

INDEX

DEPARTMENT OF HOME SCIENCE

BSc. (Prog.) Home Science

Semester-III

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UG Programme for Bachelor in B.Sc. Home Science (Prog.) degree in three years

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 307 : Fundamentals of Textiles

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 | | |
| Fundamentals of Textiles | 4 | 3 | 0 | 1 | XII Pass | Pass in DSC HP 102 Fashion Concepts |

Learning Objectives

1. To impart knowledge regarding production, properties and usage of textile fibres and yarns
2. To create awareness regarding various techniques of fabric production and their properties
3. To give an overview of dyeing, printing and finishing of textiles

Learning Outcomes

After completing this course, students will be able to:

1. Describe textile fibres in terms of their production and properties
2. Understand production techniques and properties of yarns
3. Explain various methods of fabric construction and relate them to specific uses keeping in mind fabric properties
4. Recall various dyeing, printing and finishing techniques

SYLLABUS OF DSC HP 307

THEORY (Credits 3; Hours 45)

UNIT I: Introduction to Textile Fibres

6 Hours

This unit will deal with the key concepts of textile polymers, morphology of textile fibers, primary, secondary properties and classification of textile fibers.

- Morphology of textile fibers: Monomer, Polymer, Degree of Polymerization, Crystalline

and Amorphous Regions, Orientation

- Primary and secondary properties
- Fiber classification

UNIT II: Production, Chemistry, Properties and Usage of Fibers

12 Hours

This unit will introduce the student to selected commercially significant cellulosic, protein and man-made fibers, their production, chemistry, properties and usage

- Natural fibers: Cotton, Flax, Silk, and Wool
- Man-made fibers: Rayon, Nylon, Polyester, Acrylic, and Elastomeric fibers

UNIT III: Production and Properties of Yarns

8 Hours

This unit will discuss the techniques of yarn production, types of yarns and their properties.

- Yarn construction:
 - Mechanical spinning (Cotton system, Wool system, Worsted system)
 - Chemical spinning (Wet, Dry, Melt)
- Types of yarns: Staple and Filament yarns, Simple and Complex yarns
- Yarn Properties: Yarn Twist and Balance, Yarn Count

UNIT IV: Techniques of Fabric Construction

11 Hours

This unit will apprise the students about different fabric construction techniques. Students will learn basic principles of weaving, knitting and non-woven fabrics.

- **Weaving**
 - Parts of a loom
 - Operations and motions of the loom
 - Classification of weaves- construction, characteristics, usage
- **Knitting**
 - Classification of knits
 - Construction and properties of warp and weft knits
- **Non-wovens**
 - Types
 - Construction
 - Properties and usage

UNIT V: Basics of Wet Processing

8 Hours

This unit help students gain insight to the fundamentals of textile processing, viz. dyeing, printing and finishing.

- **Dyeing**
 - Fundamentals of dyeing- Dyes and Pigments
 - Stages of dyeing- Advantages and Disadvantages
- **Printing**
 - Fundamentals of printing
 - Difference between dyeing and printing,
 - Methods of printing: Block, Screen

- Styles of printing: Direct, Resist, Discharge
- **Finishes**
- Classification of finishes
- Routine finishes

PRACTICAL
(Credit 1; Hours 30)

- Fibre Identification tests –Visual, burning, microscopic and chemical
- Yarn Identification – Single, ply, cord, textured, elastic, monofilament, multifilament and spun yarn
- Thread count and balance
- Fabric identification (woven, knitted, non-woven)
- Identification of basic weaves
- Tie-Dye

Essential Readings

1. Rastogi, D. & Chopra, S. (Eds.) (2017). *Textile Science*. New Delhi, India: Orient Black Swan Publishing Limited.
2. Rastogi, D, Chopra, S., Arora, C. & Chanchal (Eds.). (2016). *Textile Science-A Practical Manual*. New Delhi, India: Elite Publishing House Private Limited.
3. Sekhri S. (2022). *Textbook of Fabric Science: Fundamentals to Finishing*. IV Edition, Delhi, India: PHI Learning.
4. Joseph, M. L. (1988). *Essentials of Textiles*. (6th Edition). Florida: Holt, Rinehart and Winston Inc.
5. Corbman, P.B. (1983). *Textiles- Fiber to Fabric*. (6th Edition). USA: McGraw Hill.

Suggested Readings

1. Collier B. & Tortora G. Phyllis. (1997). *Understanding Textiles*. USA: Merrill.
2. Hollen, N. and Saddler, J. (1979). *Textile*. New York: Mcmillan.

