

CENTRAL UNIVERSITY OF TAMIL NADU

Master of Science in Yoga (w.e.f. 2025-26)



**School of Education and Training
Department of Physical Education and Sports
Central University of Tamil Nadu
Thiruvarur-610 005**

REGULATIONS FOR M.SC. (YOGA)

The M.Sc. Yoga is a two-year postgraduate degree program spread across four semesters, designed to provide a comprehensive and interdisciplinary understanding of yoga philosophy, practice, and therapy. The course aims to develop professional competence in yoga by integrating traditional knowledge with modern scientific approaches. The program covers yogic sciences, human anatomy and physiology, therapeutic applications, research methodology, and the role of yoga in health and wellness. It provides in-depth exposure to asana, pranayama, meditation techniques, yoga therapy for lifestyle disorders, and holistic well-being. Graduates of the program will have career opportunities as Yoga Therapists, Yoga Instructors, Wellness Consultants, Researchers, and Educators in universities, health and wellness centers, hospitals, rehabilitation clinics, sports academies, and corporate wellness programs.

A. Vision

To create globally competent yoga professionals who integrate traditional yogic wisdom with modern scientific knowledge to promote holistic health, well-being, and sustainable living.

B. Mission

M1: To impart a deep understanding of yogic philosophy, practices, and their scientific applications.

M2: To develop skilled yoga practitioners and therapists capable of addressing modern health challenges.

M3: To foster research and innovation in yoga for evidence-based practices.

M4: To promote the integration of yoga in education, healthcare, and community development.

M5: To cultivate ethical and compassionate yoga professionals committed to societal well-being.

C. Program Educational Objectives (PEOs):

PEO1: To equip students with a strong foundation in yogic philosophy, practices, and their scientific basis.

PEO2: To develop advanced skills in yoga therapy, teaching, and research.

PEO3: To prepare students for careers in yoga education, therapy, and wellness industries.

PEO4: To promote the application of yoga for holistic health and well-being in diverse populations.

PEO5: To foster ethical leadership and a commitment to societal well-being through yoga.

D. Graduate Attributes

1. **Yogic Knowledge:** Deep understanding of yogic philosophy, practices, and their applications.
2. **Professional Skills:** Proficiency in teaching, therapy, and research in yoga.
3. **Critical Thinking:** Ability to analyze and apply yogic principles to solve health and wellness challenges.
4. **Ethical Leadership:** Commitment to ethical practices and societal well-being.
5. **Lifelong Learning:** Continuous pursuit of knowledge and skill enhancement in yoga.

E. PEO to Mission Statement Mapping:

	PEO1	PEO2	PEO3	PEO4	PEO5
M1	✓	✓	✓	✓	✓
M2	✓	✓	✓	✓	✓
M3	✓	✓	✓	✓	✓
M4	✓	✓	✓	✓	✓
M5	✓	✓	✓	✓	✓

F. Program Outcomes (POs):

PO1: Demonstrate a deep understanding of yogic philosophy, practices, and their scientific basis.

PO2: Apply advanced yoga techniques for teaching, therapy, and wellness.

PO3: Conduct research and contribute to evidence-based practices in yoga.

PO4: Address health and wellness challenges using yogic principles.

PO5: Exhibit ethical leadership and a commitment to societal well-being.

G. PO to PEO Mapping:

	PEO1	PEO2	PEO3	PEO4	PEO5
PO1	✓	✓	✓	✓	✓
PO2	✓	✓	✓	✓	✓
PO3	✓	✓	✓	✓	✓
PO4	✓	✓	✓	✓	✓
PO5	✓	✓	✓	✓	✓

I. Assessment

Evaluation Scheme (Theory & Practicum)

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	20	20	20	20	20	100

Grading System

S.No.	Range of Marks in %	Letter Grade	Grade Point	Description
1	90 to 100	O	10	Outstanding
2	80 to 89	A+	9	Excellent
3	70 to 79	A	8	Good
4	60 to 69	B+	7	Above Average
5	50 to 59	B	6	Average
6	Below 50	RA	0	Reappear
7	-	FA	0	Failure due to lack of attendance
8	-	AE	0	Absent in the End Semester Examination
9	-	AU	None	Audit Course

J. Internal Assessment

Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

K. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Objective)	2	2	2	2	2
Part – B (Short Answer)	3	3	3	3	3
Part – C (Essay)	7	7	7	7	7
Total	12	12	12	12	12

L. Program Credit Scheme:

Semester	Core Courses			Elective Course			Total Credits
	No. of papers	Credits (L+T/P)	Total Credits	No. of papers	Credits (L+T/P)	Total Credits	
I	5	12T+20P	22	1	3T	3	25
II	4	9T+18P	18	3	8T	8	26
III	4	9T+18P	18	1	3T	3	21
IV	5	14T+20P	24	-	-	-	24
Total Credits for the Course	18	(44T + 76P)	82	1	14T	14	96

M. Distribution of Percentage of Components in the Course:

S.No	Course Components	Credits	Percentage
1	Core Course	48	50%
2	Core Course Practical	24	25%
3	Discipline Specific Elective (DSE)	9	9.4%
4	Open Elective (OE)	3	3.1%
5	Soft-Skill (SS)/ Swayam	2	2%
6	Internship / Field Visit / Training	4	4.2%
7	Project / Dissertation	6	6.3%
	Total	96	100%

N. Common Rubric for Assignments

Sl. No	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	Knowledge and Understanding	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO1, CO2, CO3, CO4
2	Organization	Well communicated with logical sequences, examples, and references	Communicated with sequences	Just communicated	No coherent communication	Not Attended	CO1, CO2, CO3, CO4

O. Duration of the Program:

The duration of the course is two academic years **with** four semesters. A candidate must complete the course of study for the Master of Science in Yoga (M.Sc. Yoga) and pass all papers in Semester I, II, III, and IV within a total period of two years commencing from the date of admission to the M.Sc. Yoga program.

P. Eligibility for Admission:

Any Bachelor's degree holder with a minimum of 55% marks or 6.0 CGPA (on a 10-point scale) in the qualifying degree examination for General Category, 50% marks or 5.5 CGPA for OBC (Non-creamy layer), EWS, and 45% aggregate marks or 5.0 CGPA for SC/ST/PWD candidates. The admission into the program is done through the Common University Entrance Test (CUET-PG). *Admission criteria follow as per CUTN Norms.*

SEMESTER I

Course Code	Course Title	Course Type	No of Hours		Total Credits per Week
			T	P	Credits
PES5011	Fundamentals of Yogic Philosophy	Core Course	4	-	4
PES5012	Anatomy and Physiology	Core Course	2	4	4
PES5013	Introduction to Yoga text	Core Course	4	-	4
PES5014	Meditation	Core Course	2	4	4
PES5P01	Yoga Practicum – 1	Skill Based	-	12	6
PES5EC01	Yogic Diet and Nutrition	DSE	3	-	3
PES5EC02	Yoga Sutras				
Total			15	20	25

SEMESTER II

PES5021	Yoga Parampara	Core Course	4	-	4
PES5022	Applied Psychology and Yoga	Core Course	3	2	4
PES5023	Methods of Practicing yoga	Core Course	2	4	4
PES5P02	Yoga Practicum – II	Skill Based	-	12	6
PES5EC03	Traditional Systems of Medicine	DSE	3	-	3
PES5EC04	Self-Management and Career Development				
	Open Elective	OPE	3	-	3
	SWAYAM / MOOCS / NPTEL	DSE	2	-	2
Total			17	18	26

SEMESTER III

CODE	Course title	Course Type	Credits		
			T	P	Total
PES5031	Research Process and Statistics in Yoga	Core Course	4	-	4
PES5032	Introduction to Hatha Yoga	Core Course	2	4	4
PES5033	Yogic Pedagogy	Core Course	3	2	4
PES5P03	Yoga Practicum – III	Skill Based	-	12	6
PES5EC05	Surya Namaskar and Pranayama	DSE	3	-	3
PES5EC06	Yoga Therapy				
Total			12	18	21

SEMESTER IV

PES5041	Introduction to Indian Knowledge System	Core Course	4	-	4
PES5042	Yoga and Artificial Intelligence	Core Course	4	-	4
PES5044	Dissertation	Core Course	6	-	6
PES5P04	Yoga practicum – IV	Skill Based	-	12	6
PES5P04	Internship / Officiating	Skill Based	-	8	4
Total			14	20	24
Grand Total			58	76	96

SEMESTER- I

COURSE TITLE : FUNDAMENTALS OF YOGIC PHILOSOPHY

COURSE CODE : PES5011

COURSE OBJECTIVES :

1. Give an introduction of yoga and its important streams.
2. Explain the hidden concepts available in the ancient yogic texts.
3. Explain the introduction and appreciate the contribution of the yogis.

A. COURSE LEARNING OUTCOMES

Sl. No:	Course Learning Outcome	Level
CLO 1	Give an introduction of yoga and its important streams	Understand
CLO 2	Give an introduction Gyan Yoga, Bhakti Yoga, Karm Yoga, Hath Yoga and Raj Yoga.	Apply
CLO 3	Appreciate the contribution of the yogis.	Apply
CLO 4	Explain the hidden concepts available in the ancient yogic texts.	Apply
CLO 5	Reviewing the autobiography of Yogis.	Apply

B. SYLLABUS

Unit - I Introduction and Evolution of Yoga

Meaning, Definition and importance of Yoga according to various schools of thoughts. Aims, Objectives and Importance of Yoga in Life. Application and Misconceptions about Yoga in Modern Society. Historical, Psychological, Mythological development and evolution of Yoga.

Unit – II YOGA IN VARIOUS PHILOSOPHIES AND TEXTS

Classification of Indian Philosophy and their basis of Division. 25 elements of Sankhya Darshana, Purusha, Prakriti and their Relationship, Yoga Darshana. Yoga in Nyaya Darshana, Vaisheshika Darshana, Mimansha Darshana, and Vedanta Darshana. Yoga in Baudha Darshana, Jain Darshana and Sufi Darshana.

Unit - III Schools of Yoga

Introduction of Hatha Yoga , Mantra Yoga , Laya Yoga, Raja Yoga. Karma Yoga, Bhakti Yoga, Gyan Yoga. Shiv Yoga Sadhana, Swar Yoga. Tantra Yoga (Shaiva, Shaktta, Vaishnave).

Unit – IV Biographies Of Famous Yogis and Their Contribution in Yoga

Maharishi Patanjali, Matsyendra Nath, HathaYogi Gorakshanath, Ramkrishna Paramhansa, Swami Vivekananda, Raman Maharishi, Maharishi Aurobindo, Paramhansa Yoganand.

Unit -V Introduction of Yogic Text

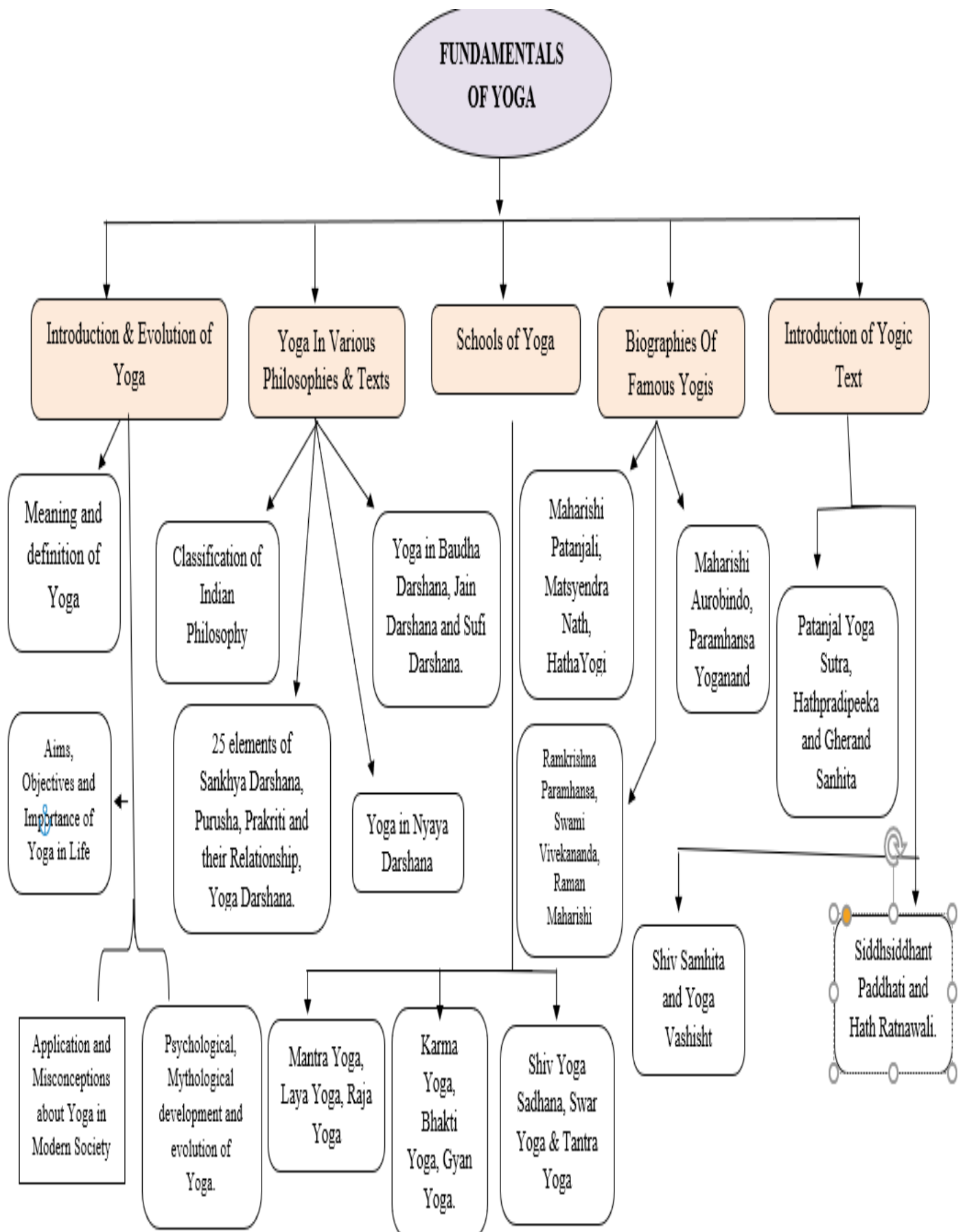
Patanjal Yoga Sutra, Hathpradipeeka and Gherand Sanhita. Shiv Samhita and Yoga Vashisht. Siddhsiddhant Paddhati and Hath Ratnawali.

REFERENCES:

1. Iyengar, B. K. S. (2005). *Light on life: The yoga journey to wholeness, inner peace, and ultimate freedom*. Rodale Books.
2. Saraswati, S. (1996). *Asana Pranayama Mudra Bandha* (Rev. ed.). Bihar School of Yoga.
3. Radhakrishnan, S., & Moore, C. A. (Eds.). (1957). *A sourcebook in Indian philosophy*. Princeton University Press.
4. Dasgupta, S. (1991). *A history of Indian philosophy* (Vol. 1). Motilal Banarsidass.
5. Vivekananda, S. (2001). *The complete works of Swami Vivekananda* (Vols. 1–9). Advaita Ashrama.
6. Saraswati, S. S. (2001). *Four chapters on freedom: Commentary on the Yoga Sutras of Patanjali*. Yoga Publications Trust.
7. Goldberg, E. (2016). *The path of modern yoga: The history of an embodied spiritual practice*. Inner Traditions.
8. Yogananda, P. (2002). *Autobiography of a yogi*. Self-Realization Fellowship. (Original work published 1946).
9. Swami Mukti bodhananda. (1998). *Hatha Yoga Pradipika* (with commentary). Bihar School of Yoga.
10. Gharote, M. L., & Devnath, M. (2005). *Gheranda Samhita: The original Sanskrit text with English translation and commentary*. The Lonavala Yoga Institute.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOMES:

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : ANATOMY AND PHYSIOLOGY
COURSE CODE : PES5012
COURSE OBJECTIVES :

This course provides a fundamental understanding of human anatomy and physiology in relation to yoga. It covers the structure and functions of major organ systems and their role in maintaining homeostasis. Students will analyze the physiological effects of yoga on overall health and well-being. The course also explores yoga's impact on stress management, immunity, and therapeutic applications.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO1	Students will be able to understand the basic structure and functions of the human body	Understand
CLO2	Students will gain knowledge about the musculoskeletal and respiratory.	Apply
CLO3	Students will develop an understanding of the cardiovascular, nervous, and endocrine systems.	Apply
CLO4	The students will able to analyze the role of the immune and lymphatic	Understand
CLO5	Students will understand the physiological aspects of the reproductive and excretory systems.	Understand

B. SYLLABUS

UNIT – I: Introduction to Human Anatomy and Physiology

Introduction to Human Anatomy and Physiology - Basic Anatomical and Physiological terms; Cell: Structure & Functions - different cell organelles and their functions; Tissues and Organization of human system; Introduction to Support Systems; Maintenance Systems - Control Systems, - Defense System and Concept of Homeostasis.

