

- Longvah, T., Ananthan, R., Bhaskarachary, K. and Venkaiah, K. (2017). Indian Food Composition Tables. National Institute of Nutrition, ICMR, Hyderabad.
- Raina, U., Kashyap, S., Narula, V., Thomas, S., Suvira, Vir, S., Chopra, S. (2010) Basic food preparation. (4th ed.) Lady Irwin College.
- Vir, S.C. (2021). Public Health Nutrition in Developing Countries. Volume-I, 2nd edition. Woodhead Publishing India Pvt Ltd.
- Vir, S.C. (2021). Public Health Nutrition in Developing Countries. Volume-II, 2nd edition. Woodhead Publishing India Pvt Ltd.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time

Bachelors in Arts with With Community Science
Category-V

**DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-FN 11-HSC:
PHYSIOLOGY AND PROMOTIVE HEALTH**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Physiology and Promotive Health	4	3	1	0	-	-

Learning Objectives

- To learn about the structural organization of the human body.
- To understand the normal functioning of the organ systems and their interactions.
- To learn about modes of transmission of common communicable diseases and their prevention.
- To learn on the web of causation of non-communicable diseases and lifestyle disorders.

Learning Outcomes

The students would be able to:

- Understand the knowledge about the structural organization of the human body.
- Develop insight into normal functioning of all the organ systems of the body and their interactions.
- Understand the modes of transmission of common communicable diseases and their prevention.
- Understand the causes of non-communicable diseases and lifestyle disorders.

THEORY
(Credits 3: Hours 45)

UNIT I: Cardio-Respiratory and Gastric Physiology**10 Hours**

The unit presents the student with an understanding of the structure and functioning of the Cardio-respiratory system and Gastro-Intestinal system.

- Cardio-respiratory Physiology: Blood- composition and function, blood circulation (systemic, pulmonary, coronary, and portal), pulse rate, blood pressure, structure of lungs, lung volume and capacities and its function
- Gastro-intestinal Physiology: structure of stomach, liver, gallbladder, pancreas, and their functions, composition, function and regulation of GI secretions, cholelithiasis, non-alcoholic fatty liver disease (NAFLD), Gastro esophageal reflux disease (GERD)

UNIT II: Neuroendocrine, Renal & Reproductive Physiology**13 Hours**

The unit presents the student with an understanding of the structure and functions of the neuroendocrine, renal and reproductive system of the body.

- Neuro- Endocrine Physiology: Organization of nervous system, actions & disorders of Pituitary, Thyroid & Pancreatic hormones
- Renal and reproductive Physiology: Structure of kidney and its functions, physiology of menstruation, pregnancy, lactation and menopause

UNIT III: Promotive Health**7 Hours**

The unit presents the student with an understanding of the concept of health, disease and its prevention.

- Concept of Health, Disease and its prevention: WHO definition of Health, epidemiological triad, concept of Immunization, Immunization Schedule, new vaccines e.g. COVID vaccines, anticancer vaccines
- Community Health: Maternal and Child Health care: Antenatal Care, family planning, and contraception, geriatric health, occupational health

UNIT IV: Epidemiology of Community related diseases**15 Hours**

This unit focuses on communicable diseases and non-communicable diseases.

- Epidemiology of communicable diseases: Air borne infections: Tuberculosis, COVID, fecal-oral infections: Hepatitis, Enteric Fever, zoonotic diseases: Rabies, vector Borne diseases: Malaria and Dengue, sexually transmitted diseases: AIDS
- Epidemiology of non-communicable diseases: Hypertension, diabetes, PCOD, cancer

TUTORIAL
(Credits 1: Hours 15)

1. Discussion on disease-based case studies:
 - Iron Deficiency Anemia – Investigations & Diagnosis
 - Enteric Fever
 - VBD; Malaria and Dengue
 - HIV/AIDS & STIs
 - Hypertensive Disorders (including Pregnancy-Induced Hypertension)
 - Diabetes Mellitus & Blood Glucose Variations
2. Create awareness regarding maternal health (ANC): Menstrual Health & Hygiene,

- Sanitation & Hygiene (WASH Model)
3. Develop an educational aid on PCOS – Lifestyle & Hormonal Health- Lifestyle Disorders in Young Adults
 4. Create a project on types of contraceptive devices
 5. Screening & Self Examination: Oncogenesis – Risk factors, warning signs & vaccines, breast Cancer – Cervical Cancer & HPV Vaccination
 6. Quiz on geriatric health: Dementia & Alzheimer’s Disease, Fall Risk in Elderly, Polypharmacy in Elderly
 7. Case Study on depression in adolescents /substance abuse among college students (Alcohol, Tobacco, Vaping)

Essential Readings

UNIT I

This unit details the physiological structures and functions of the cardio-respiratory and gastro-intestinal systems, covering blood circulation, pulmonary capacities, digestive secretions, and prevalent clinical conditions like GERD and NAFLD.

- **Ganong, W. F.** (2019). Review of medical physiology (26th ed.). McGraw-Hill Education.
- **Guyton, A. C., & Hall, J. E.** (2011). Textbook of medical physiology (12th ed.). Elsevier Saunders.
- **Marieb, E. N.** (2014). Human anatomy and physiology (10th ed.). Pearson Education (Addison-Wesley).
- **Park, J. E., & Park, K.** (2025). Park’s textbook of preventive and social medicine (28th ed.). Banarsidas Bhanot Publishers.
- **Bedi, Y. P.** (2018). Handbook of preventive and social medicine: Community health/Community medicine (17th ed.). Bedi Publications.
- **Nageswari, K. S., & Sharma, R.** (2018). Practical workbook of human physiology (2nd ed.). Jaypee Brothers Medical Publishers.
- **Pal, G. K., & Pal, P.** (2020). Textbook of practical physiology (5th ed.). Universities Press (India) Pvt. Ltd.
- **Ghai, C. L.** (2013). A textbook of practical physiology (8th ed.). Jaypee Brothers Medical Publishers.