DISCIPLINE SPECIFIC CORE COURSE
DSC HP 308 : Personal Finance and Consumer Education

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 | | |
| Personal Finance and Consumer Education | 4 | 3 | 0 | 1 | XII Pass | Pass in DSC HP 101 Introduction to Resource Management |

Learning Objectives

1. To provide students' an understanding of income, saving and investment management in the changing socio-economic environment.
2. To acquaint students with the concept of consumers' role in an economy, consumer problems, education and empowerment.
3. To comprehend issues related to consumer protection, legislative measures and redressal mechanisms.
4. To provide insights and practical knowledge of critically evaluating and designing various consumer aids.

Learning Outcomes

1. After completing this course, students will be able to:
2. Gain knowledge of income, saving and investment management in the changing socio-economic environment.
3. Understand the role of consumer in the economy, consumer problems, education and empowerment.
4. Comprehend issues related to consumer protection, legislative measures and redressal mechanisms.
5. Gain practical knowledge of critically evaluating and designing various consumer aids.

SYLLABUS OF DSC HP 308

THEORY
(Credits 3; Hours 45)

UNIT I: Income and Expenditure

15 Hours

The unit focuses on developing the fundamental concepts of income, savings and investment management and its applicability in changing socio-economic environment.

Subtopics:

- Household Income – Types, Sources, Supplementation of family income
- Income management – significance of budgeting, steps of making a budget, household accounts
- Factors influencing expenditure pattern
- Family savings and investments- need, principles, channels of investment, tax implications
- Consumer credit

UNIT II: Consumer in India: Consumer problems and education

12 Hours

This unit attempts to acquaint the students in understanding the consumer problems faced, role of consumer education and empowerment in today's context.

Subtopics:

- Definition of a consumer
- Role of consumers in the economy
- Types of consumer problems – products and service related, causes and remedies
- Guidelines for wise buying practices
- Consumer education and empowerment, sustainable consumption
- Changing nature of the business world –e-commerce, e-business

UNIT III: Consumer Protection

9 Hours

This unit will orient the students in understanding the need for consumer protection, rights and responsibilities available for safeguarding consumers' interest.

Subtopics:

- Consumer protection
- Consumer rights and responsibilities
- Consumer organizations and their role in consumer protection

UNIT IV: Legislative framework for consumers protection

9 Hours

The unit focuses on the legislative frameworks, acts and redressal mechanisms available for consumers for their protection.

Subtopics:

- Basic legislative framework for consumer protection in India
- Consumer Protection Act (COPRA) and its amendment
- Alternative redressal mechanisms
- Standardization and quality control measures

PRACTICAL (Credit 1; Hours 30)

- Understanding and designing standardization marks.
- Evaluation and designing of informative and attractive labels of different types of products.
- Evaluation and designing of advertisements in the print media including products, services and social ads.
- Case study of banks and post offices to understand their services and products.
- Learning to fill different bank forms.
- Analysis of consumer redressal through case study approach.

- Food adulteration tests.

Essential readings

1. Mital, M., Sawhney, H. K. (2015). *Family Finance and Consumer Studies*. New Delhi: Elite Publishing House Pvt. Ltd.
2. Mital M., Jain, S., & Mehta, C. (2015). *Family finance and Consumer Studies: A Practical Manual, Second Edition*. New Delhi: Elite Publishing House Pvt. Ltd.
3. Seetharaman, P. and Sethi, M. (2001). *Consumerism: Strength and Tactics*. New Delhi: CBS Publishers.

Suggested readings

1. Khanna, S. R., Hanspal S., Kapoor S. & Awasthi H.K. (2007). *Consumer Affairs*. Universities Press India Pvt. Ltd.
2. Arora, R. *Consumer Grievances Redressal*. New Delhi: Manak Publications.

DISCIPLINE SPECIFIC CORE COURSE
DSC HP 309 : Introductory Physical Science For Home Science

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 | | |
| Introductory Physical Science for Home Science | 4 | 2 | 0 | 2 | XII Pass | NIL |

Learning Objectives

1. To develop basic understanding of different chemical and physical concepts and to relate them with everyday life.
2. To enhance skills of students in handling different equipment.

Learning Outcomes

The students would be able to:

1. Study about different chemicals/compounds, their reactions and applications in everyday life.
2. Correlate structures of compounds with their properties and functions.
3. Develop understanding of the basic principles, theories and laws of physics and correlate them with real life situations.
4. Acquire ability to demonstrate basic experimental skills, handling different equipment and understand their working principles.
5. Apply the basic knowledge to different fields of home science.

