Subtopics: ● Capacities of the neonate ● Infant care practices ● Physical motor development ● Socio-emotional development ● Language development ● Cognitive development

# Unit IV: Development during early childhood

(12 hours)

- Unit Description: The unit traces the progression in development that occurs from 2-6 years of life.
- Subtopics: Physical Motor Development Socio-Emotional Development Language Development Cognitive Development

#### PRACTICAL (30 hours)

- Unit 1 Narrative method: recalling and recording an event Exploring cultural practices and traditions during Pregnancy birth Infant care
- Unit 2 Observation method: observing infants and preschool children in everyday settings recording the observations Neonatal assessment (APGAR scale and Neonatal reflexes) Multi-media resources to study prenatal development, infancy, early childhood

# **Essential readings**

- 1. Berk, L. (2013). Child development. 9th ed. Boston: Pearson.
- 2. DECE-1 Organising Child Care Services (IGNOU Study Material) https://www.egyankosh.ac.in/handle/123456789/32288
- 3. Dixit, A. (2019). Baal Vikas (1st ed.). Doaba House.
- 4. Journey of the first 1000 days: Rashtriya Bal Swasthya Karyakram (2018) Ministry of Health and Family Welfare.
- 5.https://nhm.gov.in/images/pdf/programmes/RBSK/Resource\_Documents/Journey\_of\_The\_Fi rst\_1000\_Days.pdf
- 6. Patni, M. (2020). Baal Vikas (3rd ed.). Star Publications.
- 7. Santrock, J.W. (2011). Life-span development. New York: McGraw-Hill.
- 8. Singh, A. (Ed.) 2015. Foundations of Human Development. New Delhi: Tata McGraw
- 9. Hill. Chapter 2,
- 10. Snow, C.W. (1997). Infant Development. New Jersey, Prentice-Hall Inc.

#### **Suggested Readings**

- 1. Joshi, P. & Shukla, S. (2019). Child development and education in the twenty-first century. Singapore: Springer International
- 2. Khalakdina, M. (2008). Human development in the Indian context: A socio cultural focus: 1. India: Sage.

# DISCIPLINE SPECIFIC CORE COURSE – 2 (DSC-HH 102) Food Science and Nutrition

## Credit distribution, Eligibility and Prerequisites of the Course

Course title & Code	Credits	Cred	it distribut cours	tion of the e	Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		(if any)
Food Science and Nutrition	4	3	0	1	Class XII With Science	-

## **Learning Objectives**

- 1. To understand the relationship between food, nutrition and health.
- 2. To describe the function of various nutrients and list their sources.
- 3. To understand the nutritional contribution of and effect of cooking on different food groups.
- 4. To describe ways of reducing nutrient losses during cooking and methods of enhancement of nutritional quality of foods.
- 5. To be able to prepare dishes using principles of food science.

## **Learning outcomes**

After completing this course, students will be able to:

- 1. Understand the relationship between food, nutrition and health.
- 2. Describe the digestion, absorption and function of various nutrients and list their sources.
- 3. Understand the nutritional contribution of and effect of cooking on different food groups.
- 4. Understand ways of reducing nutrient losses during different methods of cooking and methods of enhancement of nutritional quality of foods.
- 5. Prepare dishes using principles of food science and assess serving size and nutritional contribution.

#### **SYLLABUS OF DSC-2**

# **Unit I: Basic Concepts in Food and Nutrition**

(5 hours)

Unit Description: An introduction to the sciences of food and nutrition and their relationship to health and disease.

Subtopics: ● Basic terms used in study of food and nutrition ● Understanding relationship between food, nutrition and health ● Functions of food-Physiological, psychological and social

Unit II: Nutrients (15 hours)

Unit Description: Functions, dietary sources and clinical manifestations of deficiency/ excess of the nutrients

Subtopics: ● Energy, Carbohydrates, lipids and proteins ● Fat soluble vitamins ● Water soluble vitamins ● Minerals

## Unit III: Food groups (15 hours)

Unit Description: Structure, composition, products, nutritional contribution, selection and changes during cooking of various food groups

Subtopics: ● Cereals and Pulses ● Fruits and vegetables ● Milk & milk products ● Eggs ● Meat, poultry and fish ● Fats and Oils ● Spices and herbs ● Beverages

## Unit IV: Methods of Cooking and Enhancing the Nutritional Quality of Foods (10 hours)

Unit Description: Different methods of cooking and ways to improve nutrient retention or improve nutritional quality

Subtopics: ● Dry, moist, frying and microwave cooking ● Advantages, disadvantages and the effect of various methods of cooking on foods ● Preventing losses of nutrient during cooking ● Improving nutritional quality of diets by Food synergy, Germination, Fermentation, Fortification and Genetic Modification of foods

# **Practical component – 30 Hours**

Unit I ● Weights and measures; preparing market order and table setting

Unit II Food preparation, understanding the principles involved, nutritional quality and portion size- ● Cereals: Boiled rice, pulao, chapati, paratha-plain/stuffed, poori, pastas

- Pulses: Whole, dehusked, pulse curry Vegetables: Dry preparation, vegetable curry
- Milk preparations: Kheer, porridge, custard Egg preparations: Boiled, poached, fried, scrambled, omelettes, egg pudding Soups: Plain and cream soups Baked products: cakes, biscuits/cookies Snacks and Breakfast Cereals: pakoras, cutlets, samosas, cheela, upma/poha, sandwiches Salads: salads and salad dressings

# **Essential readings**

- 1. Chadha R and Mathur P (eds)(2015). Nutrition: A Lifecycle Approach. Hyderabad: Orient Blackswan.
- 2. Rekhi T and Yadav H (2014). Fundamentals of Food and Nutrition. New Delhi: Elite Publishing House Pvt Ltd.
- 3. Srilakshmi B (2014). Food Science, 6th Edition. Delhi: New Age International Ltd.
- 4. Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. New Delhi: Elite Publishing House Pvt Ltd.
- **5.** Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation: A Complete Manual, Fourth Edition. Hyderabad: Orient Black Swan

# Suggestive readings (if any)

- 1. Bamji MS, Krishnaswamy K, Brahmam GNV (2016). Textbook of Human Nutrition, 4th edition. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- 2. Byrd-Bredbenner C, Moe G, Beshgetoor D, Berning J. (2013). Wardlaw's Perspectives in Nutrition, International Edition, 9th edition, New York: McGraw- Hill.
- 3. Sethi P, Lakra P. Aahar Vigyan, Poshan evam Suraksha (Hindi); First Ed; 2015; Delhi: Elite Publishing House (P) Ltd.

# DISCIPLINE SPECIFIC CORE COURSE— 3 (DSC-3) COMMUNICATION CONCEPTS AND THEORIES

# Credit distribution, Eligibility and Pre-requisites of the Course

Course title &	Credits	Credit distribution of the			Eligibility	Pre-
Code		course			criteria	requisite of
		Lecture	Tutorial	Practical/		the course
				Practice		(if any)
Communication					Class XII	
Concepts and	4	3	0	1	pass with	
Theories					Science	