

**Department of Home Science**  
**Semester – V**

**B.Sc. (Prog.) Home Science**

**DISCIPLINE SPECIFIC CORE COURSE**  
**DSC HP 513: Space Planning and Sustainability**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Space Planning and Sustainability	4	3	0	1	XII Pass	Appeared in Personal Finance and Consumer Education

**Learning Objectives**

- To understand the fundamentals of space planning.
- To acquire knowledge regarding materials, building construction techniques and technologies.
- To comprehend sustainable parameters in space design.

**Learning Outcomes**

- Comprehend the concept of design applicable to interior spaces.
- Understand the application of materials and finishes to create aesthetic and sustainable interiors.
- Comprehend the concept of sustainability and green rating systems.

**SYLLABUS OF DSC HP 513**

**UNIT I: Basic Concepts in Space Planning**

**10 Hours**

This unit will develop understanding regarding the concept of space planning and designing.

- Concept of space as a resource, characteristics of space
- Principles of planning spaces
- Zoning
- Types of houses: Independent houses and Apartments.
- Contemporary Housing - Service Apartments, Senior living.
- Building bye-laws – NBC and MPD

## **UNIT II: Construction Features in Building Design**

**15 Hours**

This unit will acquaint students with various elements of building construction important for developing a strong structure.

- Site selection
- Conventional and Non-conventional building materials, sustainable building materials
- Structural components of a building (Material and Types) – Foundation, Walls, Flooring, Roofs, Doors and Windows, Staircase.
- Basic building services
- Landscaping
- Earthquake resistant structures
- Home Automation

## **UNIT III - Concept of Space Design**

**15 Hours**

This unit will introduce students to the area of space design such as elements and principles of design, furniture and furnishings and wall treatment.

- Introduction to Elements and Principles of design
- Concept of Colour in Interior Design - Colour Theories, Colour Psychology, Colour Schemes, Colour Forecasting
- Energy Efficient Lighting Systems.
- Furniture - Types, Selection criteria, Arrangement
- Furnishings - Home Furnishing, Window treatment, Floor Coverings
- Wall treatment
- Use of sustainable material in space design

## **UNIT IV: Sustainable built environment**

**5 Hours**

This unit will introduce students to the concept and application of sustainability in built environment.

- Introduction to sustainable built environment
- Green building rating guidelines in India – GRIHA and LEED
- Concept of Smart Cities

### **PRACTICAL (Credits 1; Hours 30)**

1. Introduction to building terminologies, Concept of Scale, building constructions symbols
2. Evaluation of floor plans on the basis of principles of space planning
3. Preparation of floor plans
  - Multipurpose rooms/ studio apartment (Computer aided / manual)
4. Identification and characteristics of different building materials
5. Case study of a Green Building
6. Project on Landscaping / Home Automation

**Essential Readings:**

- Goel S., Seetharaman P. Kakkar, A. (2015). *Manual on Interior space designing*, Elite publishers.
- Goldstein, H. & Goldstein, V. (1988). *Art in Everyday Life (4th ed.)*, Oxford & IBH Publishing Co.
- Indian Green Building Council. (2022). *Introduction to Green Buildings and Built Environment*, BSP Books.
- Kumar, S. (2008). *Building Construction*, Standard Publisher.
- Rao, M.P. (2020). *Interior Design Principles and Practices*, Standard Publishers Distribution.

**Suggested Readings:**

- Duggal S.K. (2017). *Building Materials*. CRC Press.
- Green Rating for Integrated Habitat Assessment (GRIHA). (2021). *GRIHA Manuals*, GRIHA Council.
- Grimley, C. and Love, M. (2018). *The Interior Design Reference & Specification Book*, Rockport Publishers.
- Indian Green Building Council. (2021). *IGBC Manuals*, IGBC.
- Iyer, G. H. (2022). *Green Building Fundamentals*, Notion Press.
- Mitton, M. and Nystuen, C. (2021). *Residential Interior Design: A Guide to Planning Spaces (4th ed.)*, Wiley.
- Singh, G. (2019). *Building Construction and Materials*, Standard Publishers.