SYLLABUS OF DSC HP 309

THEORY
(Credits 2; Hours 30)

Section A-Chemistry

UNIT I: Basic Concepts of Chemistry

10 Hours

Fundamental concepts like solutions, nature of substances and organic chemistry

Subtopics:

- Solutions- Properties of water, types of solutions, ways of expressing concentrations

of solutions (normality, molarity, strength), colloids (types, properties and applications of colloids)

- Acids and bases – Definition (Arrhenius, Lewis and Bronsted), examples and applications in daily life, pH, pH scale, buffer solutions and pH measurement
- Oxidising and reducing agents - Oxidation and reduction, antioxidants, examples and applications
- Organic Chemistry – Tetravalency of carbon, catenation, functional groups, types of organic compounds and their importance, nomenclature (examples- alkanes, alkenes, alkynes, alcohols, alkyl halides, aldehydes, ketones, amines, acids and esters).

UNIT II: Important Chemical Compounds

6 Hours

Cleaning agents and biomolecules

Subtopics:

- Surfactants – Soaps and synthetic detergents (structure, cleansing action and their applications)
- Disinfectants – Commonly used disinfectants and their hazards, eco-friendly disinfectants
- Dyes- Classification of dyes, natural dyes
- Biomolecules - Importance of carbohydrates, lipids, proteins and nucleic acids.

Section B-Physics

UNIT III: Mechanics and electricity

10 Hours

Basics of mechanics and electricity

Subtopics:

- Measurements of Physical Quantities- Units and dimensions
- Different types of motions- Translational motion, Circular motion, rotational motion, oscillatory motion and their applications
- Elasticity, stress, strain, elastic limit, Hooke's law, stress-strain diagram, Young's modulus, Shear modulus and Bulk modulus
- Concept of current, voltage and Ohm's law. Heating and magnetic effect of current
- Alternating Current, AC motor, comparison between alternating current and direct current
- Electrical Protection: Fuses and disconnect switches, circuit breakers, Earthing
- Estimation of electrical energy used and concept of star rating of household equipment
- Renewable energy- Solar energy, Wind energy, hydro energy, geothermal energy

UNIT IV: Heat, Optics and Sound

4 Hours

Basics of heat, optics and sound

Subtopics:

- Temperature and its measurements
- Calorimetry, change of state with applications
- Heat transfers and thermal conductivity
- Sound waves, production and properties
- Spectrum of light, basics of diffraction and interference

PRACTICAL
(Credits 2; Hours 60)

Section A- Chemistry

- Safe handling and disposal of chemicals generally used in chemical laboratories
- Calculation and preparation of standard solutions (Sodium chloride, sodium bicarbonate)

- Determination of pH of different solutions
- Experiments using Analytical techniques:
 - Acid-base titrations
 - Redox titrations
 - Estimation of salinity in saline water
 - Determination of hardness of water using complexometric titration

Detection of functional groups- Acids, Alcohols, Aldehydes and Ketones

Qualitative tests for carbohydrates

Section B- Physics

- Basic mathematical concepts and study of different types of experimental errors, their reporting and graphing techniques
- Study of least count of different measuring instruments and familiarization of multimeter
- Measurement of volume of the given cylinder using Vernier calliper
- Measurement of area of cross section of a rod and a wire using screw gauge
- Determination of elastic constants of a wire by Searle's method
- Comparison of thermometric scales of temperature using graph method and verification of Newton's law of cooling
- Study of different types of lenses and determination of focal length of double convex lens by one pin method
- Setting up of two way lighting circuit and calculation of cost of electricity consumed
- Verification of Ohm's law and to determine the resistance of a conductor using graph method.
- Study of the voltage and current of the solar cells.
- Demonstration of colour measurement using colorimeter.

Essential readings

1. Ahluwalia V. K. Dhingra, S. and Gulati, A. (2005). College Practical Chemistry, University Press (India) Pvt. Ltd., New Delhi.
2. Bahl A. and Bahl B.S. (2016). A textbook of Organic Chemistry. S. Chand and Sons, New Delhi.
3. Boyle G. (2012). Renewable Energy, Power for a sustainable future 3rd Ed. Oxford University Press, U.S.A.
4. Gomber K.L., Gogia K.L. (2015). Fundamental Physics. Pradeep publications, Jalandhar.
5. Sharma P. and Pathania. (2016). Principles of Physical Chemistry. Vishal Publishing Company, New Delhi.
6. Sukhatme, S.P. and Nayak, J. K. (2017). Solar energy. Tata McGraw - Hill Publishing Company Ltd., India.
7. Walker, J., Resnick, R., Halliday, D. (2013). Fundamentals of Physics. Wiley, United States.

Suggested readings

1. Bahl A. and Bahl B.S. (2012). Advanced Organic Chemistry. S. Chand and Sons, New Delhi.
2. Jacob T. (1979). Textbook of Applied Chemistry. McMillan India Ltd., Noida.
3. Lal S. (1995). Fundamental Physics. Pradeep Publication, Delhi.
4. Morrison and Boyd. (2011). Organic Chemistry. Pearson Education, New Delhi.
5. Singh H. (2001). B.Sc. Practical Physics. S. Chand and Co., New Delhi.
6. Vogel (2009). Quantitative Chemical analysis. Pearson Education, New Delhi.

