carried out in different levels in the society. Theoretical knowledge regarding health promotion work especially with the physical working environment and physical activity within different fields and for different groups in the society.

Textbooks Required:

- Kroemer, K.H.E., Fitting the Human: Introduction to Ergonomics, CRC Press Recommended: Freivalds, A., Neibel's Methods, Standards and Work Design, McGraw Hill

Program: Bachelor of Physiotherapy (BPT)

Semester: Eight

Course: Universal Human Value & Ethics

Course Code: 23AOE03

L	T	P	Credits
2	0	0	2

Course Learning Objective:

CLO 1: To make students aware of the key aspects of Indian culture and ethics.

CLO 2: To become acutely aware of the crisis developed within Indian human values and ethics.

CLO 3: To have a clear concept of the need for inculcating values into individual life and taking it to the larger domain.

CLO 4: To sensitize the student's mind towards gender discrimination and the need to create an equal society.

CLO 5: To make the students actively participate in sustaining and maintaining a clean environment.

Course Outcome:

On completion of the Course, the students will be able to:

CO 1: Have a strong belief in our rich cultural and social heritage.

CO 2: Balancing their core values with dynamics of changing world.

CO 3: Thinking twice before supporting any kind of gender discriminatory act and sensitizing others towards building an equal society.

CO 4: Helping to build a strong family and retaining social values.

CO 5: Actively helping to save natural resources and cleaning the environment.

Unit 1: VALUE CRISIS IN CONTEMPORARY INDIAN SOCIETY Value Crisis at the Individual Level, Societal Level, Intellectual Level, Cultural Level, Value – What are they? The Indian Concept of Values. Modern Approach to the Study of Values. Aesthetic Sensibilities

Unit II: MORAL AND ETHICAL HUMAN VALUES Bases for Moral Judgment Some Canons of Ethics. Virtue Ethics. Ethics of Duty. Ethics of Responsibility Factors to be considered in Making Ethical Judgments. Different Meanings of Human Values A New Approach to Human Value, Freedom, Creativity Love & Wisdom

Unit III: MORAL VALUES IN PROFESSION what is a Profession? Professional Ethos Code of Professional Ethics Practicing the Code Corporate Social Responsibility The Larger Domain of Human Values Institutionalizing Ethics and Human Values

Unit IV: GENDER SENSITIZATION Socialization of women Just Relationships, being together as equals Declining sex ratio, demographic consequences Women's work, its politics

and economics, fact and fiction, unrecognized and Unaccounted work Domestic violence, eve teasing and harassment. Is home a safe place?

Suggested Reading:

1. Dr. Rajan Mishra, Human Values: Laxmi Publications Pvt. Ltd.
2. S. Dinesh Babu, Professional Ethics and Human Values; Laxmi Publications Pvt. Ltd.
3. P.S. Rathore. Business Ethics And Communication; S.Chand Publishing
4. Dr. K.Alex. Managerial Skills; S. Chand Publishing.
5. Dr. M. Adithan, Study Skills for Professional Students for Higher Education, S.Chand Publishing
6. Govindarajan M “Professional Ethics and Human Values.”
7. R.R. Gaur and R. Sangal “ A Foundation Course in Human Values and Professional Ethics”

Websites:

- [www.tatamcgrawhill.com/digital Solutions/ monopoly](http://www.tatamcgrawhill.com/digital%20Solutions/monopoly)
- www.schandedutech.com
- www.laxmipublications.com

Program: Bachelor of Physiotherapy (BPT)
Semester: Eight
Course: Entrepreneurship in Health Sectors
Course Code: 23AOE04

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE:

The main objectives of the course are to:

CLO1: Introduce the basic principles of entrepreneurship and to demonstrate their value in the ongoing improvement of healthcare and population health.

CLO2: Explore how the main industries involved in healthcare (biopharma and medical devices) create and bring to the market new products and services.

CLO3: Examine the adoption of innovation in healthcare, and the critical role of the leader in creating an environment that facilitates innovation.

CLO4: Provide an overview of business model selection and business plan development. Intellectual property, licensing, alliances, partnerships and start-ups will also be explored.

CLO5: Discuss the creation of the start-up; namely, what makes an effective start-up team, and potential sources of funding.

CLO6: Describe venture capital and its associated competencies; pitching to investors, negotiation, valuation, and awareness of the deal structure.

Learning Outcomes After completion of the course students are expected to be able to:

CO1: Define and describe innovation and entrepreneurship.

CO2: Discuss how governments try to support the innovation process.

CO3: Outline and examine the reasons why innovation adoption in healthcare requires careful consideration of the wider context and the nature of the innovation itself.

CO4: Critique the role evidence plays in the decision to adopt innovation and why its collection is hard for many healthcare innovations.

CO5: Describe the concept and importance of intellectual property and licensing.

CO6: Evaluate sources of funding.

CO7: Describe venture capital.