UNIT – II: Musculo-Skeletal System, Digestive & Respiratory System

The Skeletal System: Skeleton - Functions of Skeleton - Classification of bones - Study of joints; Structure and function of a Synovial joint; The Muscular System: Types of Muscles in the body; The Characteristics - structure and functions of the Skeletal Muscles - Smooth Muscles and Cardiac Muscle. Gross anatomy of digestive system - functional anatomy of Mouth - Oral cavity, Pharynx, Esophagus, Stomach, Small Intestine, Large Intestine, and Anal canal - Physiology of digestion. Gross anatomy of the respiratory passages, functional of Nasal cavity, Pharynx, Larynx, Trachea, Bronchus, Lungs and Alveoli - The process of Respiration, Lungs volumes & capacities, Mechanics of breathing and exchange of gas in alveoli.

UNIT – III: Cardiovascular System, Nervous System & Special Senses

Functional anatomy of the Heart, arteries, veins and capillaries - The organization of systematic and

pulmonary circulation, the cardiac cycle - Blood: Composition and Functions, Blood groups and their importance - Cardiac output and Venous return - Blood pressure and Regulation of blood pressure. An introduction to Histology – nerve – structure and properties of neurons – nerve – action potential – generation propagation – factors influencing classification of neurons and nerve fibers, neuralgia cells, receptors and reflex arcs – Functional anatomy of cerebrum, cerebellum, spinal cord – Functions and importance of the parts of the brain viz, cerebrum, pons, medulla, thalamus, hypothalamus, cerebellum and autonomic nervous system – Functional anatomy and physiology of eyes, ears, nose, tongue and skin.

UNIT – IV: Endocrine System, Blood & Lymphatic System

Anatomical Structure of important endocrine glands (Pituitary, thyroid, parathyroid, pancreas, adrenal and gonads) – Short anatomy of the hypothalamus and the releasing hormones secreted from it – Structure and function of anterior and posterior pituitary – function of thyroid, parathyroid, pancreas, islets of Langerhans – Composition of blood corpuscles – RBC, WBC and Platelets – Plasma, hemoglobin – coagulation of blood and anticoagulants, blood groups and its importance – Sites, functional anatomy of lymph nodes and their function – Lymphatic system and its role in immune system.

UNIT – V: Reproductive and Excretory System

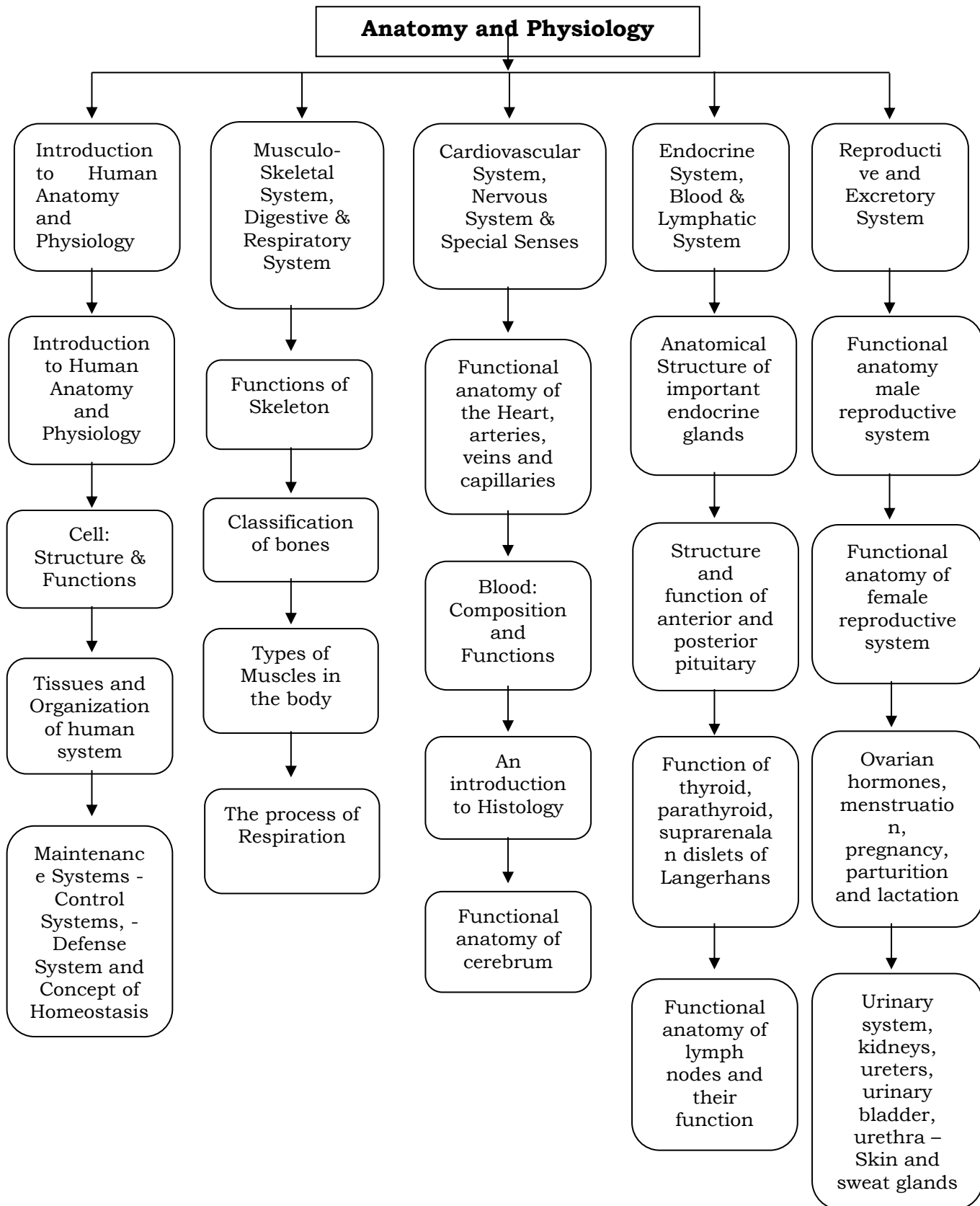
Functional anatomy male reproductive system, seminal vesicles and prostate glands – Spermatogenesis – Functional anatomy of female reproductive system – Ovarian hormones, menstruation, pregnancy, parturition and lactation – Urinary system, kidneys, ureters, urinary bladder, urethra – Skin and sweat glands.

REFERENCES

1. Gore, M.M, Kanchan Prakshan, Lonavala. (2003). Anatomy and Physiology of Yogic practices.
2. Sri Krishna, Kaivalyadhama S.M.Y.M.Samiti, Lonavala. (1988). Notes on Structure and Functions of Human Body and Effects of Yogic Practices on it.
3. Peter L Williams & Roger Warwick. (1988). Gray's Anatomy
4. Shirley Telles, VK Yogas. (1995). A Glimpse of the Human body.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : INTRODUCTION TO YOGA TEXT - I
COURSE CODE : PES5013
COURSE OBJECTIVES :

This course helps students understand the ten principal Upanishads and their connection to yoga. It explores the Bhagavad Gita's teachings on different types of yoga and their uses in daily life. Students will learn from the Yoga Vasishtha how to overcome challenges through yogic practices. It also covers key yogic ideas like Atman, Brahman, and the Gunas.

A. COURSE LEARNING OUTCOMES

S. No	Course Learning Outcome	Level
CLO 1	Students will gain foundational knowledge of the Upanishads	Understand
CLO 2	Students will be able to interpret and apply the Bhagavad Gita's yogic teaching.	Apply
CLO 3	Students will develop insight into the psychosomatic aspects of yoga Vasishtha.	Apply
CLO 4	The students will understand the significance of meditation, consciousness states, and the role of food and faith in yogic life.	Understand
CLO 5	Students will integrate the philosophical essence of yogic texts into their personal spiritual journey.	Understand

B. SYLLABUS

UNIT – I: Principal Upanishads

Brief Introduction of Ten Principal Upanishads. Ishavasyopanishad: Concept of Karmanishta - Concept of Vidya and Avidya - Knowledge of Brahman - Atma Bhava. Kena Upanishad: Self and the Mind - Intuitive realization of the truth - Moral of Yaksha Upakhyana. Katha Upanishad: Definition of Yoga - Nature of Soul - Importance of Self Realization.

UNIT – II: Principal Upanishads

Prashna Upanishad: Concept of Prana and rayi (creation) - Panchapranas; The six main questions Mundaka Upanishad: Two approaches to Brahma- Vidya- Para and Aparā; The greatness of Brahmadevidya; Worthlessness of Selfish-karma; Tapas and Gurubhakti; The origin of creation, the ultimate aim of Meditation- Brahmanubhuti. Mandukya Upanishad: Four States of Consciousness and their relation to syllables in Omkara.

UNIT – II: Principal Upanishads

Aitareya Upanishad: Concept of Atma, Universe and Brahman. Taittiriya Upanishad: Concept of Pancha Kosha; Summary of Shiksha Valli, Ananda Valli, Bhrguvalli. Chhandogya Upanishad: Om (udgitha) Meditation; Shandilyavidya. Brihadaranyaka Upanishad: Concept of Atman and Jnana Yoga; Union of Atman and Paramatman.

UNIT – IV: Bhagavad Gita

General Introduction to Bhagavad Gita, Definitions of Yoga, their relevance & Scope; Essentials of Bhagavad Gita - meanings of the terms Atmaswarupa, Stithaprajna, Sankhya Yoga (Chpt. II), Karma Yoga (Chpt. III), Samnyasa Yoga and Karma Swarupa (Sakama and Nishkama) Samnyasa, Dhyana Yogas (Chpt. VI); Types of Bhakta (Chpt. VII) Nature of Bhakti (Chpt. XII), Means and End of Bhakti-Yoga; The Trigunas and nature of Prakriti; Three Kinds of Faith. Food for Yoga-Sadhaka, Classification of food (Chpt. XIV & XVII) Daivasura – Sampad - Vibhaga Yoga (Chpt. XVI); Moksa – Samnyasa Yoga (Chpt. XVIII)

UNIT – V: Yoga Vasishtha

Salient features of Yoga Vashitha, Concept of Adhis and Vyadhis; Psychosomatic Ailments; The four Dwarpaals to Freedom; How Sukha is attained in the Highest State of Bliss; Practices to overcome the Impediments of Yoga; Development of Satvaguna; Eightlimbs of Meditation; Jnana Saptabhumika.

REFERENCES:

1. Nagarathna, R., Anand, A., Rain, M., Srivastava, V., Sivapuram, M.S., Kulkarni, R., Ilavarasu, J., Sharma, M.N.K., Singh, A., & Nagendra, H.R. (2021). Yoga Practice is beneficial for maintaining healthy lifestyle and endurance under restrictions and stress imposed by lockdown during COVID-19 Pandemic. *Frontiers in Psychiatry*.12, 613762. <https://doi.org/10.3389/fpsy.2021.613762>.
2. Brinsley, J., Smout, M., & Davison, K (2021). Satisfaction with Online Versus In-Person Yoga During COVID-19. *The Journal of Alternative and Complementary Medicine*, 27(10), 893-896. <https://doi.org/10.1089/acm.2021.0062>
3. Goldberg, E. (2016). *The Path of Modern yoga: The History of an Embodied Spiritual practice*. Inner Traditions/Bear. <https://books.google.com/books?id=0BucjgEACAAJ>
4. Iyengar, B.K.S. (2013). *B.K.S. Iyengar Yoga: The Path to Holistic Health*. DK Publishing.
5. Jois, K.P. (2010). *Yoga Mala: The Original Teachings of Ashtanga Yoga Master Sri K. Pattabhi Jois*. Farrar, Straus and Giroux.

COURSE TITLE : MEDITATION
COURSE CODE : PES5014
COURSE OBJECTIVES :

1. To understand the historical, philosophical, and cultural origins of meditation practices.
2. To explore various meditation techniques and their applications in daily life.
3. To analyze the physiological, psychological, and spiritual benefits of meditation.
4. To develop practical skills for practicing and teaching meditation.
5. To explore meditation as a therapeutic tool for stress management and personal well-being.

A. COURSE LEARNING OUTCOMES:

CLO 1: Understand the foundational principles of meditation and its evolution.

CLO 2: Demonstrate proficiency in various meditation techniques.

CLO 3: Analyze the effects of meditation on mental, emotional, and physical health.

CLO 4: Develop personalized meditation practices suited to individual needs.

CLO 5: Integrate meditation into daily life for stress management and holistic well-being.

B. SYLLABUS

Unit I: Introduction to Meditation

Definition and Concept of Meditation, Historical and Cultural Perspectives: Eastern and Western Approaches; Types of Meditation: Concentrative, Mindfulness, and Transcendental; Philosophical Foundations: Role in Yoga and Spiritual Traditions; Scientific Research on Meditation: Benefits and Evidence.

Unit II: Meditation Techniques

Breathing-Based Meditation: Anapanasati, Sectional Breathing; Mantra-Based Meditation: Om Chanting, Japa Meditation; Visualization Techniques: Guided Imagery and Trataka (Candle Gazing); Body Scan and Progressive Relaxation; Movement Meditation: Walking Meditation and Dynamic Meditation.

Unit III: Meditation and Health

Physiological Benefits: Impact on Cardiovascular, Respiratory, and Nervous Systems; Psychological Benefits: Stress Reduction, Anxiety Management, and Emotional Regulation; Meditation for Cognitive Development: Focus, Memory, and Creativity; Meditation for Pain Management and Sleep Improvement; Therapeutic Applications: Depression, ADHD, and PTSD.

Unit IV: Advanced Meditation Practices

Chakra Meditation and Kundalini Practices; Loving-Kindness Meditation (Metta); Zen and Vipassana

Meditation: Philosophy and Techniques; Yoga Nidra: Deep Relaxation Practice; Bhavana (Visualization) Practices for Self-Realization.

Unit V: Meditation as a Lifestyle

Developing a Daily Meditation Routine; Role of Ethics and Mindfulness in Meditation Practices; Practical Applications in Professional and Personal Life; Teaching Meditation: Guidelines and Challenges; Integrating Meditation with Yoga and Pranayama.

REFERENCES:

1. Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*.
2. Swami Satyananda Saraswati. (1976). *Yoga Nidra*. Bihar School of Yoga.
3. Goleman, D. (1988). *The Meditative Mind: The Varieties of Meditative Experience*.
4. Tolle, E. (2004). *The Power of Now: A Guide to Spiritual Enlightenment*.
5. Chopra, D. (2001). *The Seven Spiritual Laws of Success: A Practical Guide to the Fulfillment of Your Dreams*.
6. Iyengar, B.K.S. (2005). *The Art of Meditation: Insights into Self-Awareness through Yoga*.

COURSE TITLE : YOGA PRACTICUM-I
COURSE CODE : PES5P01
COURSE OBJECTIVES :

1. Empower students to enhance their physical mobility through effective exercises and Basic Asanas.
2. Equip students with the skills to perform standing asanas for strength and balance.
3. Help students master sitting asanas for flexibility and mindfulness.
4. Enable students to practice lying asanas for relaxation and core strength.
5. Enable students to practice pranayama techniques for enhanced respiratory health, mental focus, and emotional balance.

A. COURSE LEARNING OUTCOMES:

CLO 1: Students will develop flexibility and joint mobility through simple and effective exercises.

CLO 2: Students will learn to perform standing asanas that improve posture, balance, and body strength.

CLO 3: Students will master sitting asanas that enhance hip flexibility and promote mental focus.

CLO 4: Students will practice lying asanas to strengthen their core and relax their body effectively.