DISCIPLINE SPECIFIC ELECTIVE
DSE HP 3A1 : Developmental Diversity across Ecological Settings

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 | | |
| Developmental Diversity across Ecological Settings | 4 | 2 | 0 | 2 | XII Pass | Pass in DSC HP 204 Lifespan Development I: Prenatal and Early Years |

Learning Objectives

1. To learn about the concepts, features and theoretical approaches to ecological settings
2. To know about various ecological settings and diversities and how it shapes development
3. To understand relationship between ecological settings and diversity

Learning outcomes

The students would be able to:

1. Acquire an understanding of basic concepts, salient characteristics and theoretical perspectives of ecological settings
2. Demonstrate knowledge of different ecological settings and diversities
3. Be able to identify relationship between ecology, diversity and development

SYLLABUS OF DSE HP 3A1

THEORY
(Credits 2; Hours 30)

UNIT I: Concepts and theoretical foundations

7 Hours

- Basic concepts and key terms: ecology, diversity and features of human ecology
- Theoretical approaches and perspectives to understanding ecological systems
- Historical and demographic attributes of ecological settings

UNIT II: Diverse ecological landscapes

12 Hours

- Diverse settings: urban, rural and tribal ecologies, conflict zones, medical settings, post-disaster contexts
- Socio-cultural and individual variables: caste and class, cultural variations, religion, poverty livelihood, gender, education, health and disability.

- Local and global understanding of human geographies

UNIT III: Developmental diversity across settings

11 Hours

- Experiences of growing up in India: working children, migrant children, sibling caregivers, growing up with disability
- Contemporary issues and themes addressing ecological diversities – poverty and disability/ gender and disability/ immigration/ refugee status/ environmental changes/ mobility
- Diversity, disadvantage, disability: influence on development

PRACTICAL (Credits 2; Hours 60)

- Visit a locality and write about the physical and social features of the ecology
- Develop a checklist to understand the ecological setting (with reference to children)
- Using a checklist to study daily schedule of a child with special needs/ child from a disadvantaged group and highlight significant factors in the setting
- Exploring different ecological settings using mental mapping and photo elicitation
- Observe and interview children on the street, working children, a child with special needs and map their ecologies
- Using a theoretical framework, analyze one's own ecological setting and reflect on various diversities
- Case profile to understand the ecological setting of any one of the following:
 - A slum
 - A shelter home
 - A village
 - An institutional care setting
- Representing lived experiences of growing up in diverse ecologies through role play technique
- Analyze and understand the changes in demographic characteristics of your city/town/village using secondary sources
- Understanding diversities of childhood ecologies through audio-visual analysis
Film: Babies/ Traffic signal/ Documentary by UNICEF

Essential readings

1. Anandalakshmy, S., & Bajaj, M. (1981). Childhood in the weavers 'community in Varanasi: Socialization for adult roles. In D. Sinha (Ed.), *Socialisation of the Indian child* (pp. 31-38). Concept.
2. Dyson, J. (2006). Respite and Rupees: The Impact of a new market opportunity on everyday lives of children and young people in Indian Himalayas. In D, Behera (Ed.). *Childhoods in South Asia* (pp. 29-42). Pearson.
3. Ghazoul, J. (2020). *Ecology: A very short introduction*. Oxford University Press. <https://doi.org/10.1093/actrade/9780198831013.001.0001>
4. Hutterer, K. L., Terry Rambo, A., & Lovelace, G. (2020). *Cultural values and human ecology in Southeast Asia*. University of Michigan Press.
5. King, R., & Maholmes, V. (2012). *The Oxford Handbook of Poverty and Child Development*. Oxford University Press
6. Lerner, R. M., Schiamberg, L. B., & Anderson, P. M. (2003). *Encyclopedia of Human Ecology: AH* (Vol. 1). ABC-CLIO.

7. Saraswathi, T. S. (Ed.) (1999). Culture, Socialization and Human Development: Theory, Research and Applications in India. Sage Publications Chapter 4: Theoretical Frameworks in Cross-cultural Psychology, Chapter 6: Individualism in a Collective Culture: A Case of Co-existence of Opposites.
8. Saraswathi, T. S., Menon, S., & Madan, A. (2019). *Childhoods in India*. Routledge India.
9. Dakshayani, B. & Gangadhar, M.R. (2016). *Child development among the scheduled tribes of India*. Aayu Publications.
10. Shelton, L. (2018) *The Bronfenbrenner Primer: A Guide to Develceology*. Routledge

Suggested readings

1. Desai, A. (1982). *The village by the sea: An Indian family story*. Heinermann
2. Devi, M. (2003). *Kyun Kyun Ladki*. Tulika Publishers.
3. Harkness, S., & Super, C. (1996). Parents 'Cultural Belief Systems: Their Origins, Expressions and Consequences. New York: The Guilford Press.
4. Shingnapure, V. J. (2007). *Tribal Children: Education, health and labour*. Dattsons.
5. Vasanta, D. (2004). Childhood, Work and Schooling: Some Reflections. Contemporary Education Dialogue, Vol. 2(1), 5-29.