UNIT II

This unit examines the organization of the nervous system and endocrine glands, renal structure and function, and the physiological processes governing the female reproductive cycle, pregnancy, lactation, and menopause.

- **Ganong, W. F.** (2019). Review of medical physiology (26th ed.). McGraw-Hill Education.
- **Guyton, A. C., & Hall, J. E.** (2011). Textbook of medical physiology (12th ed.). Elsevier Saunders.
- **Marieb, E. N.** (2014). Human anatomy and physiology (10th ed.). Pearson Education (Addison-Wesley).
- **Park, J. E., & Park, K.** (2025). Park’s textbook of preventive and social medicine (28th ed.). Banarsidas Bhanot Publishers.
- **Bedi, Y. P.** (2018). Handbook of preventive and social medicine: Community health/Community medicine (17th ed.). Bedi Publications.
- **Nageswari, K. S., & Sharma, R.** (2018). Practical workbook of human physiology

(2nd ed.). Jaypee Brothers Medical Publishers.

- **Pal, G. K., & Pal, P.** (2020). Textbook of practical physiology (5th ed.). Universities Press (India) Pvt. Ltd.
- **Ghai, C. L.** (2013). A textbook of practical physiology (8th ed.). Jaypee Brothers Medical Publishers.

UNIT III

This unit defines health and disease through the epidemiological triad, covering immunization strategies, modern vaccines, maternal and child healthcare, family planning, and the essential principles of occupational health and prevention.

- **Park, J. E., & Park, K.** (2025). Park's textbook of preventive and social medicine (28th ed.). Banarsidas Bhanot Publishers.
- **Bedi, Y. P.** (2018). Handbook of preventive and social medicine: Community health/Community medicine (17th ed.). Bedi Publications.

UNIT IV

This unit analyzes the distribution and determinants of communicable diseases—categorized by transmission mode—and non-communicable diseases, focusing on their epidemiology, risk factors, and management of chronic conditions like PCOD and cancer.

- **Park, J. E., & Park, K.** (2025). Park's textbook of preventive and social medicine (28th ed.). Banarsidas Bhanot Publishers.
- **Bedi, Y. P.** (2018). Handbook of preventive and social medicine: Community health/Community medicine (17th ed.). Bedi Publications.

Suggested Readings

- **Ross and Wilson** (2018). Foundation of Anatomy and Physiology, Medical Division 12th Edition
- **Singh HD** (2010). Handbook of Basic human physiology for paramedical students.
- **WHO**. <https://www.who.int/news-room/fact-sheets/detail/cancer> (Accessed February 19th 2026)
- **WHO** <https://www.who.int/news-room/fact-sheets/detail/hiv-aids> (Accessed February 19th 2026)
- **WHO** <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue> (Accessed February 19th 2026)
- **WHO** https://www.who.int/health-topics/anaemia#tab=tab_1 (Accessed February 19th 2026)
- **WHO** https://www.who.int/health-topics/contraception#tab=tab_1 (Accessed February 19th 2026)
- **NHM** https://nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/Hypertension_full.pdf (Accessed February 19th 2026)
- **NVBDCP**
<https://nvbdcp.gov.in/Doc/National%20Guideline%20for%20Dengue%20case%20management%20during%20COVID-19%20pandemic.pdf> (Accessed February 19th 2026)
- **NHM**. <https://www.nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/stg-tb.pdf> (Accessed February 19th 2026)
- **NHM**. <https://www.nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/dengue.pdf> (Accessed February 19th 2026)
- **Manav sharir** -rachna aur kriya- vigyan, paper- 4 of PGDIPP, SIGFA Solutions
<http://assets.vmou.ac.in/PGDIPP04.pdf>

- **Manav Jeevan Vigyan evum Yog, M.Y-104** hindi pdf, Uttrakhand Mukta Vishwa Vidyalaya <https://uou.ac.in/sites/default/files/slm/MY-104.pdf>

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**Bachelors in Arts with With Community Science
Category-V**

**DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-FN 13-HSC:
INDIGENOUS FOOD SYSTEM AND WELLNESS**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Indigenous Food System and Wellness	4	3	1	0	-	-

Learning Objectives

- To provide overview of the traditional foods evolved from indigenous foods.
- To equip students with knowledge of traditional Indian functional foods.
- To familiarize students with medicinal applications of indigenous and traditional food.
- To familiarize students with the concept of wellness and various approaches for longevity.

Learning Outcomes

The students would be able to:

- Understand and explain the concept of traditional food evolving from indigenous foods.
- Learn about the health benefits of traditional foods as functional food.
- Understand the concept of medicinal applications of indigenous and traditional foods.
- Understand the several elements of health, wellness and longevity.

**THEORY
(Credits 3: Hours 45)**

UNIT I: Basic Concepts of Wellness

15 Hours

This unit will familiarize the students with the concept of wellness, health, their determinants and interaction.

- Definitions – longevity, wellness / wellbeing, standard of living, level of living, quality of life, physical quality of life index (PQLI), Human Development Index, Happiness Index
- Dimensions of wellness
- Diet Related Approaches for Longevity and Wellness