



SILVER OAK UNIVERSITY

Silver Oak Institute of Science

Bachelor of Science Physics

Course Name: Ayurveda and Nutrition

Course Code: 2050003183

Semester: 2nd

Prerequisite:

1. Basic understanding of biological principles relevant to human health and plant sciences.

Course Objectives:

1. Introduce students to the concept of Ayurveda, Ayurvedic Medicines and related concepts of medicinal plants and their applications.
2. Educate students about Nutrition, food composition, food safety and quality control and different processing techniques.
3. Develop the ability to apply interdisciplinary knowledge of Ayurveda and nutrition in practical settings to enhance health outcomes.

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
2	0	0	2	2

Contents:

Unit	Topics	Teaching Hours	% Weightage
1	<p>Ayurvedic Pharmacology and Ayurvedic Medicines Introduction, Definition and scope of Ayurvedic Pharmacology. Historical development and significance in Ayurveda. Comparison with modern pharmacology.</p> <p>Classification of Ayurvedic Medicines, Classification based on origin (herbal, mineral, animal). Classification based on therapeutic properties (Rasoushadhi, Bhasma, Guggulu, etc.). Dosage forms and preparations (Churna, Kwatha, Vati, Avaleha, etc.).</p>	7	25
2	<p>Ayurvedic Pharmacy and Medicinal Plants Introduction to Ayurvedic Pharmacy, Historical perspective and significance in Ayurveda. The role of Ayurvedic pharmacy in healthcare. Medicinal Plants in Ayurveda, Identification, classification, and importance of medicinal plants. Concept of "Dravya" (substances) in Ayurveda. Study of different parts of plants used, such as roots, stems, leaves, bark, flowers, fruits, seeds, and rhizomes. Understanding the properties, actions, and therapeutic applications of specific medicinal plants.</p>	7	25
3	<p>Nutrition Definition and importance of nutrition, role of nutrition in health and well-being. Nutrients and Their Classification: Understanding macronutrients (carbohydrates, proteins, fats) and micronutrients (vitamins and minerals). Water as an essential nutrient. Nutrition and lifestyle transition over the years, Regional food traditions of India.</p> <p>Digestion and Absorption: The digestive system and its</p>	7	25

	components. Mechanisms of digestion and absorption of nutrients. The role of enzymes and hormones in the digestive process.		
4	<p>Food Science and Technology Introduction, Definition and scope of food science and technology. Historical development of food science. The role of food science in nutrition and health. Food Safety and Quality Control: Foodborne pathogens and foodborne illnesses. Food safety regulations and standards. Quality control methods in food production.</p> <p>Food Processing Techniques: Techniques for food preparation and processing. Food additives and their role in food processing. Minimally processed and processed foods.</p>	7	25

Course Outcomes:

Sr. No.	CO Statement	Unit
CO-1	Develop basic understanding of Ayurvedic Pharmacology and Ayurvedic Medicines.	1
CO-2	Describe basics of Ayurvedic Pharmacy and Medicinal Plants.	2
CO-3	Describe basics of Nutrition, role of enzymes and hormones.	3
CO-4	Develop better understanding and provide effective solutions on Food Science and Technology, food safety and quality control.	4

Teaching & Learning Methodology:

1. Design Thinking
2. Inquiry based Learning
3. Competency based Learning
4. Conceptual Understanding

Books Recommended: -

1. Dr. David Frawley and Dr. Vasant Lad, "The Yoga of Herbs: An Ayurvedic Guide to Herbal Medicine", Lotus Press
2. Amadea Morningstar and Urmila Desai, "The Ayurvedic Cookbook: A Personalized Guide to Good Nutrition and Health", Motilal Banarsidass Publishing House
3. Julieanna Hever and Raymond J. Cronise, "Plant-Based Nutrition", Alpha

List of Open-Source Software/learning website:

1. <http://silveroakuni.ac.in/video-lecture>

CO-PO-PSO Matrix:

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
CO-1						2	2				2	1	
CO-2						2	2				2	1	
CO-3						2	2				2	1	
CO-4						2	2				2	1	