DISCIPLINE SPECIFIC ELECTIVE
DSE HP 3B1 : Food Science

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 | | |
| Food Science | 4 | 2 | 0 | 2 | XII Pass | Pass in DSC HP 205 Foundation of Food Science and Nutrition |

Learning Objectives

1. To enable students to understand how food is produced, processed, prepared and preserved.
2. To impart systematic knowledge of sensory & objective evaluation, food laws and their applications in processing of food to meet quality standards.
3. To acquire knowledge about the role of microorganisms in food processing, preservation and spoilage.

Learning outcomes

The students would be able to:

1. Students learn the principles and working of various techniques in order to preserve food, to provide safe food for consumption and produce nutritious food.
2. Gain knowledge of methods of food quality evaluation and applications of food laws essential for maintaining food quality and safety.

SYLLABUS OF 3B1

THEORY
(Credits 2; Hours 30)

UNIT I: Understanding of Food Science and chemistry

12 Hours

The unit will provide an understanding of the basic terms used in food science, its interdisciplinary approach and applications. The unit will also provide knowledge of the food sources, chemistry and functional properties of important components of the food. Concept of how colloidal systems are formed and their applications in the food industry will be discussed.

Subtopics:

- Introduction to food science: Definition, importance, applications and scope of food science.
- Food Chemistry- Sources, chemistry and functional properties of Carbohydrates, Lipids and Proteins.

- Colloidal Chemistry-Definition, classification, properties and applications of sols, gels, foams and emulsions.

UNIT II: Basic Food Microbiology

8 Hours

The unit will introduce types of food microorganisms, and their role in spoilage

Subtopics:

- Introduction to microbes in food - Characteristics of predominant micro-organisms in food (yeast, mold and bacteria), bacterial growth curve, factors influencing growth of microorganisms.
- Role of microorganisms in spoilage - Important food spoilage micro-organisms (psychotrophic, thermophilic, osmophilic microbes), spoilage in specific food groups (raw meat, fruits & vegetables), role of microorganisms in food fermentation.

UNIT III: Food Preservation Techniques

5 Hours

The unit provides an understanding of different food preservation techniques, and their applications in extending shelf life of different food product.

- Low temperature: Freezing, refrigeration
- High temperature: Drying and dehydration, canning, pasteurization
- Irradiation and use of additives

UNIT IV: Sensory Science

5 Hours

The unit will help in understanding the sensory quality attributes and sensory evaluation of food.

Subtopics:

- Physiological basis of sensory evaluation
- Subjective and objective methods of sensory evaluation

PRACTICAL (Credits 2; Hours 60)

- Food analysis: Moisture, pH, acidity, Total soluble solids using standard methods of FSSAI.
- Assessment of surface sanitation by swab/rinse method.
- Implementation of GHP, HACCP, ISO 22000 using suitable example.
- Slide preparation and identification of micro-organisms.
- Application of colloidal chemistry to food preparation.
- Preservation of food using different methods (Blanching, Dehydration, Freezing).
- Sol /gel formation and factors affecting gel formation
- Recognition and threshold for basic tastes.
- Evaluation of food labels in accordance with FSSAI rules and regulations on Food labeling and Packaging.

Essential readings

1. Frazier WC and Westhoff DC (2014). Food Microbiology, Fifth Edition. TMH Publication, New Delhi.
2. Manay NS and Shadaksharaswamy M (2008). Food-Facts and Principles, Third Edition. New Age International (P) Ltd. Publishers, New Delhi.
3. Mathur P. (2018). Food Safety and Quality Control. Orient BlackSwan Pvt. Ltd., Hyderabad.
4. Potter NN and Hotchkiss H J (1996). Food Science, Fifth Edition. CBS Publication, New Delhi.

5. Suri, S. and Malhotra, A. (2014). Food Science Nutrition and Safety. Delhi: Pearson India Ltd.

Suggested readings:

1. Mohini Sethi, Eram Rao (2011). Food science- Experiments and applications, Second Edition. CBSpublishers & Distributors Pvt Ltd.
2. Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food
3. Preparation: A Complete Manual, Fourth Edition. Orient Black Swan Ltd.
4. Sivashankar. B (2002). Food Processing and Preservation. PHI learning Pvt. Ltd.

