

COURSE TITLE: SELECTED TOPICS IN AYURVEDA AND COGNITIVE SCIENCES

Focus Area/Subject Area: Ayurveda, its principles, concepts, and practices.

Credits: 2

Eligibility: B.Tech, Masters, PhD/Research Scholars

Details of the Instructors:

Dr. Amrita Sharma, Assistant Professor, D.A.V College and Hospital, Jalandhar, Punjab

Course Objectives:

This course Introduces the students to the fundamental principles and practices of Ayurveda, the traditional Indian system of medicine. Students will learn about its history, philosophy, core concepts like Doshas and Dhatus, physiological understanding of the body according to Ayurveda, and its approach to health and well-being.

Learning Outcome:

By the end of the course, the students will be able to:

- Explain the basic tenets of Ayurveda and its historical background.
- Discuss core Ayurvedic concepts and their significance for health.
- Describe the Ayurvedic understanding of the human body's physiology.
- Explain the Ayurvedic perspective on mental health and well-being.
- Identify some potential applications of Ayurveda in maintaining health.

SYLLABUS

Unit 1: Fundamental principles of Ayurveda and quantum mechanics (3 hours)

1. Conceptual understanding and history of Ayurveda.
2. Introduction to basic principles of Ayurveda and their significance.
3. Understanding 'Ayu' (life Period) and perspective of life as per Ayurveda.
4. Philosophical background of fundamentals of Ayurveda.
5. Introduction to schools of Indian Philosophy and Philosophical individuality of Ayurveda (Sankhya Philosophy).

Unit 2: Panchamahabhoota Siddhanta (Five Elemental Theory) (7 hours)

1. Formation, characteristics and qualities of five elements of nature.
2. Concept of Tridosha (three humors) and its role in body and mind.
3. Conceptualisation of Ayurveda Prakriti and epigenetics. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake.
4. Triguna (Three Qualities) of life and its significance in life.
5. Role of Panchamahabhuta and Triguna in Deha prakriti (Body constitution) and Manasa prakriti (Mental Constitution) respectively.

6. Types of the psychic constitution ,its characteristics and Inter-dependence of body and mind

Unit 3 : Means of Scientific Investigation (Pramanas) (1 hour)

1. Significance of Scientific investigation and types of investigative techniques.
 - a) Pratyaksha Pramana
 - b) Anumana Pramana.
 - c) Yukti Pramana.
 - d) Upamana Pramana
2. Significance of Karya and Karana (Cause and Effect Theory) in Ayurveda.

Unit 4: Ayurvedic Aspect of Physiology And Digestion Of Food (5 hours)

1. Introduction to Dhatu (Tissues) of the body and conceptual understanding of (Dhatuposhana Nyaya – Rule of nourishment of Tissues).
2. Brief knowledge of all Dhatu (tissues) of the body.
3. Physiology of digestion and absorption of Nutrients.
 - a) Formation of Rasa Dhatu from Aahara Rasa and its circulation.
 - b) Role of Vyana Vayu and Samana Vayu in Rasa Samvahana.
4. Relationship of functioning of Hridaya (Heart) and Rasa Dhatu Ashtavidha Sara.
5. Brief concept of Oja and description of Vyadhikshamatva (Immunity) and Bala Vriddhikara Bhava.
6. Concept of Agni in the body with respect to digestion of food.

Unit 5: Understanding Physiology of Sense Organs And Qualities of Life (2 hours)

1. Understanding eleven Indriyas (Sense organs) of the body.
2. Physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha and mental cognition.
3. Understanding Adhyatma guna (Spiritual qualities of life) and mental health in regards to Spiritual qualities.

Unit 6: Nadi Pariksha (Pulse Diagnosis) (1 hour)

1. Conceptual understanding of Nadis.
2. Parameters of Nadi pariksha in various states of health.

Unit 7: Understanding Concept Of Atma And Manas In Ayurveda (3 hours)

1. Atma: Etymological derivation, definition, seat and qualities of Atma.
2. Difference between Paramatma and Jivatma and the process of knowledge formation (atmanah jnasya pravrittih).
3. Understanding mind its Nourishment and development.
4. Dual nature of mind (ubhayaatmakatvam).
5. Attributes, Functions and Factors related of mind.
6. Physiology of Manovaha srotas (channels of transportation and transformation of mental factors).
7. Categories of mental strengths.
8. Qualities and impurities of mind.
9. Manas as a substratum of diseases and penta-elemental nature (Panchabhutatmakatvam).

Unit 8: Concept Of Nidra (Sleep) (1 hour)

1. Nidrotpatti (sleep genesis), physiological and clinical significance of Nidra (sleep).
2. Types of dreams and its origin.

Unit 9: Ayurvedic Perspective On Psycho-Somatic And Psychiatric Disorders (4 hours)

1. Psycho-somatic and psychiatric disorders as per Ayurveda.
2. Dosha specific mental disorders.
3. Diagnosis of perverted mental state.
4. Management and significance of preserving and protecting mental and spiritual health.

Unit 10: Inter relationship on Yoga, Ayurveda and Chakras (1 hour)

Basic knowledge and relationship of yoga, ayurveda and chakra healing.

References:

Text books:

1. Chowdhury, K. (2023). *Mental Health as described in Ayurveda*. Kanchan Chowdhary Publications.
2. Das, B. (2001). *Caraka Samhita: Text with English translation & critical exposition based on Cakrapani Datta's Ayurveda Dipika (7 volume set)*. Chowkhamba Sanskrit Series Office.

Reference Books:

1. Chary, D. L. (2017). *A textbook of Padarth Vigyan evam Ayurveda ka Itihas*. Chowkhamba Sanskrit Pratishtan.
2. Chopra, D. (2001). *Perfect health: A step-by-step program to better mental and physical wellbeing*. Bantam Books.
3. Chopra, D. (2003). *Ageless body, timeless mind 10th anniversary edition: A practical alternative to growing old*. RHUK.
4. Dwivedi, G. V. (2014). *Nadi Pariksha - Pulse examination*. Chaukhambha Orientalia.
5. Lad, V. (2002). *Textbook of Ayurveda: Fundamental principles of Ayurveda*, Volume 1. Ayurvedic Press.
6. Lad, V. D. (2020). *Secrets of pulse: The art of Ayurvedic pulse diagnosis*. Motilal Banarasidass Publishing House.
7. Lad, V. D. (1993). *Ayurveda: The science of self-healing*. Laurier Books Limited.
8. Murthy, K. R. S. (2021). *Vagbhata's Astanga Hridayam- Text, English translation, notes, appendix and indices- 3 Vols*. Chaukhambha.
9. Vidyanath, R., & Singh, R. H. (2013). *Illustrated Astanga Hridaya text with English translation and appendices*. Chaukhambha Subharti Prakashan.