CLO 5: Students will master pranayama techniques to regulate breath and enhance overall well-being.

B. PRACTICAL SYLLABUS

Unit 1: Mobility Exercises and Basic Asanas

Stretching Exercises, Loosening the Joints and Joint Freeing Series.

Unit 2: Standing Asanas:

Tadasana (Mountain Pose), Vrikshasana (Tree Pose), Virabhadrasana I (Warrior I Pose), Virabhadrasana II (Warrior II Pose), Trikonasana (Triangle Pose), Utkatasana (Chair Pose), **Parsvakonasana (Extended Side Angle Pose)**, Ardha Chandrasana (Half Moon Pose), Padahasthasana (Hand-to-Foot Pose) and Garudasana (Eagle Pose).

Unit 3: Sitting Asanas:

Padmasana (Lotus Pose), Vajrasana (Thunderbolt Pose), Sukhasana (Easy Pose), Baddha Konasana (Butterfly Pose), Paschimottanasana (Seated Forward Bend), Ardha Matsyendrasana (Half Spinal Twist), Upavistha Konasana (Wide-Angle Seated Forward Bend), Parvatasana (Seated Mountain Pose), Marichyasana (Sage Pose) and Gomukhasana (Cow Face Pose).

Unit 4: Lying Position Asanas:

Prone Position: Bhujangasana (Cobra Pose), Dhanurasana (Bow Pose), Makarasana (Crocodile Pose), Salabhasana (Locust Pose) and Naukasana (Boat Pose).

Supine Position Asanas: Shavasana (Corpse Pose), Setu Bandhasana (Bridge Pose),

Pavanamuktasana (Wind-Relieving Pose), Supta Baddha Konasana (Reclining Bound Angle Pose) and Jathara Parivartanasana (Reclining Spinal Twist).

Unit 5: Pranayama: Sectional Breathing

Anuloma, Viloma, Pratiloma, Surya Bhedana and Chandra. Bandhas (Basic)

REFERENCE:

1. Iyenger B.K.S (1976) Light on Yoga, London, Unwin Paperbacks.
2. Sivananda Sarawathi Sawmi (1934) Yoga Asanas Mudras: My Magazine of India.
3. Slathia, S. D. (2014) “Effects of Yogic Practices on Different Organs of an Athlete”, ‘Paripex - Indian Journal of Research’, Volume : 3 | Issue : 1 | Jan 2014 ISSN - 2250-1991
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5. Dhume, RR. and Dhume, RA. (1991) “A comparative study of the driving effects of dextroamphetamine and yogic meditation on muscle control for the performance of balance board.” ‘Indian Journal Physiol Pharmacol’ 1991; 35: 191-94.
6. Vishnu Devananda Swami (1972) the Complete Illustrated Book of Yoga, New York: Pocket Books.

COURSE TITLE : YOGIC DIET AND NUTRITION
COURSE CODE : PES5EC01
COURSE OBJECTIVES :

1. To introduce the concepts of nutrition, macronutrients, micronutrients, and balanced diets.
2. To educate students on nutrition at various life stages.
3. To familiarize students with Yogic diet principles and characteristics of sattvic, rajasic, and tamasic foods.
4. To educate students on specialized diets like summer diet, detox, and nutrition for new mothers.
5. To guide students in diets for disease prevention, longevity, and overall well-being.

A. COURSE LEARNING OUTCOMES:

- CLO 1: Students will gain knowledge about balanced diets and the benefits of vegetarian and Mediterranean diets.
- CLO 2: Students will apply nutritional practices for different life stages and understand pregnancy requirements.
- CLO 3: Students will incorporate Yogic diet principles into daily nutrition for yogic practitioners.
- CLO 4: Students will design diets for brain detox, stress reduction, and new mothers health.
- CLO 5: Students will design diets for disease prevention and enhance longevity.

B. SYLLABUS

Unit 1:Nutrition:

Meaning and definition of Nutrition and Yogic diet, Nutrition: Macromutation, micro-nutrition, carbohydrate, fats, proteins, vitamins, minerals, waters, balanced diet, benefits of vegetarian diet, Mediterranean diet. Yogic diet, principles of yogic diet, characteristics of sattvic, rajasic and tamasic diet, diet for yogic practitioners.

Unit 2 Stages of Nutrition in Life:

Nutrition during various stages of Life: Childhood, adolescence, adulthood, middle aged & aged. Nutrition during pregnancy & tips

Unit 3:Yogic diet:

Meaning and definition of Yogic diet, principles of yogic diet, characteristics of sattvic, rajasic and tamasic diet, diet for yogic practitioners.

Unit 4: Specialized Diets

Summer diet, diet for detoxing brain, boosting diet, anti-stress diet, super food for new mothers.

Unit 5: Diet for Disease Prevention and Longevity

Diet for diseases, diet for longevity and well-being.

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1. Girija Shyamsundar (2007) Nutrition perspectives Chennai: university of Madras.
2. Swami Sivananda (2007) Health and hygiene sivanandanagar: the divine life society.
3. Lily Pritam Telu Tam (1981) Health and Hygiene, Delhi: Vikas publishing House pvt ltd.
4. Sunitha Pant Bansal (2008) Diet in diseases Delhi: Pustak Mahal.
5. Nagendra and Nagratha (2008) New perspectives in stress management, Bangalore: Vivekananda Yoga Research foundation.
6. Elangovan (2018) Yoga Psychology, Chennai: Ashwin Publications.

COURSE TITLE : YOGA SUTRA
COURSE CODE : PES5EC02
COURSE OBJECTIVES :

This course provides a fundamental understanding of human anatomy and physiology in relation to yoga. It covers the structure and functions of major organ systems and their role in maintaining homeostasis. Students will analyze the physiological effects of yoga on overall health and well-being. The course also explores yoga's impact on stress management, immunity, and therapeutic applications.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO 1	Students will be able to understand the basic structure and functions of the human body	Understand
CLO 2	Students will gain knowledge about the musculoskeletal and respiratory.	Apply
CLO 3	Students will develop an understanding of the cardiovascular, nervous, and endocrine systems.	Apply
CLO 4	The students will able to analyze the role of the immune and lymphatic	Understand
CLO 5	Students will understand the physiological aspects of the reproductive and excretory systems.	Understand

B. SYLLABUS:

UNIT – I: Introduction to Chitta

Yoga, it's meaning & purpose & Nature of Yoga; Concept of Chitta, Chitta-Bhumis, Chitta-Vrittis, Chitta-Vritti nirodhopaya Abhyasa and Vairagya as the tools Chitta-Vikshepas (Antarayasa), Chitta-prasadanam, Prakriti and its evolutes.

UNIT – II: Samadhi Pada

Types and nature of Samadhi: Ritambharaprajna and Adhyatmaprasada; Samprajnata, Asamprajnata, Sabeeja & Nirbeeja Samadhi, Difference between Samapattis and Samadhi; Concept of Ishvara and qualities of Ishvara.

UNIT – III: Sadhana Pada

Concept of Kriya Yoga of Patanjali, theory of Kleshes; Concept of Dukhavada; Drishyanirupanam, Drasthanirupanama, PrakritiPurushaSamYoga; Brief Introduction to

Ashtanga Yoga; Concept of Yama, Niyama, Asana, Pranayama, Pratyahara and their usefulness in Chitta vritti nirodhopayah.

UNIT – IV: Vibhuti Paada

Introduction of Dharana, Dhyana and Samadhi, Nature of Sanyama; Concept of Chitta samskara, Parinamatraya and vibhutis.

UNIT – V: Kaivalya Paada

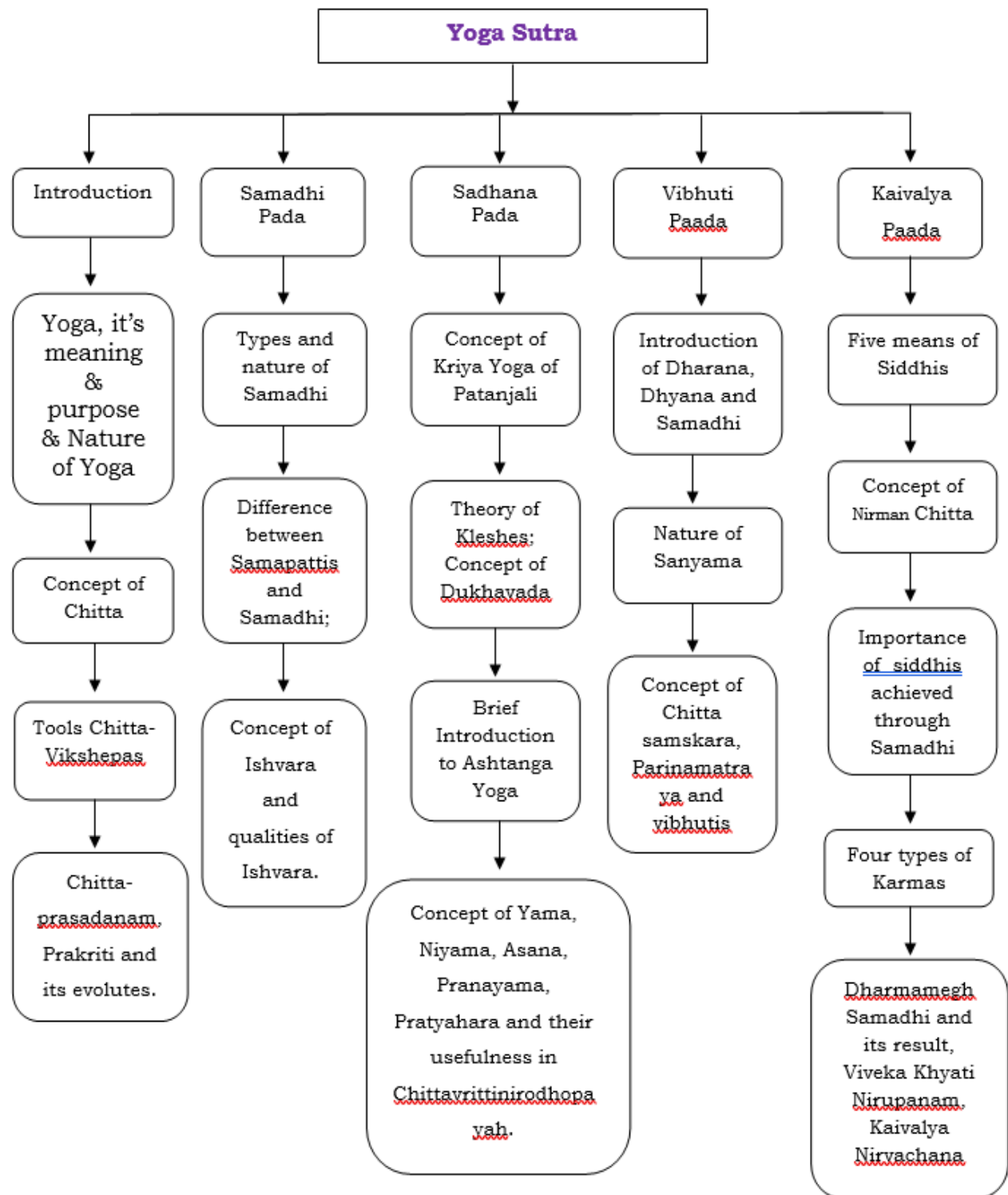
Five means of Siddhis, concept of Nirman Chitta, Importance of siddhis achieved through Samadhi, Four types of Karmas; Concept of Vasana; Dharmamegh Samadhi and its result, Viveka Khyati Nirupanam, Kaivalya Nirvachana.

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1. Varun Yadav. (2022). Ancient Indian Scriptures and Modern Psychology: A Case Study on Patanjali's Yoga Sutra.
2. Vivekananda, S. (2021). Patanjali Yoga Sutras. Srishti Publishers and Distributors.
3. Amit Majmudar. (2019). Review: Patanjali's Yoga Sutra.
4. Ananda Balayogi Bhavanani. (2010). An overview of the Yoga Sutras.
5. Williams, J.M., Russell, I., & Russell, D. (2008). Mindfulness-based cognitive therapy: further issues in current evidence and future research. Journal of consulting and clinical psychology, 76(3), 524-529. <https://doi.org/10.1037/0022-006X.76.3.524>

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME :

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



SEMESTER-II

COURSE TITLE : YOGA PARAMPARA
COURSE CODE : PES5021
COURSE OBJECTIVES :

This course introduces the history and traditions of Yoga from ancient times to today. It covers important yogic texts and their teachings. Students will learn about different types of yoga and how they benefit health and well-being. The course also explores Yoga's role in daily life, work and education.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO 1	Students will understand the evolution of yoga.	Understand
CLO 2	Students will analyze classical yogic texts.	Apply
CLO 3	Students will differentiate various schools of yoga.	Apply
CLO 4	The students will apply yogic principles for well-being.	Understand
CLO 5	Students will appreciate yoga's contemporary relevance.	Understand

B. SYLLABUS:

UNIT – I: Introduction to the Tradition of Yoga

Origin and Development of Yoga – evolution of Yoga from Vedic Literature – Yoga in the Bhagavad-Gita and Mahabharata – Concept of Brahma, Atman and Moksha in yoga philosophy.

UNIT – II: Classical Yogic Texts and Philosophy

Overview of Patanjali's Yoga Sutra – The Eight Limbs of Yoga – Samkhya Philosophy and its Influence of Yoga – Concept of Chitta Vrtti and Chitta Prasadana.

UNIT – III: Schools and Traditions of Yoga

Hatha Yoga: Core Principles and Practices – Raja yoga and its Meditative Approach – Bhakti Yoga, Karma yoga and Jnana Yoga in Different Traditions – Tantric and Kundalini Yoga.

UNIT – IV: Yoga lineage

Patanjali rishi- Thirumoolar thirmandiram, Thirukural and yoga, Bihar school of yoga- Sivanandha, Kuvalayanandha- Kaivalyadhama, Moraji desai school of yoga, Mahesh maharishi – transcendental meditation, Vallalar margam, vedathri maharishi simplified kundalini yoga, Integral Yoga – Swami Satchidanandha, Brahma kumaris, art of living, Isha yoga, chinmaya

UNIT – V: Modern Applications of Yoga

Yoga in Contemporary Society and Global Influence – Scientific Research on Yoga and its Benefits – Yoga

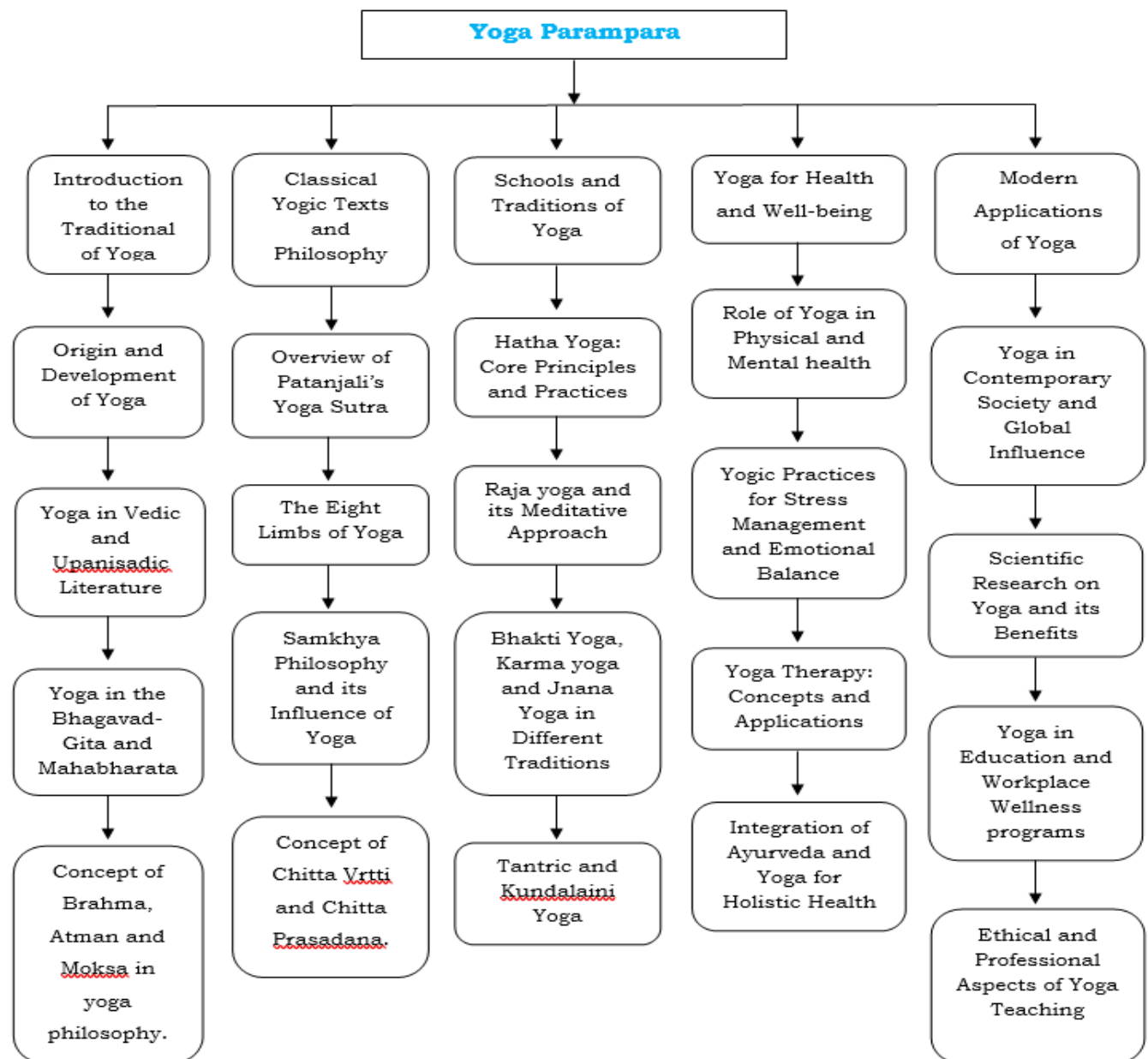
in Education and Workplace Wellness programs – Ethical and Professional Aspects of Yoga Teaching. International Yoga Day and its importance in regaining the originality.