DISCIPLINE SPECIFIC ELECTIVE
DSE HP 3C1: Media, Culture and Society

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 | | |
| Media, Culture and Society | 4 | 2 | 0 | 2 | XII Pass | NIL |

Learning Objectives

1. To appraise the importance of culture, cultural transmission and cultural influences on human interactions
2. To gain knowledge of key theories, concepts, models and perspectives in the study of communication & media
3. To understand the relevance and roles of communication media in individual lives as well as in the larger context of culture & society
4. To analyze the relationships, dynamics, and trends within communication media, culture & society

Learning Outcomes

The students would be able to:

1. Assess the significance of culture, cultural transmission and cultural influences on human interactions
2. Enhance their awareness on the concepts, models and perspectives in the study of communication & media
3. Comprehend the relevance and roles of communication media in individual lives as well as in larger context of culture & society
4. Critically analyse the relationships, dynamics, and trends within communication media, culture & society

SYLLABUS OF DSE HP 3C1

THEORY
(Credits 2; Hours 30)

UNIT I: Understanding Culture

6 Hours

This unit explores the different dimensions of culture and its types. It also highlights the concepts of hegemony and ideology along with cultural influences and role of media. It touches upon the

essence of folk culture and the relation between media, society and popular culture. It revisits the work of Raymond Williams and Stuart Hall in explaining the concepts of culture and further provides diverse perspectives on popular culture

Subtopics:

- Concept of cultures, subcultures and counter culture
- Popular, folk and mass culture
- Role of Ideology and hegemony

UNIT II: Media & Media Audience

8 Hours

Unit II highlights the importance of mass media in our lives and the types of media audiences. It elaborates on the processes of media audience analysis

Subtopics:

- Role of Mass Media in society
- Media Audience
- Media Audience analysis (segmentation)
- Types of Audience
- Foucault's Notion of Knowledge and Power
- Queer Studies and Representations of Gender in Media

UNIT III: Media and Popular Culture

8 Hours

This unit highlights the relation between media, society and popular culture. It revisits the work of Raymond Williams and Stuart Hall in explaining the concepts of culture and further provides diverse perspectives on popular culture

Subtopics:

- High Culture and Popular Culture
- Relation between Media, Society and Popular culture
- Perspectives of Critical Theorists, Functionalists & Interactionists Raymond Williams, Stuart Hall
- Perspectives of Critical theorists: Culture Industry and Mass Deception; Walter Benjamin

UNIT IV: Media Realism and Technologies

8 Hours

This particular unit critically acclaims the notion of media and realism along with gaining insights into postcolonial theory. It further elaborates upon the Indian Context to Media, Culture & Society

Subtopics:

- Introduction to Postcolonial Theory
- Indian Context to relationship between Media, Culture & Society
- Interconnections between Literature, media, Culture and Identity
- Postcolonial from Indian perspective
- Digital media and culture

**PRACTICAL
(Credits 2; Hours 60)**

- Media Critiquing- Choose a movie or television series and apply some of the concepts and techniques about interpretation, ideology, or gender/class/race.
- Audience perceptions about media; audience preferences listenership/ viewership
- Assessing the prevalence of cultural stereotypes in the society and depiction of the same via media

Essential readings

1. Grossberg, Lawrence et al (1998) Media-Making: Mass Media in a popular culture. Sage Publications
2. Mc Quail, Denis. (2000). Mass Communication Theory. London, Thousand Oaks, New Delhi: Sage Publications.
3. Potter, James W (1998) Media Literacy. Sage Publications
4. Bannerjee, P. (2021). Cultural Studies: Texts and Contexts. India: Dattsons. ISBN: 8171922007
5. Nayar, P. (2016). An Introduction to Cultural Studies. India: Viva Books. ISBN: 8130933985
6. Achebe, Chinua. (2010) The African Trilogy: Things Fall Apart; No Longer At Ease; Arrow of God. Alfred A. Knopf
7. Ghosh, Amitav. (2008), Sea of Poppies, Viking Canada
8. Ghosh, Amitav.(2011). River of Smoke. Penguin India
9. Ghosh, Amitav. (2016). Flood of Fire. Penguin India
10. Habermas, J. 2006. 'The Public Sphere: An Encyclopaedia Article' in Media and Cultural Studies- Key Works by Meenakshi Gigi, et.al. (Eds). Oxford: Blackwell Publishing.
11. Williams, Raymond. (1977) Marxism and Literature, Oxford UP
12. Butler, Judith. (1990). Gender Trouble: Feminism and the Subversion of Identity. Routledge