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

**DISCIPLINE SPECIFIC CORE COURSE**  
**DSC HP 514: INDIAN TEXTILE HERITAGE**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/ Practice		
Indian Textile Heritage	4	3	0	1	XII Pass	Appeared in Fundamentals of Textiles

**Learning Objectives**

- To study the traditional textile arts in their historical perspective, the impact of modernization and their contemporary status.
- To create awareness about the khadi, handloom and handicraft sectors and measures undertaken by organisations for their sustenance.
- To impart knowledge of fundamentals of textile storage and conservation

**Learning Outcomes**

- Explain history, construction and design of selected traditional woven fabrics.
- Recognize and identify embroidered fabrics of different states in terms of stitches and designs.
- Describe our heritage of varied dyed, painted and printed fabrics.
- Provide an insight into the evolution and socio-economic significance of khadi, handloom and handicraft sectors.
- Discuss sustenance of traditional textile crafts and interventions by organisations.
- Analyse the textile arts in their historical perspective, the impact of modernisation and their contemporary status.
- Classify conservation techniques and recognize signs of deterioration of textiles.
- Carry out care and conservation of traditional textiles

**SYLLABUS OF DSC HP 514**

**THEORY**

**(Credits 3; Hours 45)**

**UNIT I: Study of Textile Crafts of India: with reference to history, production centers, techniques, designs, colours and products.**

This unit lays thrust on history, making and design details of various textile crafts of India

- Classification of Traditional Indian Textiles, craft centres. **6 Hours**
- Woven Textiles-Banaras Brocades , Jamdanis and Baluchars of Bengal, Kani Shawls of Kashmir, Kanjivaram sarees of Tamil Nadu **6 Hours**
- Embroidered Textiles-Kanthas of Bengal, Kasuti of Karnataka, Phulkari of Punjab, Chikankari of Uttar Pradesh, Kashida of Kashmir, Gujarat embroideries **8 Hours**
- Painted and Printed textiles –Kalamkaris of Andhra Pradesh, Dabu printing of Rajasthan, Ajrakh printings of Gujarat **6 Hours**
- Dyed textiles –Bandhnis of Rajasthan and Gujarat, Ikats- Patola of Gujarat **4 Hours**

#### **UNIT II: Status of Traditional Textiles in Modern India 7 Hours**

This unit highlights on the socio economic importance of the traditional textile industries. It also emphasizes on the role of organizations in sustenance of textile crafts

- Evolution and socio-economic significance of Khadi, Handloom and Handicraft sector
- Sustenance of traditional textile crafts
- Interventions by organizations

#### **UNIT III: Conservation of Textiles 8 Hours**

This Unit highlights on very important area - Conservation of textiles. It provides insight into the types of conservation along with degradation factors that affect textiles. It also highlights the care and storage methods that can be used to prolong the life of textiles

- Types of Conservation- Preventive and Curative
- Factors affecting deterioration of textiles
- Care and storage of textiles

### **PRACTICAL (Credit 1; Hours 30)**

1. Resist Dyeing Techniques
  - Tie & dye using various techniques on natural fabrics
  - Batik on cotton
2. Printing
  - Block printing: pigment
  - Screen printing: pigment
3. Embroidery stitches of traditional embroideries
4. Portfolio development-Traditional textile crafts
5. Product development
6. Visit to craft centers/museums: Craft documentation report on any one craft

#### **Essential Readings:**

- Agarwal, O.P., 1977, Care and Presentation of Museum projects – II, NRL
- Barnard, N., Gillow, J., 1993, Indian Textiles, Thames and Hudson, USA
- Chattopadhyaya, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi
- Crill, R., 2015, The Fabric of India, Victorial and Albert Museum, UK

- Das, Shukla, 1992, Fabric Art- Heritage of India, Abhinav Publications, N Delhi.
- Evaluation study on khadi and village industries programme, (2001) Programme evaluation organization planning commission government of India, New Delhi. Chapter 1 & 2, pg 1-9
- Grundy & Northedge, (1998) Standards in the Museum Care of Costume and Textile Collections, Museums & Galleries Collection, Spin Offset Limited, Chapter 7-14, pg 35-54
- Mausumi Kar, (2015), The Indian Textile and Clothing Industry An Economic Analysis, Springer New Delhi Heidelberg New York Dordrecht London, Chapter 1& 2, pg 12-33.
- Pandit Savitri, 1951, Indian Embroidery- Its Variegated Charm, Pandit Publisher, Baroda  
Embroidery tutorials, video links of woven textiles and slide share