REFERENCES

1. Saraswati, Swami Satyananda. (2008). Asana, Pranayama, Mudra, Bandha, Yoga Publications Trust.
2. Feuerstein, Georg (2001). The Yoga Tradition: Its History, Literature, Philosophy, and Practice. Hohm Press.
3. Taimni, I.K. (1961). The Science of Yoga: The Yoga-Sutras of Patanjali in Sanskrit with Transliteration in Roman, Translation in English and Commentary. The Theosophical Publishing House.
4. Amit Majmudar. (2019). Review: Patanjali's Yoga Sutra.
5. Wood, Ernest (1959). The Yoga System of Patanjali. Motilal Banarsidass.
6. Swami Vivekananda (1896). Raja Yoga. Advaita Ashrama.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME :

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : **APPLIED PSYCHOLOGY AND YOGA**
COURSE CODE : **PES5022**
COURSE OBJECTIVES :

1. Have an understanding about utility of yoga psychology for self and society.
2. The goal of teaching yoga psychology is to make students familiar to the facts of successful counselling. It also makes them equipped with the ethics of counselling.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO1	Have an understanding about Psychology development.	Understand
CLO2	Explain the concept of consciousness, Attention, Memory and Learning.	Apply
CLO3	Understand common mental disorders.	Apply
CLO4	Define utility of yoga psychology for self and society.	Apply
CLO5	Assessing the mental process motivation emotion and intelligence.	Apply

B. SYLLABUS

Unit I INTRODUCTION OF PSYCHOLOGY

Psychology: Meaning, Definition and Scope of Psychology in Yoga. Nature and Branches of Psychology. Relevance and Contribution of Psychology in Teaching & Learning Process of Yoga Education. Methods of Psychology: General Introduction, Survey and Experiment Method.

Unit -II LEARNING AND MOTIVATION

Learning: Meaning, Definition, Laws of Learning and Learning Curves. Theories of Learning: Thorndikes Trial and Error, Pavlovs Learning by conditioning. Motivation: Meaning, Definition, Concept and Dynamics of Motivation in Yoga. Theories of Motivation: Abraham Maslows Self Actualization Theory, Sigmond Freuds Instinct Theory.

Unit III PERSONALITY

Personality: Meaning, Definition and Structure of Personality. Theories of Personality: Sigmond Freuds Psycho-Analytical Theory. Type Theories of Personality: Kretschmers, Sheldons and Jungs Classification. Trait Theory of Personality: Allport and Eyesenk.

Unit IV GUIDANCE AND COUNSELLING

Guidance: Meaning, Definition and Significance of guidance. Principles of Guidance in Yoga Education. Counseling: Meaning, Definition and Significance of Counseling and Different types of Counseling. Concept

of Counseling Process and Qualities of a Counselor.

Unit V ROLE OF YOGA IN MENTAL DISORDER

Patanjali Yoga Sutra Inclusion Concept of Mental Disorders. Role of Yoga in Mental Disorder. Diagnosis by Yoga in Mental Disorders.

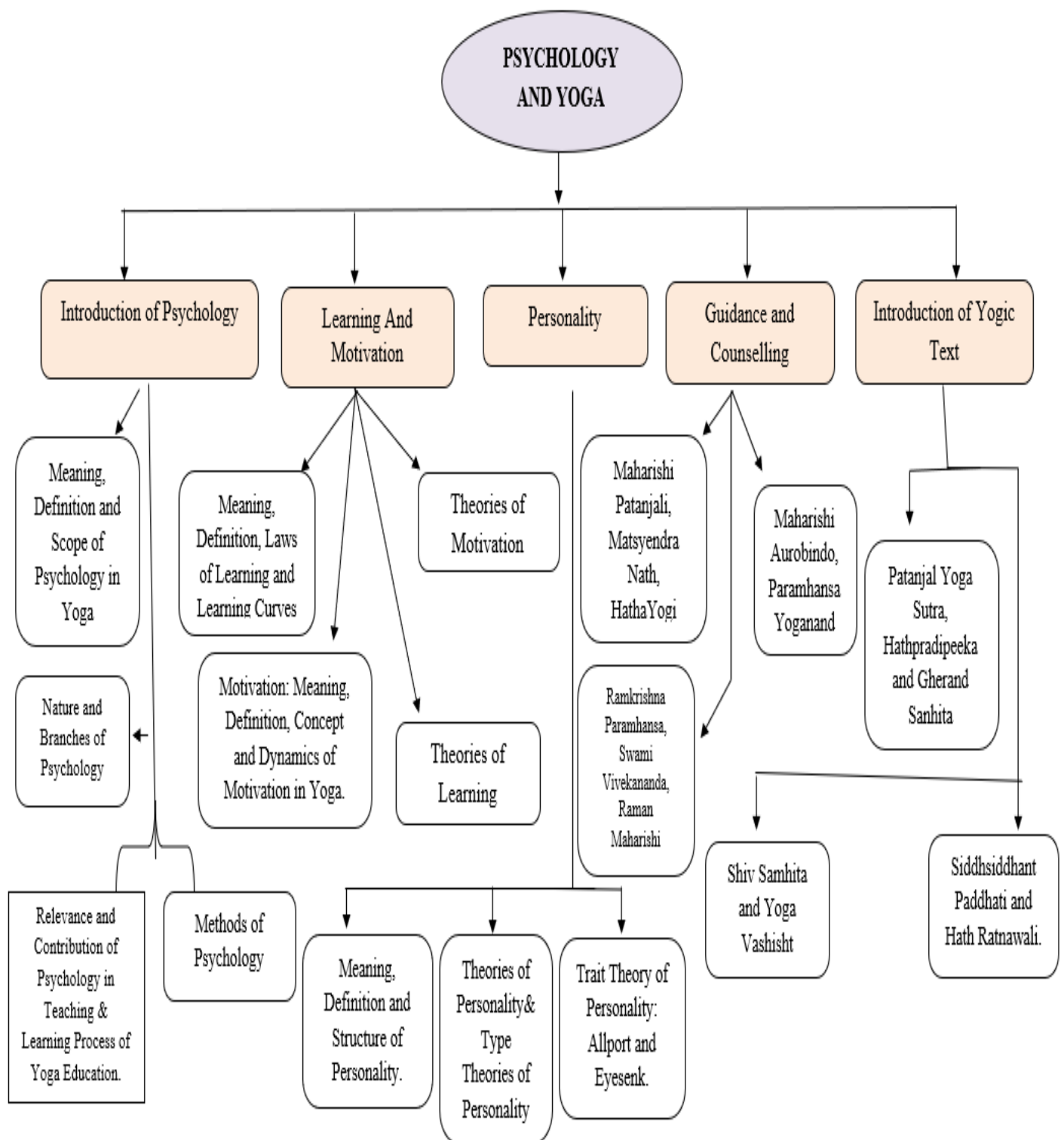
REFERENCES:

1. Iyengar, B. K. S. (2002). *The path to holistic health*. London, UK: Dorling Kindersley.
2. Saraswati, S. S. (2008). *Yoga and psychotherapy*. Munger, India: Bihar School of Yoga.
3. Taimni, I. K. (1961). *The science of yoga: The yoga-sutras of Patanjali*. Wheaton, IL: The Theosophical Publishing House.
4. McCall, T. (2007). *Yoga as medicine: The yogic prescription for health and healing*. New York, NY: Bantam Books.
5. Feuerstein, G. (2003). *The deeper dimension of yoga: Theory and practice*. Boston, MA: Shambhala Publications.
6. Field, T. (2011). Yoga clinical research review. *Complementary Therapies in Clinical Practice*, 17(1), 1–8. <https://doi.org/10.1016/j.ctcp.2010.09.007>
7. Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., & Brown, R. P. (2012). Effects of yoga on the autonomic nervous system, gamma-aminobutyric-acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder. *Medical Hypotheses*, 78(5), 571–579. <https://doi.org/10.1016/j.mehy.2012.01.021>
8. Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga*, 4(2), 49–54. <https://doi.org/10.4103/0973-6131.85485>
9. Granath, J., Ingvarsson, S., von Thiele, U., & Lundberg, U. (2006). Stress management: A randomized study of cognitive behavioural therapy and yoga. *Cognitive Behaviour Therapy*, 35(1), 3–10. <https://doi.org/10.1080/16506070500401292>
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C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3

MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOMES:



COURSE TITLE : METHODS OF PRACTICING YOGA
COURSE CODE : PES5023
COURSE OBJECTIVES :

Gain proficiency in warming up, dynamic exercises, and loosening routines. Learn and practice various yoga poses and their techniques. Master pranayama breathing techniques and understand their benefits. Explore and practice shat karmas, kriyas, mudras, and bandhas.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcomes	Level
CLO1	Understand the concept of warming up & Joint loosening practices	Understand
CLO2	Understanding the different kinds of asana, and the internal movements of the body and prana	Understand
CLO3	Students will gain knowledge to apply pranayama (breathing techniques)	Apply
CLO4	The students will gain knowledge and understanding about Shat karmas	Understand
CLO5	The student will be able to perform the process of Kriyas and Bandhas	Skill

B. SYLLABUS:

Unit -I

Joint freeing series for warming up and loosening the joints and dynamic movements of various joints. Vinyasa: Suryanamaskar (kneeling, lunging, jumping).

Unit -II

Understanding the Meaning and Benefits of Yoga Postures (Asanas). Types of Asanas in Laying Position. Techniques and Precautions for the following Asanas: Yoga poses include Shavasana, Vipritkarni, Sarvangasana, Karnapidasana, Halasana, Uttanpadasana, Vakrasana, Malasana, Merudandasana, Janusirsasana, Bharadvajasana, Suptavajrasana, Makarasana, Ardha Padmasana, Sukhasana, Natrajasana, Savasana Pawan Muktasana, and Naukasana.

Unit -III

Pranayama: Definition, Types, and Preparation. Pranayama breathing techniques. Benefits and Precautions, Time, including the following Pranayama: Nadi-Shodhan, Surya Bhedi, Ujjai, Sheetali, Shitakari, Bhastrika, Bhramari, Murchha, and Plavini.

Unit -IV

Understanding the Meaning and Benefits of Shat Karma. Types of Shat Karmas and Precautions for the Following Shat Karmas: Dhauti, Vasti, Neti, Nauli, Trataka, and Kapalbhathi.

Unit -V

Introduction of Kriyas & Bandhas: Jalandhara Banda, Varuna mudra, Mukula mudra, Khechari mudra, Tadagi mudra, Shanmuki mudra, Moola Bandha, Uddiyana Bandha. Mudras: Chin mudra, Chinmaya mudra, Adhi mudra, Bhrama mudra, Bairava mudra, Nasiga mudra, Ganesha mudra.

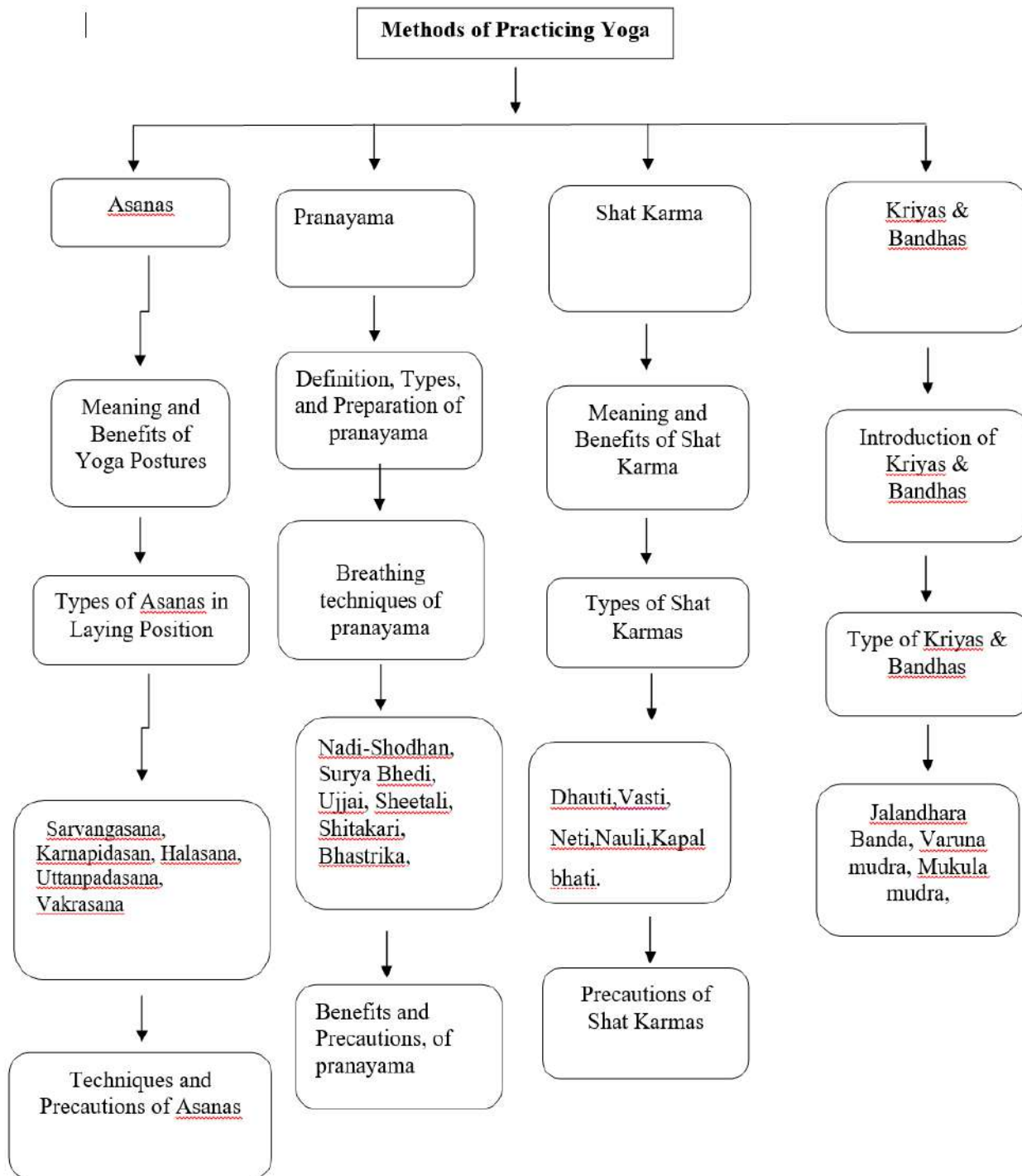
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3. Sathyananda Sarawathi Swami (2007) Meditations from thitantras Murugar.
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5. Sivananda Sarawathi Swami (2008) Asanas Pranayama, Mudra, Bandha.
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7. Chandrasekaran K. (1999) Sound Health Through Yoga, Sedapatti: Prem
8. Vishnu Devananda Swami (1972) The Complete Illustrated book of yoga, New
9. Yogeshwaranand Saraswathi Swami (1975) First steps to higher yoga.
10. Coulter, H David (2001) Anatomy and Hatha Yoga, USA: Body and Breath inc.
11. Kirk Martin (2006) Hatha Yoga Illustrated Champaign Human kinetics.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME:

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3

Course Mapping



COURSE TITLE : YOGA PRACTICUM – II
COURSE CODE : PES5P02

COURSE OBJECTIVES :

1. Introduce students to joint-loosening exercises and Surya Namaskar variations to enhance flexibility and physical health in children & advance asanas.
2. Enable students to practice meditation asanas for improved mental focus, posture, and relaxation.
3. Help students master cultural asanas to increase physical strength, flexibility, and mental concentration.
4. Teach students relaxation asanas to reduce stress and promote mental and physical rejuvenation.
5. Equip students with various pranayama techniques to regulate breathing, improve lung capacity, and promote mental calmness.