Suggested readings

1. Berger, Asa Authur (1998). Media Analysis Technique. Sage Publications
2. Stevenson, N (2002). Understanding Media Studies: Social Theory And Mass Communication, 2nd edition, Sage publications
3. Walder, Dennis. (1998). Post-Colonial Literatures in English: History, Language, Theory. Blackwell Publishers
4. Loomba, Ania. (2005) Colonialism/Postcolonialism. 2nd Edition, Routledge
5. Mambrol, Nasrullah. (2018) "Postcolonialism." Literary Theory and Criticism Notes, 22 Jan. 2018, literariness.org/2016/04/06/postcolonialism/.
6. Watson, Katherine. (2005) "Queer Theory". The Group-Analytic Society, Vol 38, no. 1, 2005, pp. 81-85. DOI:10.1177/0533316405049370
7. Duncan, Margaret Carlisle and Michael Messer. (1993) "Separating the Men from the Girls: The Gendered Language of Televised Sports.. Gender and Society 7 1, pp. 121-137
8. Michel Foucault, (1997) "What Is Enlightenment?" in Paul Rabinow, ed., Ethics: Subjectivity and Truth, The Essential Works of Foucault 1954-1984, Volume I, New Press,

DISCIPLINE SPECIFIC ELECTIVE
DSE HP 3D1: Pattern Making for Fashion Design

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 | | |
| Pattern Making for Fashion Design | 4 | 2 | 0 | 2 | XII Pass | Pass in DSC HP 102 Fashion Concepts |

Learning Objectives

1. To impart knowledge regarding the basics of apparel design.
2. To make students understand various terminologies used in relation to garment components and their application in designing garments.
3. To develop a level of proficiency in making patterns for simple garments.
4. To be able to independently lay patterns, cut fabric and sew a garment.
5. To teach the students the fundamentals of fit and enable them to design for different figure types.

Learning outcomes

The students would be able to:

1. Develop basic knowledge of apparel design and describe its terminology.
2. Apply the knowledge of fabrics and fabric terminology to follow preparatory steps before garment cutting
3. Use and apply the concept and techniques of pattern making, laying out and cutting
4. Judicious application of knowledge for producing quality in patterns, and processes in garment assembly
5. Use and apply the concept and techniques of various seams and edge finishes

SYLLABUS OF DSE HP 3D1

THEORY
(Credits 2; Hours 30)

UNIT I: Introduction to pattern making

8 Hours

This unit will delve into the concept, significance and techniques of body measurements, basic block and patterns.

Subtopics:

- Measurement on body and dress form: importance, precautions, landmarks and procedure of taking measurement
- Importance of patterns and pattern information
- Methods of pattern making
- Rules of pattern making
- Shaping methods, dart and dart equivalents

UNIT II: Preparatory steps for garment construction

6 Hours

This unit provides an insight into the concepts and processes of fabric selection, terms, preparatory steps, fabric layouts, pinning, marking and cutting.

Subtopics:

- Fabric types: weights and widths, fabric terms
- Preparatory steps- preshrinking, straightening and truing
- Layouts for patterns- general guidelines, basic layouts- lengthwise, partial lengthwise, crosswise, double fold, open, combination fold
- Layouts for special fabrics- Unidirectional, bold and large prints, plaids, stripes and checks
- Pinning, marking and cutting

UNIT III: Seams and finishing of raw edges

6 Hours

This unit offers information on sewing machines, appropriate stitching guidelines, seams and various additional techniques required for finishing seams and garment edges.

Subtopics:

- Sewing machine and components of sewing machine, basic operations (upper and lower threading, needle insertion, bobbin winding)
- Relationship between needle, thread, stitch length and fabric weight
- Seam defects and remedies
- Seam classification - super imposed seam, enclosed seam, lapped seam, bound seam, flat seam and decorative seam

UNIT IV: Design & Fit

10 Hours

This unit will acquaint students with different types of garment components and fundamental of fitting.

(5 weeks)

Subtopics:

- Designing for different figure types- Triangular, Inverted triangular, Hourglass, Rectangular
- Garment Components:
 - Bodices and yokes
 - Necklines
 - Collars
 - Sleeves and cuffs
 - Plackets and fasteners
 - Pockets
- Factors affecting fit
- Evaluating fit for a basic garment and its components

PRACTICAL **(Credits 2; Hours 60)**

1. Designing garments for self

This unit will provide hands-on skill for making basic slopers and its adaptation to create style variations.

- Development of bodice, Sleeve and skirt for self
- Develop style variations in sleeves and collars for self
- Adaptation of standard skirt block (A-line, Flared, pleated, gathered)
- Adaptation of standard women's bodice block using dart manipulation (single and double dart and dart-tuck)
-

2. Sewing techniques

This unit will train the students in operating a sewing machine efficiently and perform basic sewing processes required for garment assembly. As a result, student will be able to stitch a simple garment for self.