**Suggested Readings:**

- Annual Report, (2002-2003), Handloom Industry, Ministry of textiles, Chapter 5, pg 1-20
- Chelna Desai, 1988, Ikats Textiles of india, Chronicle Books, India
- Craft Documentaries on Youtube; As accessed on Mar. 2023
- Pandit Savitri, 1951, Indian Embroidery- Its variegated charm, Pandit Publisher, Baroda
- Karolia, Anjali, 2019, Traditional Indian Handcrafted Textiles, Niyogi Publishers

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**DISCIPLINE SPECIFIC CORE COURSE -15**  
**DSC HP 515: Extension Management**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Extension Management	4	3	0	1	XII Pass	Appeared in Communication Systems

**Learning Objectives**

- To orient the students to the concept and scope of extension in development.
- To understand the principles and process of Extension Programme Design and Management.
- To develop skills for using participatory approaches in Extension Programme Management.
- To provide knowledge about various development schemes and programmes in India.

**Learning Outcomes**

The students would be able to:

- Learn the concept of extension in a holistic manner with respect to national development.
- Get insights on the principles and process of Extension Programme Design and Management.
- Develop skills for using various participatory approaches in a programme management.
- Gain knowledge of various development schemes and programmes in India.

**SYLLABUS OF DSC HP 515**

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

**UNIT I: Extension: concept and principles**

**9 Hours**

This unit provides deeper understanding on the fundamental concepts of Extension and its application to national development.

- Extension: history, concept, goals, philosophy and scope
- Typology of extension and approaches to Extension
- Concept of Andragogy, Andragogy vs. Pedagogy

- Principles of Extension
- Relationship between Communication and Extension - role of Extension in development
- Methods of community contact in Extension

### **UNIT II: Stakeholder, Participation and Leadership**

**12 Hours**

This Unit highlights the significance of people's participation as a pre-requisite in any extension programme and develop skills in the same.

- Stakeholders in development
- People's participation and social mobilization in development, typology of participation
- Participatory Learning and Action – concept, principles, classification of tools and techniques
- Leaders in extension – functions, types and leadership styles and theories
- Diffusion of innovation and adoption – concept, theory and application

### **UNIT III: Programme Management**

**12 Hours**

This unit emphasizes on the principles and process involved in designing a programme and its management. The unit also gives conceptual clarity on project cycle and the different models of extension programme management.

- Project cycle- goals, objectives, indicators, outputs and outcomes
- Conceptual framework and Principles of extension program management
- Models of extension programme management - overview of models, Sandhu's model, Logic model
- Monitoring and Evaluation

### **UNIT IV: Development Programmes**

**12 Hours**

This unit provides an in-depth understanding of the various development schemes and programmes initiated as part of extension.

- Development issues and goals- national and international perspectives, Sustainable Development Goals
- Contemporary National Development Programmes (related to education, employment, income, health and nutrition, digitalization and women) – objectives, target groups, salient features, monitoring and evaluation, partnership and funding, outcomes and communication support

## **PRACTICAL**

**(Credit 1; Hours 30)**

1. Assessing the leadership skills in a case-study format
2. PLA as needs assessment tools
3. Approaches to the Adult Education
4. Developing skills in planning and using individual and small group methods in extension

### **Essential Readings:**

- Beck, S., 2022, Communication in the 2020s. Routledge, New York
- Kumar, S., 2002, Methods for community participation: a complete guide for practitioners. Vistaar Publications, New Delhi
- Ray G.L., 2015, Extension, Communication and Management, Kalyani Publications, New Delhi
- Sandhu, A S., 2018, Extension Programme Planning. Oxford and IBH Publishers, New Delhi
- Singh, S., 2022, A Brief Book on Extension Education. New Vishal Publications, New Delhi
- Singh, A K., 2020, Frontline Extension in India Innovations and Reforms. Biotech Publisher, New Delhi
- Supe, S V., 2019, An Introduction to Extension Education. Oxford & Ibh Publishing Co. Pvt Ltd, New Delhi

**Suggested Readings:**

- Bhatnagar. O.P & Dahama, O.P., 2009, Education and Communication for Development 2ed. Oxford & IBH Publishing Co. Pvt Ltd, New Delhi
- Dale R., 2004, Evaluating Development Programmes and Projects. Sage Publications, New Delhi
- Kumar & Hansra, 2000, Extension Education for Human Resource Development. Concept Publishing Company, New Delhi
- Mikkelsen, B., 2002, Methods for Development Work and Research. Sage Publications, New Delhi

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