A. COURSE LEARNING OUTCOMES:

- CLO 1: Students will perform joint-loosening exercises and Surya Namaskar models for children to improve flexibility and overall health & advance asanas.
- CLO 2: Students will practice meditation asanas to enhance mental clarity, focus, and physical comfort during meditation.
- CLO 3: Students will integrate cultural asanas into their routine to strengthen the body, improve flexibility, and increase mindfulness.
- CLO 4: Students will apply relaxation asanas to reduce physical tension and promote mental relaxation and well-being.
- CLO 5: Students will master pranayama techniques to enhance breath control, energy levels, and mental relaxation.

B. PRACTICAL SYLLABUS

Unit I: Loosening the Joints and Advanced Asanas

Surya Namaskar: for Children's (10 Steps),
Bihar School of Yoga Model
Vivekananda Kendra Model.
Advanced Asanas

Unit II: Meditation Asanas

Padmasana (Lotus Pose), Sukhasana (Easy Pose), Siddhasana (Perfect Pose), Vajrasana (Thunderbolt Pose) and Ardha Padmasana (Half Lotus Pose)

Unit III: Cultural Asanas

Bhujangasana (Cobra Pose), Paschimottanasana (Seated Forward Bend), Ardha Matsyendrasana (Half Spinal Twist), Sirshasana (Headstand) and Vrikshasana (Tree Pose)

Unit IV: Relaxation asanas

Shavasana (Corpse Pose), Supta Baddha Konasana (Reclining Bound Angle Pose), Makarasana (Crocodile Pose), Viparita Karani (Legs-Up-the-Wall Pose) and Jathara Parivartanasana (Reclining Spinal Twist)

Unit V: Pranayama

Yogic Breathing, Kapalbhathi, Bhramari, Ujjayi, Sheetkari Bhastrika and Nadi Shodhana.

REFERENCES:

1. Iyenger B.K.S (1976) Light on Yoga, London, Unwin Paperpacks.
2. Sivananda Sarawathi Sawmi (1934) Yoga Asanas Mudras: My Magazine of India.
3. Satyanada Sarawari Swami (2008) Asana, Pranayama, Mudra, Bandha, Munger Yoga Publication trust.
4. Iyenger B.K.S (2008) Light on Pranayama, new Delhi: Haper Collins Publications, India.
1. Slathia, S. D. (2014) “Effects of Yogic Practices on Different Organs of an Athlete”, ‘Paripex - Indian Journal of Research’, Volume : 3 | Issue : 1 | Jan 2014 ISSN - 2250-1991
2. Bharshankar JR, Bharshankar RN, Deshpande VN, Kaore SB, Gosavi GB. (2013) “Effect of yoga on cardiovascular system in subjects above 40 years.” Indian Journal Physiol Pharmacol. 2003; 47: 202-206.
3. Dhume, RR. and Dhume, RA. (1991) “A comparative study of the driving effects of dextroamphetamine and yogic meditation on muscle control for the performance of balance board.” ‘Indian Journal Physiol Pharmacol’ 1991; 35: 191-94.
4. Vishnu Devananda Swami (1972) the Complete Illustrated Book of Yoga, New York: Pocket Books.

COURSE TITLE : TRADITIONAL SYSTEM OF MEDICINE
COURSE CODE : PES5EC03

COURSE OBJECTIVES :

Understand and apply natural historical therapies. Study different types of hydrotherapy and their effects. Learn the application process of mud therapy. Master the techniques of applying sun rays/lighting therapy and procedures.

A. COURSE LEARNING OUTCOME:

S. No	Course Outcomes	level
CLO 1	Understand the history therapeutic techniques with natural resources	Understand
CLO 2	Understanding the different kinds hydrotherapy techniques and effects	Understand
CLO 3	Mud therapy/bath Skill Applying and its effects on health	Skill
CLO 4	The students will gain knowledge about therapy by using sun light	Understand
CLO 5	Therapeutic uses of various colors lights and its application process	Apply

B. SYLLABUS

UNIT- I

Therapies in Naturopathy History of hydrotherapy, Physical properties of water, physiological base of hydrotherapy, Heat production and heat distribution in the body, Regulation Heat temperature classification, physiological effects of hot and cold water, Application of water on different temperature, Reflex effects of cold and hot applications.

UNIT- II

Action and reactions, Incomplete reaction, conditions that encourage and discourage reaction, Types of reactions, General principles of hydrotherapy, Therapeutic use of hydrotherapy, classification of hydrothermic effects, prophylactic use of water. Hydrotherapy techniques are plain water, bath, vapour bath and air bath. Fomentation and Douche, compress and packs, Internal use of water, irrigation and enemas Hydriatic prescriptions.

UNIT-III

Concept of mud therapy Types of Mud and chemical composition. Various effects of mud Natural Mud baths, Mud packs, Dry baths, Sandbath

UNIT-IV

Chromotherapy and Heliotherapy Composition of sun rays. Difference between morning, mid day and evening sun rays, Physiological effects of sunlight on: metabolism, blood formation, blood circulation, fermentation, nervous system, skin.

UNIT- V

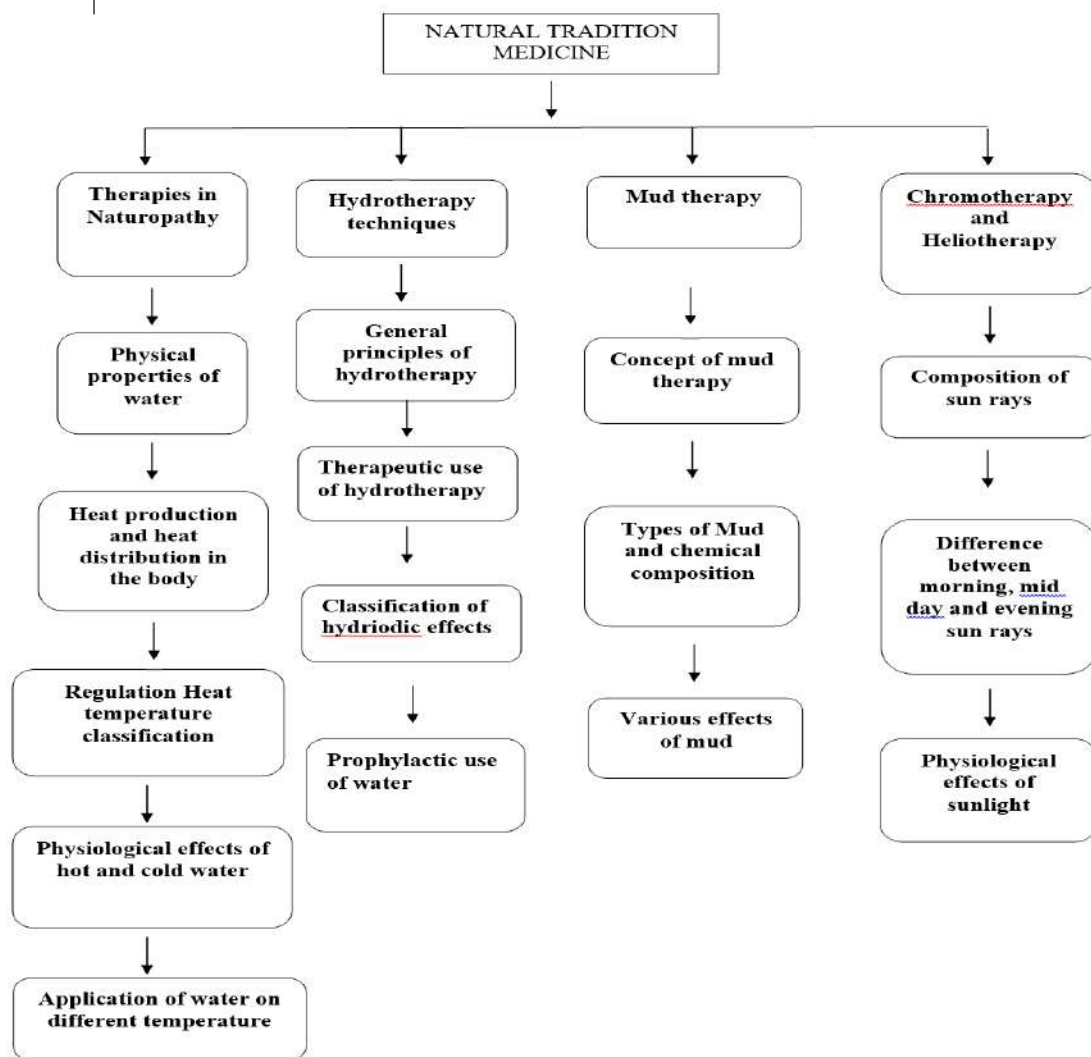
Effects of sun rays on microorganism Therapeutic uses of various colours. Techniques of application of sun rays.

References:

1. Agrawal S, Pandey A (2021) Herbal drugs forensic. Intech Open. <https://doi.org/10.5772/intechopen.98253>
2. Ajeet Jaiswal (2018) Traditional health care and traditional medicine in India. Archaeol Anthropol 2(3). <https://doi.org/10.31031/AAOA.2018.02.000537>
3. Ashwini D, Patil R (2022) Reverse pharmacology for Ayurvedabased modern medicines. Centre for Society and Policy, pp 1–5
4. Bhargava PM (2007) How to make India a knowledge-based society. Futures 39(8):997–1007. <https://doi.org/10.1016/j.futures.2007.03.001>
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C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : SELF-MANAGEMENT AND CAREER DEVELOPMENT
COURSE CODE : PES5EC04
COURSE OBJECTIVES :

Develop self-management techniques through yoga. Enhance capacity-building and career management skills. Learn effective yoga communication techniques. Achieve personality development through yoga.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcomes	level
CLO 1	To understand the self-management concepts, and techniques.	Understand
CLO 2	Development of Capacity building skills via yoga techniques.	Skill
CLO 3	To Understand the meaning and need for self-management and career development.	Understand
CLO 4	To understand the various communications via yoga	Understand
CLO 5	Application process of achieving personality development.	Apply

B. SYLLABUS:

UNIT – I

Introduction of Self-Management and Career Development, Self-management- concept, basis, meaning, nature and need. Study of different dimensions related to self-management, Self-confidence – meaning and its improvement, Mapping of life- components of life.

UNIT-II

Development of capabilities: Development of will, imagination and Yogic Life. Development of thinking, emotion control and Yogic Life. Meditation in the development of intuition and power of senses, Improvement of memory and meditation.

UNIT-III

Self-Management and Stress-Management: Management of needs and internal community, maintenance of health and vitality. Management; time Management, Management of different stages of life; Problems, decisions and plans. Stress – Nature, causes and effects, Stress – Yogic management.

UNIT-IV

Communication and Yogic Life: The importance of communication, determinants, Skill and blocks to communication, effective listening, body language, effective reading and speaking in public, Ideas to action, direction setting, Mobilizing people and work achievement.

UNIT-V

Personality Development: Body Language, Eye Contact, Movement, Language and skill, Group Discussion, Situation control and Adaptation.

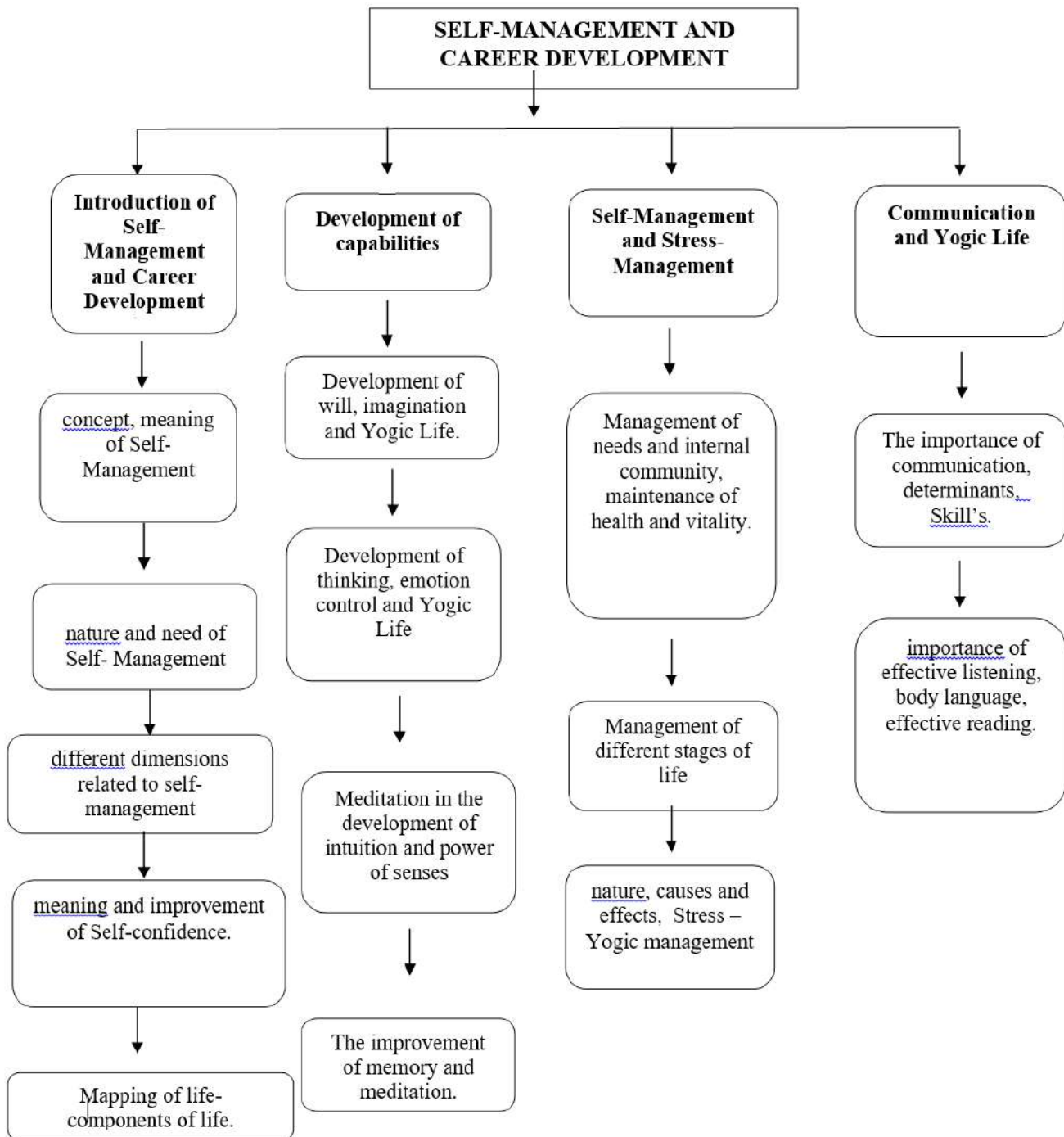
REFERENCE BOOKS

1. Chang, I. H., & Ching, G. S. (2025). Self-confidence and self-actualization: Key factors in coping with stress and depression among international students. *International Journal of Research Studies in Education*, 14(2), 1–15. <https://doi.org/10.5861/ijrse.2025.25800> ResearchGate
2. Mukhopadhyay, S. (2023). *The myth of making it: Ambition, work, and career myths*. New York, NY: Harper One.Teen Vogue
3. Bregman, R. (2025). *Moral ambition: Don't just stand there, do something*. London, UK: Bloomsbury Publishing.
4. Cottam, H. (2025). *The work we need*. London, UK: Little, Brown.
5. Athar, M., Arif, A., & Khan, R. (2024). The impact of emotional intelligence and time management on academic stress: The mediating role of coping strategies and moderating role of social support. *International Journal of Multidisciplinary Conference Proceedings*, 1(1), 3. <https://doi.org/10.5281/zenodo.1234567ijmcp.com+1economics.pubmedia.id+1>
6. Lamm, E., & Tosti-Kharas, J. (2024). Stimulating simulation: Managing stress through effective time management. *Management Teaching Review*. Advance online publication. <https://doi.org/10.1177/23792981241263523SAGE Journals>
7. Peterman, D. (2024). *Negotiating while Black*. New York, NY: HarperCollins.
8. Samrose, S., Rawassizadeh, R., & Hoque, E. (2020). Immediate or reflective?: Effects of real-time feedback on group discussions over videochat. *arXiv preprint arXiv:2011.06529*. <https://arxiv.org/abs/2011.06529arXiv>
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C. Mapping of program outcomes with course outcome

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3

Mapping



OPEN ELECTIVE

SWAYAM / MOOCS / NPTEL

SEMESTER-III

COURSE TITLE : RESEARCH METHODOLOGY AND STATISTICS IN YOGA
COURSE CODE : PES5031
COURSE OBJECTIVES :

Acquire in-depth knowledge of various aspects of yoga-related research. Understand the types and techniques used in yoga research. Learn ethical considerations for conducting research. Develop skills to prepare research proposals, hypotheses, and research reports. Understand and apply statistical tools for data analysis in yoga research.