- Introduction to sewing machine and basic sewing exercises
- Development and identification of seams with emphasis on Additional techniques for straight, curved and cornered seams: clipping, notching, grading, seam balancing, trimming, under stitching, stay stitching, trimming a corner, handling unequal seams (easing)
- Plackets and fasteners
- Edge finishing (binding, facing)
- Handling Fullness- dart, dart-tuck, gathers, pleats
- Construction of skirt for self
- Construction of skirt top/ kurta for self

Essential readings

1. Armstrong, H.J., (2009), *Pattern Making for Fashion Design*, Harper Collins Publishers Inc., New York.
2. Liechty, E.G., Potterberg, D.N., Rasband, J.A., (2010), *Fitting and Pattern Alteration: A Multimethod Approach*, Fairchild Publications, New York.
3. Stamper, A.A., S. H. Sharp and L.B. Donnell, (1986), *Evaluating Apparel Quality*, Fairchild Publications,
4. Brown, Patty and Rice Janett (1998) *Ready to Wear Apparel Analysis* (2nd Edition), Prentice Hall.

Suggested readings

1. Jennifer Lynne & Matthews-Fairbanks, (2018), *Pattern Design: Fundamentals*, Fairbanks Publishing LLC.
2. Reader's Digest (Eds.). (2002), *New Complete Guide to Sewing*, Reader's Digest Association (Canada) Ltd. Montreal.

DISCIPLINE SPECIFIC ELECTIVE
DSE HP 3E1: Basics of Design Application

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 | | |
| Basics of Design Application | 4 | 2 | 0 | 2 | XII Pass | NIL |

Learning Objectives

1. To comprehend the concept of design as applicable to interior spaces.
2. To develop proficiency in making working and presentation drawings to be used by interior space design professional.
3. To understand the application of materials and finishing for creating an aesthetic and sustainable interior

Learning Outcomes

The students would be able to:

1. Students will be able to comprehend the concept of design applicable to interior spaces.
2. Students will gain proficiency in preparing presentation drawings to be used in design profession.
3. Students will understand the application of materials and finishes for designing interior spaces

SYLLABUS OF DSE HP 3E1

THEORY
(Credits 2; Hours 30)

UNIT I: Design Fundamentals

6 Hours

This unit will develop understanding regarding basics of design.

Subtopics:

- Objectives of design
- Types of design: structural & decorative
- Elements of design
- Principles of design

UNIT II: Design Application in Interiors

8 Hours

This unit will acquaint students with the concept & application of color, lighting & furnishes in interior spaces.

Subtopics:

- Color in design
- Lighting for interiors
- Surface finishes – wall, floor, ceilings (types and usage)

UNIT III: Furniture & Furnishings

8 Hours

This unit will help students learn about furniture, furnishings and accessories in interiors.

Subtopics:

- Furniture – styles, types, construction, selection and purchase, arrangement, care and maintenance
- Furnishings – types & selection
- Accessories

UNIT IV: Contemporary trends

8 Hours

This unit will acquaint students with the contemporary trends in interiors.

Subtopics:

- Recent trends in design: Bio-Mimicry, Bio-philic
- Sustainable design & materials

PRACTICAL (Credits 2; Hours 60)

1. Introduction to drawing interiors:

- Basic drawing techniques
- Concept of scale
- Lettering

2. Presentation drawings:

- Drawing & identification of common symbols
- Drawing 1 BHK floor plans & elevations

3. Rendering:

- Rendering Techniques
- Application of rendering in plans

Essential readings:

1. Chris Grimley, Universal principles of Interior Design , (2022), Rockport publishers .
2. Frida Ramstedt ,(2020)Interior Design Handbook ,Random House publishers
3. S. Goel, P.Seetharaman ,A.Kakkar, Manual on Interior space designing (2015) (ISBN No: 81-88901-44-X),Elite publishers, Delhi
4. M.Pratap Rao (2000), Interior Design Principles and Practice, Standard Publishers Distribution, Delhi.
5. S.K Duggal,(2017) , Building Materials, CRC Press, Delhi.
6. Joseph De Chiara, J. Panero, M. Zelnik(2001), Time Saver Standards for Interior Design and Space Planning , second edition McGraw Hill.
7. Premavathy, Seetharam. & Pannu, Parveen (2005). Interior Design and Decoration. CBS Publishers & Distributers, New Delhi

Suggested readings:

1. CPWD, Manual on Door and Window Details for Residential Building
2. CPWD, Manual on Accessible Built EnvironmentFaulkner, S. and Faulkner,R, Inside Today's Home, Rinehart Publishing company, New York.