Unit – 1 Introduction Meaning and Importance, Evolution of term ‘Entrepreneurship’, Factors influencing entrepreneurship’, Psychological factors, Social factors, Economic factor, Environmental factors. Characteristics of an entrepreneur, Types of entrepreneur, Health entrepreneurship, Barriers to entrepreneurship.

Unit- 2 Entrepreneurial Motivation - Motivation Maslow's theory Herzberg's theory McGregor's Theory McClelland's Need – Achievement Theory. Culture & Society, Values / Ethics, Risk taking behavior.

Unit- 3 Creativity Creativity and entrepreneurship, Steps in Creativity, Innovation and inventions, Using left brain skills to harvest right brain ideas, Legal Protection of innovation, Skills of an entrepreneur, Decision making and Problem Solving (steps indecision making). The Unique Case of the Healthcare Sector, Innovation in the Biopharma and Medical Device Industry, Health Innovation Adoption.

Unit - 4 Organisation Assistance Assistance to an entrepreneur, New Ventures, Special Economic Zone (Meaning, features & examples), Financial assistance by different agencies, MSME Act Small Scale Industries, Carry on Business (COB) licence Environmental Clearance National Small Industries Corporation (NSIC), Government Stores Purchase scheme (e-tender process), Excise exemptions and concession, Exemption from income tax, Quality Standards with special reference to ISO, Financial assistance to MSME, Modernisation assistance to small scale.

Unit - 5 Rules And Legislation Applicability of Legislation, Industries Development (Regulations) Act, 1951, Factories Act, 1948, The Industrial Employment (Standing Orders) Act, 1946, Suspension Stoppage of work, Termination of employment, Environment (Protection) Act, 1986.

Program: Bachelor of Physiotherapy (BPT)
Semester: Eight
Course: Disaster Risk Management for Health
Course Code: 23AOE05

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

- CLO1:** Candidate will learn about disaster and its management.
CLO2: Candidate will learn about risk factors and its prevention methods.
CLO3: Candidate will learn about responsibility and function in different disaster situation.

COURSE OUTCOME: At the end of the course student will able to

- CO1:** Face different disaster situation as health care team.
CO2: Communicate efficiently with health care team and others.
CO3: Maintain record for future and analyze other cases.

Understanding Disaster Medicine
 Epidemiological Study of Disasters
 Prevention of Risk
 Medical Preparedness Plan
 Logistics Management
 Remote Area Planning
 Education and Training in Health Management of Disasters
 Disaster Site Management
 Clinical Casualty Management
 Community Health Management
 Medical and Health Response to Different Disasters
 Role of Information and Communication Technology in Health Response
 Psychological Rehabilitation
 Practical Manual
 Case Studies of Medical and Health Interventions in Disaster Management

Program: Bachelor of Physiotherapy (BPT)

Semester: Eight

Course: Personality Development through Life Enlightenment

Course Code: 23AOE06

L	T	P	Credits
2	0	0	2

COURSE LEARNING OBJECTIVE

CLO1: To learn to achieve the highest goal happily.

CLO2: To become a person with stable mind, pleasing personality and determination.

CLO3: To awaken wisdom in students.

Course Outcomes: Students will be able to

CO1: Study of Shrimad-Bhagwad-Geeta will help the student in developing his personality and achieve the highest goal in life.

CO2: The person who has studied Geeta will lead the nation and mankind to peace and prosperity.

CO3: Study of Neetishatakam will help in developing versatile personality of students.

UNIT-I: Neetisatakam-Holistic development of personality • Verses- 19,20,21,22 (wisdom) • Verses- 29,31,32 (pride & heroism) • Verses- 26,28,63,65 (virtue)

UNIT-II: Neetisatakam-Holistic development of personality • Verses- 52,53,59 (dont's) • Verses- 71,73,75,78 (do's)

UNIT-III: Approach to day to day work and duties. • Shrimad Bhagwad Geeta: Chapter 2-Verses 41, 47,48, • Chapter 3-Verses 13, 21, 27, 35, Chapter 6-Verses 5,13,17, 23, 35, • Chapter 18-Verses 45, 46, 48.

UNIT-IV: Statements of basic knowledge. • Shrimad Bhagwad Geeta: Chapter2-Verses 56, 62, 68 • Chapter 12 -Verses 13, 14, 15, 16,17, 18 • Personality of Role model. Shrimad Bhagwad Geeta:

UNIT-V: • Chapter2-Verses 17, Chapter 3-Verses 36,37,42, • Chapter 4-Verses 18, 38,39 • Chapter18 – Verses 37,38,63

TEXT BOOKS/ REFERENCES:

1. “Srimad Bhagavad Gita” by Swami Swarupananda Advaita Ashram (Publication Department), Kolkata.
2. Bhartrihari's Three Satakam (Niti-sringar-vairagya) by P.Gopinath, Rashtriya Sanskrit Sansthanam, New Delhi.