A. COURSE LEARNING OUTCOMES:

S. No	Course Outcomes	Level
CLO 1	Students get the knowledge in the evidence-based research method in the interventional studies.	Understand
CLO 2	Students get exposure in previously conducted research studies in the field of yoga therapy.	Understand
CLO 3	Skill in the application of various statistical procedures and hypothesis testing.	Skill
CLO 4	Develops the skill in communicating scientifically and systematically.	Understand
CLO 5	Skill in reading and analysing the research activities	Apply

B. SYLLABUS:

UNIT -I

Research methodology concepts: Introduction to research methodology – definition of research, types of research, need for yoga research. The research process, Literature review, Purpose, Process, digital source: PubMed, etc., presentation of literature review. • Ethics of research Laboratory ethics, Publication ethics, Ethical bodies IEC & IRB, Guidelines for good clinical practice.

UNIT- II

Research methodology concepts: Sampling methods - Population and Sampling methods; (Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling). Types of variables Independent, dependent, confounding variable. Research designs Experimental designs, cross-sectional design, Case study, and Survey. Selection bias, Recall bias, Observer or measurement bias, Publication bias Randomization.

UNIT -III

Scales of measurement – nominal, ordinal, interval, ratio. Data collection methods: Observation, Interview, psychological tests, questionnaire, physiological tests, and archive. Scales of measurement – nominal, ordinal, interval, ratio. Data collection methods: Observation, Interview,

psychological tests, questionnaire, physiological tests, and archive.

Statistical concepts - Descriptive statistics, inferential statistics, Hypothesis, Null hypothesis. -Statistics and Parameters, Sample and Population. Generalization, One-tailed, two-tailed hypothesis. Types of Errors and their Control.

UNIT- IV

Statistical concepts: parametric and non-parametric tests, types of data, Sampling methods, Research Designs- P Value, Confidence Interval, Statistical tests and design, assumptions of tests. (Statistical tests for various designs: Correlation, proportions, paired sample and independent sample. t-tests, Chi-Square tests, ANOVA, Repeated Measures ANOVA,

UNIT- V

Scientific studies in yoga - Scientific studies in Yoga – procedure. Procedure for publication in a journal/book/ Newspaper. Analysis of 10 Research Works in Yoga. Presentation and Discussion.

REFERENCES:

1. **Bhavanani, A. B.** (2020). *Understanding yoga research methodology*. Pondicherry: ICYER Publications.
Discusses the significance, structure, and process of yoga research, including PubMed searches and systematic literature reviews.
2. **Kalra, S., & Bhugra, D.** (2019). Ethics in research and publication. *Indian Journal of Endocrinology and Metabolism*, 23(3), 257–261. https://doi.org/10.4103/ijem.IJEM_12_19
Covers publication ethics, IRB/IEC guidelines, and good clinical practice protocols.
3. **Creswell, J. W., & Creswell, J. D.** (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
Offers foundational guidance on sampling methods, variables, research design, and dealing with bias.
4. **Mishra, S., & Panda, A. K.** (2022). Bias and confounding in clinical trials: A primer. *Indian Pediatrics*, 59(6), 463–469. <https://doi.org/10.1007/s13312-022-2516-1>
Discusses selection bias, recall bias, measurement bias, and randomization in health/yoga studies.
5. **Gravetter, F. J., & Forzano, L.-A. B.** (2018). *Research methods for the behavioral sciences* (6th ed.). Boston, MA: Cengage Learning.
Offers detailed coverage on scales of measurement and psychological tests relevant to yoga psychology.
6. **Field, A.** (2020). *Discovering statistics using IBM SPSS statistics* (5th ed.). Thousand Oaks, CA: Sage Publications.

Focuses on hypothesis testing, statistical errors, descriptive/inferential statistics, and variable control.

7. **Pagano, R. R.** (2020). *Understanding statistics in the behavioral sciences* (11th ed.). Boston, MA: Cengage Learning.

Explains assumptions of statistical tests including ANOVA, chi-square, correlation, and t-tests.

8. **Gomez-Pilar, J., Romero-Ayuso, D., & Ariza-Vega, P.** (2022). Statistical approaches in yoga research: Best practices. *Complementary Therapies in Clinical Practice*, 48, 101609. <https://doi.org/10.1016/j.ctcp.2022.101609>

Emphasizes statistical choices and assumptions in yoga-focused studies.

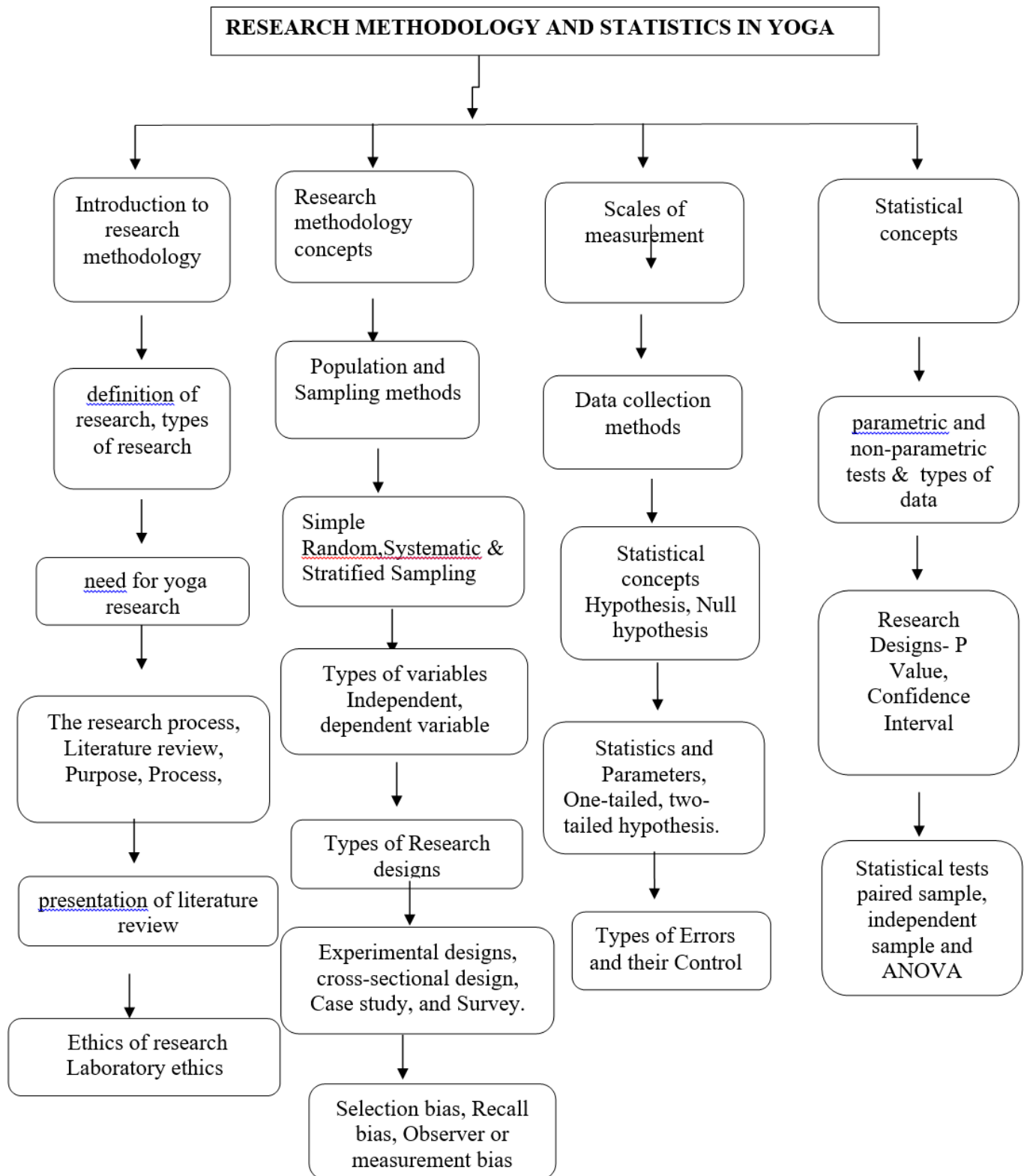
9. **Telles, S., & Naveen, K. V.** (2021). *Scientific research on yoga and meditation in India (2015–2020): A review of trends*. Bengaluru: Swami Vivekananda Yoga Anusandhana Samsthana.

Analysis of yoga research procedures and publication trends in Indian and international journals.

10. **Kumar, S., & Gupta, R.** (2023). Trends and challenges in yoga research publication: A bibliometric review. *Journal of Integrative and Complementary Medicine*, 29(1), 23–32. <https://doi.org/10.1089/jicm.2022.0538>

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : INTRODUCTION TO HATHA YOGA
COURSE CODE : PES5032
COURSE OBJECTIVES :

1. Learn the misconception about Yoga Practices.
2. About Hath sects and their contribution.
3. To give an understanding of the prerequisites of hath yoga.
4. Explain the food conducive to health and good for sadhna.
5. To introduce essential yoga text.

A. COURSE LEARNING OUTCOMES:

S. No:	Course Learning Outcome	Level
CLO1	Finding the misconception about Yoga Practices	Understand
CLO2	Demonstrate Hath sects and their contribution	Apply
CLO3	Illustrate the prerequisites of hath yoga	Apply
CLO4	Explain the food conducive to health and good for sadhana	Apply
CLO5	Commenting on Hath Yogic texts	Apply

B. SYLLABUS

Unit I INTRODUCTION OF HATHAPRADIPIKA

Definitions of Hatha Yoga; Time and Place, Dress Code & Environment for Hatha Yoga practice. Concept of Mitahara, Pathya and Apathya. Introduction of Asanas, Mudra, Bandh & Concept of Nadis. Asana and Shatkarmas; Meaning, Definitions, Principles, Types, Technique, Precautions and Benefits.

Unit II KUMBHAKA, MUDRAS, BANDHAS, NADANUSANDHANA

Kumbhaka; Meaning, Definition, Types of Kumbhaka, Technique, Precautions & Benefits Mudras and Bandhas; Meaning, Definition, Technique, Precautions and Benefits Chakras, Kundalini and Nadis 4. Nadanusandhana and Various types of Samadhis.

Unit III INTRODUCTION OF GHERANDA SAMHITA

Introduction and History of Gheranda Samhita. Concept of Ghatasth Yoga. Saptasadhana:- Shatkarma, Asanas, Pranyama, Pratyahara, Mudra, Dhyana, Smadhi. Shatkarma; Meaning Types (Dhauti, Basti, Neti, Trataka, Nauli and Kapalabhati), Technique. Precautions and Benefits. Asanas and Mudras; Meaning, Definition, Types, Technique, Precautions and Benefits.

Unit IV PRATYAHARA AND PRANAYAMAS

Pratyahara; Meaning, Types, Technique, Precautions and Benefits. Pranayama's; Meaning and Definition, Types, Technique, Precautions and Benefits. Dhayana; Meaning, Types, Technique, Precautions and Benefits. Samadhi; Meaning, Types, Technique, Precautions and Benefits.

Unit V INTRODUCTION OF HATHA YOGIC TEXTS

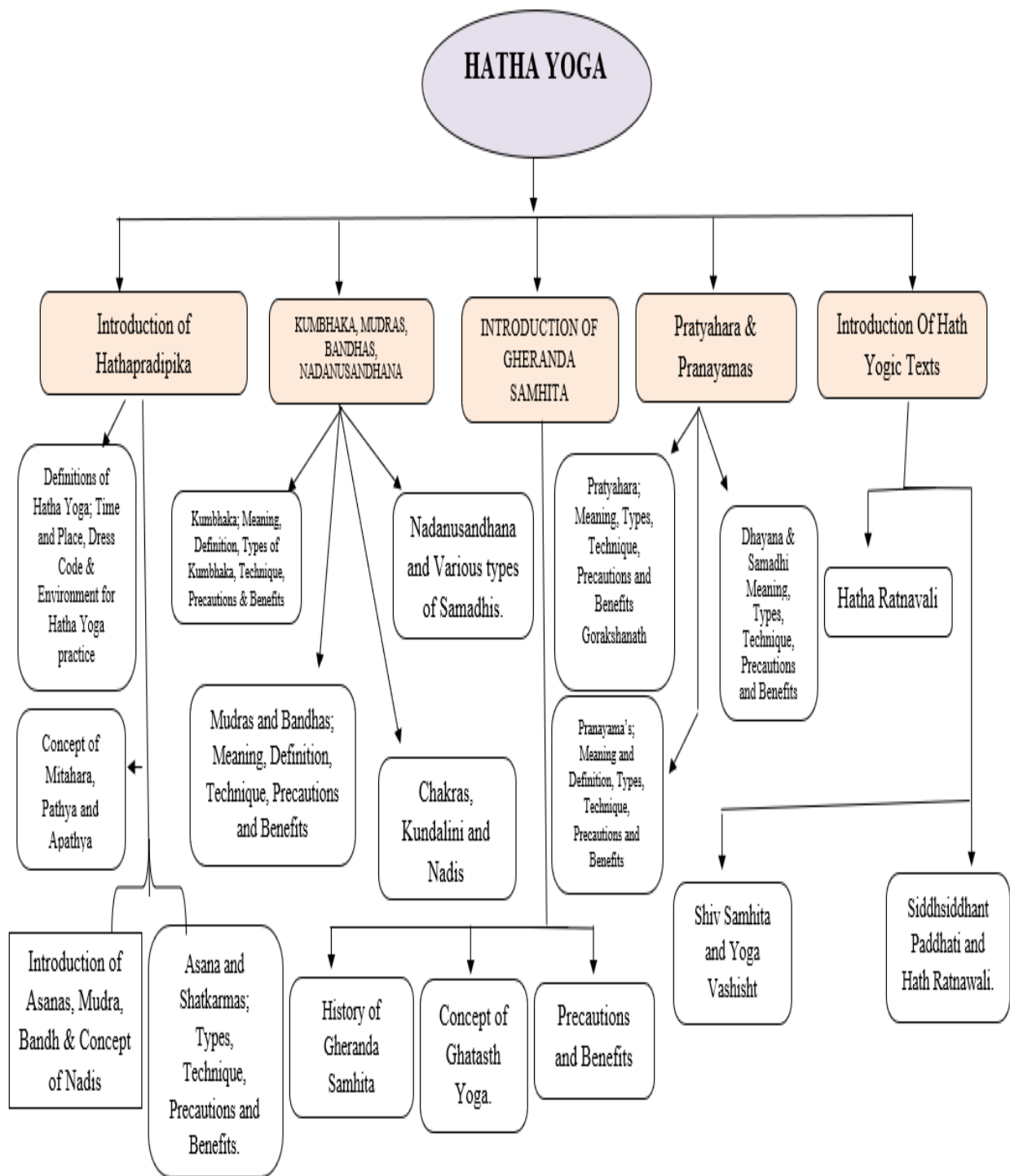
Hatha Ratnavali. Shiv Samhita. Vashishth Samhita. Siddhsiddhant Padhati.

References:

1. Swami Muktibodhananda, Hatha Yoga Pradeepika, The light on Hathayoga, Bihar School of Yoga, Munger, 1985.
2. Muktibodhananda, S. (2016). *Hatha Yoga Pradipika: Light on Hatha Yoga* (Rev. ed.). Munger, Bihar, India: Bihar School of Yoga.
3. Saraswati, S. S. (2021). *Asana Pranayama Mudra Bandha* (4th ed.). Munger, Bihar, India: Bihar School of Yoga.
4. Saraswati, S. S. (2017). *Kundalini Tantra* (Reprint). Munger, Bihar: Bihar School of Yoga.
5. Rai, S. (2023). *Mudras and Bandhas: A Guide to Advanced Yogic Practices*. New Delhi: New Age Books.
6. Mallinson, J. (2017). *Roots of Yoga*. London: Penguin Classics.
7. Bole, P. V., & Kulkarni, D. D. (2019). *Gheranda Samhita: A Critical Translation and Commentary*. Pune: Kaivalyadhama Yoga Institute.
8. Saraswati, S. S. (2018). *Four Chapters on Freedom: Commentary on the Yoga Sutras of Patanjali*. Munger: Bihar School of Yoga.
9. Iyengar, B. K. S. (2019). *Light on Pranayama: The Yogic Art of Breathing* (Revised ed.). New Delhi: HarperCollins.
10. Mallinson, J., & Singleton, M. (2017). *The Roots of Yoga*. London: Penguin Classics.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : Yogic Pedagogy and Teaching Methodology

COURSE CODE : PES5033

COURSE OBJECTIVES:

1. To provide a comprehensive understanding of the principles and practices of teaching yoga.
2. To develop effective communication and demonstration skills for yoga instruction.
3. To equip students with the ability to design and sequence yoga classes for diverse populations.
4. To foster an understanding of the ethical and cultural considerations in yoga teaching.
5. To prepare students to adapt yoga practices for individuals with specific needs or conditions.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO1	Demonstrate an understanding of the historical, philosophical, and ethical foundations of yoga teaching.	Understand
CLO2	Apply effective teaching techniques, including communication, demonstration, and hands-on adjustments.	Apply
CLO3	Design and sequence yoga classes for different levels and themes.	Create
CLO4	Adapt yoga practices for special populations, such as children, seniors, and individuals with health conditions.	Analyze
CLO5	Evaluate the role of inclusivity and cultural sensitivity in modern yoga teaching.	Evaluate

B. SYLLABUS

Unit 1: Introduction to Yogic Pedagogy

- Definition, scope, and importance of yogic pedagogy. Historical and philosophical foundations of teaching yoga. Role of a yoga teacher: Responsibilities, ethics, and qualities. Understanding the teacher-student relationship in yoga.

Unit 2: Principles of Teaching Yoga

- Fundamental principles of teaching yoga. Adapting yoga teachings to individual needs and abilities
- Balancing tradition and modernity in yoga instruction. Importance of inclusivity and cultural sensitivity in yoga teaching.

Unit 3: Teaching Techniques and Strategies

- Effective communication skills for yoga teachers. Demonstration techniques for asanas, pranayama, and meditation. Use of verbal cues, visual aids, and hands-on adjustments. Creating a safe and supportive learning environment.

Unit 4: Class Planning and Sequencing

- Principles of sequencing yoga classes. Designing classes for different levels (beginner, intermediate, advanced). Thematic class planning (e.g., focus on relaxation, strength, flexibility). Incorporating philosophy, anatomy, and mindfulness into classes.

Unit 5: Teaching Different Populations

- Adapting yoga for special populations: Children and adolescents, Seniors, Pregnant women and individuals with physical or mental health conditions. Yoga for athletes and fitness enthusiasts. Yoga in corporate and workplace settings.

References:

1. *The Heart of Yoga: Developing a Personal Practice* by T.K.V. Desikachar
2. *Teaching Yoga: Essential Foundations and Techniques* by Mark Stephens
3. *Yoga Sequencing: Designing Transformative Yoga Classes* by Mark Stephens
4. Desikachar, T. K. V. (1995). *The heart of yoga: Developing a personal practice*. Inner Traditions International.
5. Stephens, M. (2010). *Teaching yoga: Essential foundations and techniques*. North Atlantic Books.
6. Stephens, M. (2012). *Yoga sequencing: Designing transformative yoga classes*. North Atlantic Books.
7. Iyengar, B. K. S. (1979). *Light on yoga*. Schocken Books.
8. Satchidananda, S. (2012). *The yoga sutras of Patanjali*. Integral Yoga Publications.
9. Muktibodhananda, S. (2012). *Hatha yoga pradipika*. Yoga Publications Trust.
10. Kaminoff, L., & Matthews, A. (2012). *Yoga anatomy* (2nd ed.). Human Kinetics.
11. Long, R. (2009). *The key muscles of yoga: Scientific keys, volume I*. Bandha Yoga Publications.
12. Patanjali. (2012). *The yoga sutras of Patanjali* (S. Satchidananda, Trans.). Integral Yoga Publications. (Original work published circa 200 BCE)
13. Vyasa. (2018). *The Bhagavad Gita* (E. Easwaran, Trans.). Nilgiri Press. (Original work published circa 500 BCE)
14. Vasistha, V. (2019). *Yoga Vasistha* (S. Mitra, Trans.). CreateSpace Independent Publishing Platform. (Original work published circa 10th century CE)

COURSE TITLE : Yoga Practicum III

COURSE CODE : PES5P03

COURSE OBJECTIVES :

1. To enhance students' proficiency in advanced and competitive yoga asanas for strength, flexibility, and balance.
2. To develop students' ability to perform complex asanas with precision and alignment.
3. To teach advanced pranayama techniques for improved respiratory health, mental focus, and energy regulation.
4. To prepare students for competitive yoga events by focusing on performance, endurance, and presentation.
5. To foster a deeper understanding of the therapeutic and competitive aspects of yoga practice.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcome	Level
CLO1	Demonstrate advanced asanas with proper alignment, strength, and flexibility.	Apply
CLO2	Perform complex asanas with precision and grace, suitable for competitive events.	Create
CLO3	Master advanced pranayama techniques to enhance respiratory health and mental focus.	Apply
CLO4	Develop endurance and presentation skills for competitive yoga performances.	Analyze
CLO5	Understand the therapeutic and competitive aspects of advanced yoga practices.	Evaluate

B. PRACTICAL SYLLABUS

Unit 1: Advanced Mobility and Warm-Up Practices

Joint-loosening exercises and dynamic stretches. Surya Namaskar (Sun Salutation) variations for advanced practitioners. Warm-up sequences for competitive asanas.

Unit 2: Competitive Standing Asanas

Natarajasana (Dancer's Pose). Virabhadrasana III (Warrior III Pose). Utthita Hasta Padangusthasana (Extended Hand-to-Big-Toe Pose). Ardha Chandrasana (Half Moon Pose) with advanced variations. Vrksasana (Tree Pose) with advanced balancing techniques.

Unit 3: Competitive Sitting and Twisting Asanas

Padmasana (Lotus Pose) with advanced variations. Hanumanasana (Monkey Pose or Splits). Eka Pada Rajakapotasana (One-Legged King Pigeon Pose). Marichyasana C (Sage Pose C). Astavakrasana (Eight-Angle Pose)

Unit 4: Advanced Lying and Inversion Asanas

Salamba Sirsasana (Supported Headstand). Salamba Sarvangasana (Supported Shoulderstand). Pincha Mayurasana (Feathered Peacock Pose). Chakrasana (Wheel Pose). Urdhva Dhanurasana (Upward Bow Pose)

Unit 5: Advanced Pranayama and Bandhas

Kapalabhati (Skull-Shining Breath). Bhastrika (Bellows Breath). Nadi Shodhana (Alternate Nostril Breathing) with Kumbhaka (Breath Retention). Advanced Ujjayi (Victorious Breath). Introduction to Maha Bandha (Great Lock) and its application in pranayama.

REFERENCES

1. Iyengar, B. K. S. (1976). *Light on yoga*. London: Unwin Paperbacks.
2. Sivananda Saraswati, S. (1934). *Yoga asanas and mudras*. My Magazine of India.
3. Satyananda Saraswati, S. (2008). *Asana, pranayama, mudra, bandha*. Munger: Yoga Publications Trust.
4. Iyengar, B. K. S. (2008). *Light on pranayama*. New Delhi: HarperCollins Publications.
5. Vishnu Devananda, S. (1972). *The complete illustrated book of yoga*. New York: Pocket Books.
6. Slathia, S. D. (2014). Effects of yogic practices on different organs of an athlete. *Paripex - Indian Journal of Research*, 3(1), 2250–1991.
7. Bharshankar, J. R., Bharshankar, R. N., Deshpande, V. N., Kaore, S. B., & Gosavi, G. B. (2003). Effect of yoga on the cardiovascular system in subjects above 40 years. *Indian Journal of Physiology and Pharmacology*, 47, 202–206.
8. Dhume, R. R., & Dhume, R. A. (1991). A comparative study of the driving effects of dextroamphetamine and yogic meditation on muscle control for the performance of balance board. *Indian Journal of Physiology and Pharmacology*, 35, 191–194.

COURSE TITLE : SURYA NAMASKAR AND PRANAYAMA
COURSE CODE : PES5EC05
COURSE OBJECTIVES :

This course introduces students to various meditation techniques and pranayama for mental and physical well-being. It provides practical training in Asanas, Kriyas, and Mudras to enhance flexibility, detoxification, and energy balance. Students will gain hands-on experience to integrate these practices into daily life.

A. COURSE LEARNING OUTCOMES:

S. No	Course Outcome	Level
CLO 1	Students will learn practical skills in Surya namaskar and loosening exercises.	Understand
CLO 2	Students will attain the knowledge about pranayama.	Apply
CLO 3	The students will acquire knowledge about Kriyas and mudras.	Apply
CLO 4	Students will discuss yogic practices techniques and skills.	Understand

UNIT – I: Introduction

Meaning and Significance of Suryanamaskar – Historical and traditional background – Steps and techniques of Suryanamaskar – Physical and Mental benefits – Variations and Adaptations – Practical Application and daily practice.

UNIT – II: Surya namaskar types

Classic sun salutation, Bihar school of yoga, traditional hatha surya namaskar,

UNIT – III: Surya namaskar Variation

Seated sun salutation, chair salutation, half sun salutation, moon salutation

UNIT – IV: Surya namaskar mantra chanting

Sequence of mantras, Purakha kumbakha retchaka modulation with mantra

Unit – V: Pranayama

Preparatory Exercise (Sectional Breathing)– Anulomaviloma– Surya Bhedana– Chandra Bhedana – Nadi Shodhana.

REFERENCES

1. Iyengar B.K.S. (2276) Light on yoga, London, Unwin paperpacks.
2. Sivananda Saraswathi Swami (2234) Yoga Asanas Madras ; My Magazine of India.
3. Satyananda Saraswati Swami (2008) Asana, Pranayama, Mudra, Bandha, Munger: Yoga Publications Trust.
4. Iyenger B. K.S. (2008) Light on Pranayama, NewDelhi :Haper Collins Publishers India.
5. Vishnu Devananda Swami (2272) The complete Illustrated book of yoga, New York: PocketBooks.

C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3

COURSE TITLE : YOGA THERAPY
COURSE CODE : PES5EC06

COURSE OBJECTIVES:

1. To introduce the principles and applications of yoga therapy in relation to physiology and pathology.
2. To explore Ayurveda, Siddha, and Naturopathy and their therapeutic practices.
3. To study yoga's role in managing conditions like high blood pressure, obesity, and diabetes.
4. To explore yoga for managing stress, anxiety, and psychological disorders.
5. To study yoga for managing menstrual and reproductive health issues.

A. Course Learning Outcomes:

- CLO 1: Students will apply yoga therapy to various health conditions using diagnostic and treatment methods.
- CLO 2: Students will integrate traditional therapies in yoga practice.
- CLO 3: Students will apply yoga for managing chronic health conditions.
- CLO 4: Students will use yoga techniques for mental health and stress management.
- CLO 5: Students will apply yoga for women's health, including menstrual disorders and prenatal care.

B. SYLLABUS:

Unit I: Introduction to Yoga Therapy

History, Principles and Concepts of Yoga Therapy - Understanding Physiology and Pathology through Yoga - Shad Chakras, Koshas, Doshas, Granthis, and Pancha Pranas in Yoga - Various Applications of Yoga Therapy and its Types - Methodological Approaches in Yoga Therapy - Factors Affecting Therapy (Heyam, Hetu, Hanam, and Upayam) - Methods for Diagnosis and Treatment: Darsanam, Sparsanam, Prasnam, Nadi Pariksha - Examination of Body Systems: Vertebral, Joint, Muscular, Abdominal, and Nervous Systems - Therapeutic Applications of Yoga for Health Conditions - Modifying Yogic Practices to Suit Specific Conditions - Role of Yogic Diet in Therapy.

Unit II: Indian Traditional Medicine and Therapies

Overview of Ayurveda and its Therapeutic Relevance - Ashtanga Ayurveda: Doshas, Dinacharya, and Ayurvedic Diet - Panchakarma Therapy: Process, Benefits, and Indications - Introduction to Siddha Medicine: Five Elements and Pathology - Naturopathy: Principles, Treatment Modalities, and Applications - Specific Therapies: Varmam, Thokkanam, Physiotherapy, Acupressure, Acupuncture - Alternative Healing Methods: Chromotherapy, Music Therapy, and Pranic Healing.

Unit III: Therapeutic Applications of Yoga for Health Conditions

Yoga for Managing High Blood Pressure and Cardiovascular Conditions - Therapeutic Approaches for Obesity, Diabetes Mellitus, and Asthma - Using Yoga for Pain Management in Arthritis, Ulcers, and Migraine - Yoga for Managing Back Pain, Thyroid Issues, and Constipation - Addressing Sexual Health Issues: Impotency, Infertility, and Hormonal Imbalances - Yoga for Neurological Conditions: Stroke, Epilepsy, and Parkinson's Disease - Therapeutic Techniques for Sleep Disorders and Stress Management.

Unit IV: Yoga for Psychological Well-Being

Yoga for Managing Stress, Anxiety, and Depression - Therapy for Eating Disorders and Other Neurosis Conditions - Psychosis: Role of Yoga in Schizophrenia, Autism, and Bipolar Disorders - Yoga Therapy for Personality Disorders: Paranoid, Histrionic, and Addictions - Treating Substance Abuse Issues: Smoking, Alcoholism, and Drug Addiction.

Unit V: Therapeutic Applications of Yoga for Women's Health

Yoga for Menstrual Disorders: Amenorrhea, Dysmenorrhea, and Related Issues - Treatment of Excessive Menstrual Bleeding: Menorrhagia, Metrorrhagia, and Polymenorrhoea - Addressing Reproductive Health: PCOS, Miscarriage, and Uterus-Related Conditions - Yoga for Pregnancy: Pre and Post-Natal Care and Health Benefits - Holistic Approaches for Women's Hormonal and Reproductive Health.

References:

1. Shemanthakamani Narendhan et. Al (2008) Yoga and pregnancy, Bangalore: Swami Vivekananda Yoga Prakshana.
2. Nagarathna & Nagendra (2008) Yoga for Brounchial Assthama, Bangalore: Swami Vivekananda Yoga Prakshana.
3. Nagarathna & Nagendra (2007) Yoga for digestive disorders, Bangalore: Swami Vivekananda Yoga Prakshana.
4. Srikanta SS et.al (2008) Yoga for diabetes, Bangalore: Swami Vivekananda Yoga Prakshana.
5. Sundaram Yoga Charya (2004) Sundara Yoga Therapy, Coimbatore: The Yoga Publication Home.
6. Joshi (1991) Yoga and Nature – Cure Therapy, New Delhi: Orient Paper Backs.

SEMESTER IV

COURSE TITLE : INTRODUCTION TO INDIAN KNOWLEDGE SYSTEM
COURSE CODE : PES5041
COURSE OBJECTIVES :

This course introduces Vedic and Upanisadic literature, focusing on their philosophical and ethical teachings. It covers the Bhagavadgita's Key concepts like Jnanayoga, Karmayoga, and Bhaktiyoga. Students will explore Indian philosophical traditions and their scientific contributions. The course also examines Yoga and Ayurveda, emphasizing their role in holistic well-being.

A. COURSE LEARNING OUTCOMES

S. No	Course Outcome	Level
CLO 1	Students will understand Vedic and Upanisadic Literature.	Understand
CLO 2	Students will analyze the ethical and philosophical teachings of the Bhagavadgita.	Apply
CLO 3	The students will differentiate Indian philosophical systems.	Apply
CLO 4	Students will explain the principles of yoga and Ayurveda.	Understand
CLO 5	Students will appreciate and apply Indian knowledge systems.	Understand

B. SYLLABUS

UNIT – I: Introduction to the Indian Knowledge system

Indian knowledge system, History and evolutionary development, need and importance, functions of IKS division, Education systems and its transformation, General structure of the Vedic Literature – Gurukul System of Vedic times (Asrama Dharma) – General– Philosophical Ideas and Ethics in Upanisads, Rta, Rna, Purusartha, Varna Dharma, Brahman and Atman, Moksa.

UNIT – II: Frame work and classification

Indian scheme of knowledge, The knowledge triangle, Prameya – A vaisesikan approach to physical reality, Dravyas – the constituents of the physical reality, Attributes – the properties of substances and Action – the driver of conjunction and disjunction, Samanya, visasa, samavaya, Pramaṇa – the means of valid knowledge, Saṃśaya – ambiguities in existing knowledge, Framework for establishing valid knowledge, Deductive or inductive logic framework, Potential fallacies in the reasoning process, Siddhanta: established tenets in a field of study

UNIT – III: Introduction to Indian Philosophical Systems, Scientific aspects of Indian Knowledge Systems

Characteristics of Indian Philosophy - Distinction between Darsana and Philosophy – Pramanas – Pratyaksha (Perception), Anumana (Inference), Upamana (Comparison), Shabda (Verbal testimony), Arthapatti

(Implication) and Anupalabddhi (Non-apprehension) – Structure and kinds of Anumana (inference), Vyapti (invariable relation), Hetvabhasas (fallacies of inference), Vyapti (invariable relation), Hetvabhasas (fallacies of inference) - General Introduction to Indian Philosophical systems – Orthodox and Heterodox – Glimpses of Ancient Indian Science and Technology.

UNIT – IV: Introduction to Indian Psychology and Indian Martial Arts

An introduction to philosophical systems, Development of philosophy, Unique features of philosophy, Sankhya approach of philosophy, Introduction to Yoga, Tenet of Nyaya philosophy.

UNIT – V: Bhartiya Khel

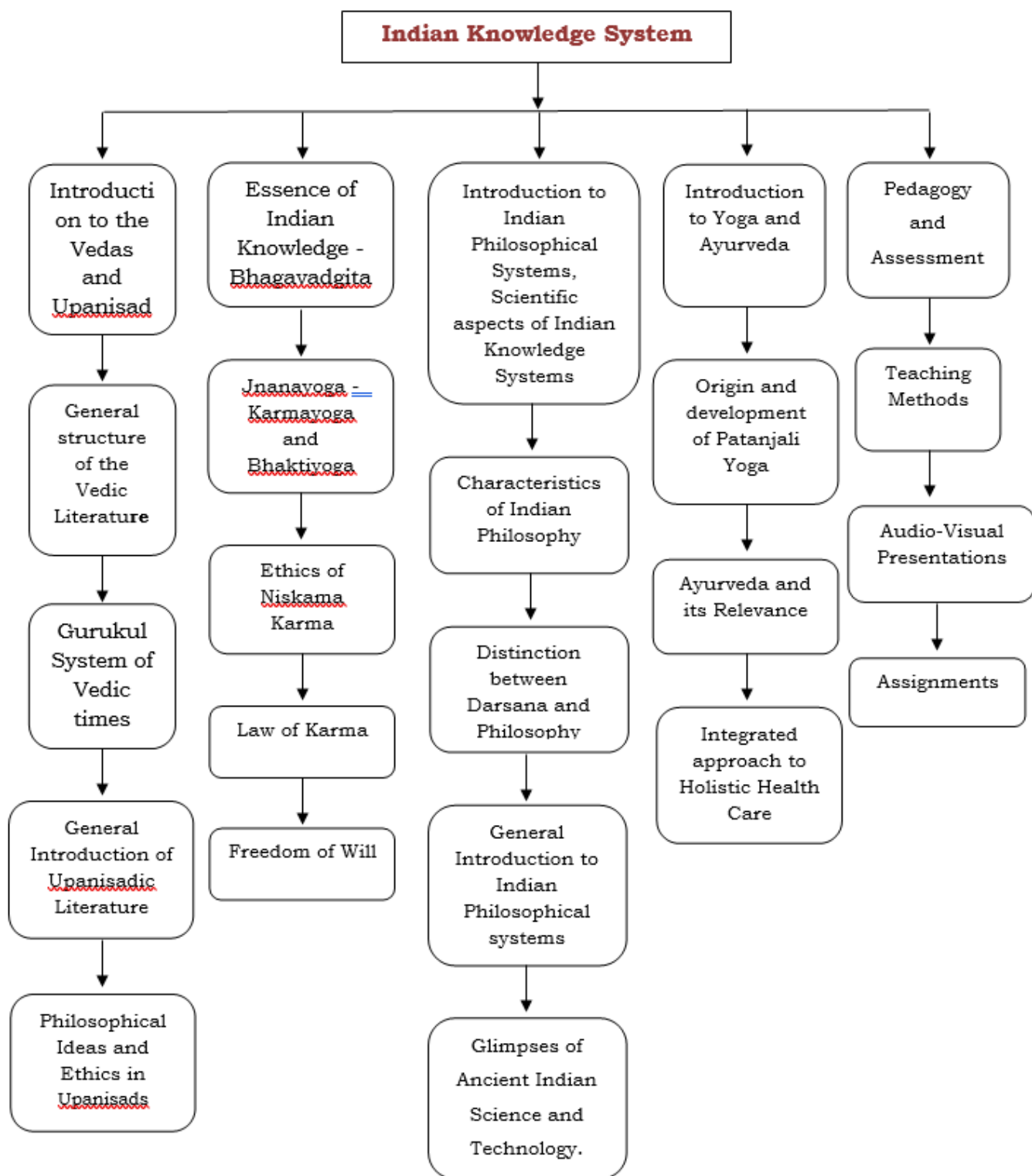
Bhartiya Khel- names of games, rules and regulation, Teaching Methods: Lectures, Discussions, Case Studies, Audio-Visual Presentations – Assessment: Assignments – Quizzes, Presentations, Practical Applications, End-Semester Examination.

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C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME:

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



COURSE TITLE : YOGA AND ARTIFICIAL INTELLIGENCE
COURSE CODE : PES5043
COURSE OBJECTIVES :

Gain knowledge about Artificial Intelligence and its importance in yoga. Learn AI-based virtual teaching and yoga practice via virtual reality. Explore AI-based wearable technology and its applications in yoga. Understand the uses of AI in job opportunities within the yoga field.

A. COURSE LEARNING OUTCOMES:

S. No	Course Learning Outcomes	Level
CLO 1	Students may understand the AI and its importance in the yoga field	Understand
CLO 2	To learn the Virtual Teaching for yoga learning	Skill
CLO 3	Application of Virtual reality for yoga with AI	Apply
CLO 4	To understand about available wearable tech in current days	Understand
CLO 5	To understand the Job opportunities with the help of AI in yoga field	Understand

B. SYLLABUS:

UNIT-I

Introduction of Artificial intelligence, History of Artificial Intelligence, Need and importance of AI in sports, AI practices in yoga and their implications. Benefits of AI goal setting, Assessments and Evaluations.

UNIT-II

Virtual Teaching: Virtual Apps and their functions and benefits- Yoga Studio, Pocket Yoga, Daily Yoga, Down Dog, Gaia, AloMoves, Asana Rebel, Core Power. Real-time correction, feedback and modifications.

UNIT-III

Virtual Reality (VR) Yoga: The process of AI combined with VR for practice, and yoga environments, practice in various virtual settings like serene beaches, and mountains-advantages of VR usage in yoga professions. **Meditation Guides:** How AI-driven leads meditation sessions, adapting the flow and content based on.

UNIT-IV

Wearable Tech: AI devices- smart yoga mats and wearables sync- AI platforms – posture track, balance, and movements corrections, feedback and recommendations- improvement, Performance analysis for development a quality competition and research.

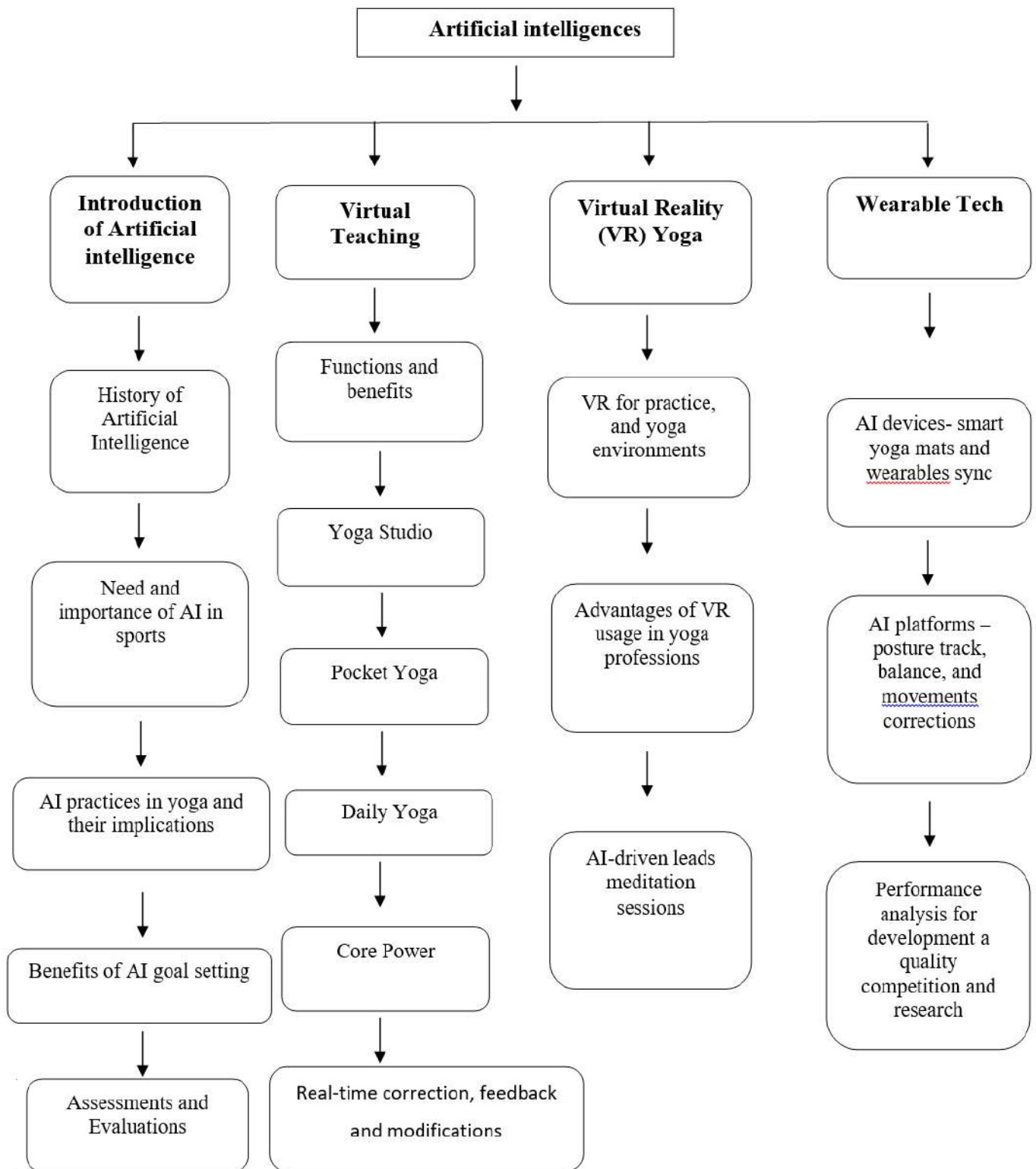
UNIT-V: Community and Support: How AI helps to connect with other yoga enthusiasts and communities- providing support and motivation through social platforms and forums- Job Opportunities creations via AI.

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1. Nagalakshmi Vallabhaneni DPP (2021) The analysis of the impact of Yoga on healthcare and conventional strategies for human pose recognition. Turk J Comput Math Educ (TURCOMAT) 12(6):1772–1783
2. Ding W, Hu B, Liu H, Wang X, Huang X (2020) Human posture recognition based on multiple features and rule learning. Int J Mach Learn Cybern 11:2529–2540
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C. MAPPING OF PROGRAM OUTCOMES WITH COURSE OUTCOME

	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3



PES5044	DISSERTATION
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COURSE TITLE : YOGA PRACTICUM – IV
COURSE CODE : PES5P04
COURSE OBJECTIVES :

1. To introduce students to essential Kriyas for detoxification and purification of the body and mind.
2. To teach students the effective practice of Bandhas for controlling energy and enhancing focus during yoga.
3. To familiarize students with Mudras and their application for mental balance and spiritual growth.
4. To integrate Kriyas, Bandhas, and Mudras into a cohesive practice for enhanced energy control and physical well-being.
5. To guide students in advanced practices of Kriyas, Bandhas, and Mudras for spiritual awakening and deep purification.

A. COURSE LEARNING OUTCOMES:

- CLO 1: Students will perform basic Kriyas such as Kapalbhathi, Trataka, and Neti to enhance physical and mental clarity.
- CLO 2: Students will master Mula Bandha, Uddiyana Bandha, and Jalandhara Bandha for energy regulation and concentration.
- CLO 3: Students will practice various Mudras like Chin Mudra and Jnana Mudra to improve focus, energy flow, and meditation.
- CLO 4: Students will combine Kriyas, Bandhas, and Mudras to improve focus, purification, and overall health.
- CLO 5: Students will practice advanced Kriyas, Bandhas, and Mudras for heightened awareness, energy flow, and spiritual growth.

B. PRACTICAL SYLLABUS

UNIT 1: KRIYAS

Kapalbhathi (Skull Shining Breath), Trataka (Concentration on a Flame), Neti (Nasal Cleansing), Dhauti (Cleansing of the Digestive Tract) and Vaman Dhauti (Self-induced Vomiting for Detox).

UNIT 2: BANDHAS

Mula Bandha (Root Lock), Uddiyana Bandha (Abdominal Lock), Jalandhara Bandha (Chin Lock), Combination of Bandhas with Pranayama (Mula Bandha with Ujjayi, Uddiyana Bandha with Bhastrika) and Bandha Integration in Asanas (Bandhas in Surya Namaskar).

UNIT 3: MUDRAS

Chin Mudra (Gesture of Consciousness), Jnana Mudra (Gesture of Knowledge), Anjali Mudra (Prayer Gesture), Kalesvara Mudra (Gesture for Concentration) and Dhyana Mudra (Meditation Gesture).

UNIT 4: INTEGRATION OF KRIYAS, BANDHAS, AND MUDRAS

Kapalbhati with Mula Bandha and Chin Mudra, Trataka with Jalandhara Bandha and Jnana Mudra
Breathing Exercises (Pranayama) with Bandhas and Mudras, Surya Namaskar with Bandhas and
Mudras for Enhanced Focus, Complete Practice of Kriyas, Bandhas, and Mudras in a Relaxation
Session.

UNIT 5: ADVANCED PRACTICES

Advanced Kriya Techniques (Basti, Kunjal Kriya), Advanced Pranayama with Bandhas
(Kumbhaka with Uddiyana Bandha), Advanced Mudras for Energy Control (Kundalini Mudra,
Yoni Mudra), Complete Kriya Yoga Session with Bandhas and Mudras, Combination of Kriyas,
Bandhas, and Mudras for Spiritual Awakening.

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