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Department of Home Science SEMESTER – II

B.SC. (Hons.) Home Science

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Category I

[UG Programme for Bachelor in BSc. Home Science (Hons.) degree in three years]

Eligibility criteria – Class XII pass with science as one of the subject. (Details on DU Website)

Pre-requisite – None

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

DISCIPLINE SPECIFIC CORE COURSE – 4 (DSC HS 204): FASHION STUDIES

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		
FASHION STUDIES DSC HS 204	4	3	-	1	12 th Pass	NIL

Learning Objectives

1. To understand the basics of fashion and the fashion industry.
2. To impart knowledge about functions and theories of clothing.
3. To develop sensitivity towards selection of garments and garment design.

Learning Outcomes

The student will be able to:

1. Identify the role and functions of clothing and recognize the factors affecting the selection and evaluation of clothing.
2. Explain the concept of fashion, its terminology, sources and factors affecting it.
3. Being aware of global fashion centres.
4. Apply the knowledge of elements and principles in design interpretation.

SYLLABUS OF DSC-4

Unit I: Clothes and us

(4 weeks)

This unit introduces the student to key concepts of how and why people started to wear clothes, and what factors are at play in the current times for selecting clothing for the individual.

- Clothing functions and theories of origin
- Clothing terminology
- Individuality and conformity, conspicuous consumption and emulation
- Body shapes
- Selection and Evaluation of quality of ready-made garments
- Selection of clothes for self

Unit II: Understanding fashion

(4 weeks)

This unit will deal with the basic concepts in understanding fashion, from key terms to the why and how of fashion and more contemporary knowledge of fast and slow fashions.

- Fashion cycle
- Terminology
- Theories of fashion adoption
- Sources of fashion research
- Factors favoring and retarding fashion
- Role of a Designer
- Fast Fashion: Characteristics of Fast Fashion, Fast Fashion and Consumer
- Slow Fashion: Characteristics, Slow Fashion as a process, importance of changing from fast to slow fashion

Unit III: Design in Garments

(3 weeks)

This unit orients the student from a design perspective in garments; the various elements that comprise a garment and the various principles that govern and guide in developing a good design.

- Structural and Decorative Design
- Elements of Design
- Principles of Design

Unit IV: Fashion

(4

weeks)

This unit will apprise the student on the forecasting process for fashions, functioning of the industry and various garment categories for production.

- Structure and Functioning of Fashion Industry
- Forecasting: Fashion seasons
- Garment Categories
- Fashion Centers
- Careers in Fashion

ESSENTIAL READINGS

- Brown, Patty, Rice J., 1998, *Ready to Wear Apparel Analysis*. Prentice Hall.
- Marshall S G, Jackson H O, Stanley MS, Kefgen M & Specht T, 2009, *Individuality in Clothing & Personal Appearance, 6th Edition*, Pearson Education, USA.
- Tate S.L., Edwards M.S., 1982, *The Complete Book of Fashion Design*, Harper and Row Publications, New York.
- Fringes G.S., 1994, *Fashion From Concept to Consumer, 6th edition*, Prentice Hall, New Jersey.

SUGGESTED READINGS:

- R. Andrew, 2018, *Key Concepts for Fashion Industry*, Bloomsbury Publishing, India

PRACTICAL
(Credit 1; Periods 30)

Unit I: Hand stitches

(7 weeks)

This unit will impart hands-on skill for making small products using upcycling of used articles of clothing or home textiles and how value addition may be achieved in garments by using popular embroidery stitches.

- Prepare samples of –
 - Basic hand stitches for creating a seam and edge finishing.
 - Decorative Hand Stitches
- Develop an upcycled product

Unit II: Elements & Principles of Design
weeks)

(8

This unit will train the students to identify the various elements of a design that a garment uses and the principles that are creating an aesthetic design. Eventually a student will be able to effectively use these elements and principles of design to create well designed garments.

- Create a collection of garments for analysis from print and visual media.
- Analyze the various elements that comprise the garments.
Identify the various principles of design used in the selected garments

ESSENTIAL READINGS

- Fringes G.S., 1994, *Fashion From Concept to Consumer*, 6th edition, Prentice Hall, New Jersey.
- Marshall S G, Jackson H O, Stanley MS, Kefgen M & Specht T, 2009, *Individuality in Clothing & Personal Appearance*, 6th Edition, Pearson Education, USA.

SUGGESTED READINGS:

- Reader's Digest (Eds.). 2002, *New Complete Guide to Sewing*, (Canada) Ltd. Montreal.

DISCIPLINE SPECIFIC CORE COURSE – 5 (DSC HS 205): FUNDAMENTALS OF RESOURCE 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		
FUNDAMENTALS OF RESOURCE MANAGEMENT DSC HS 205	4	3	-	1	12th Pass	NIL

Learning Objectives

1. To enable students to understand the fundamentals of resource management in changing scenario and available resources, their uses and conservation.
2. To understand the processes of management in a scientific manner for the judicious use of resources.

Learning Outcomes

Students will be able to:

1. Comprehend the fundamentals of resource management in the changing scenario.
2. Familiarize with the available resources, their uses and conservation.
3. Utilize resources optimally in a prudent manner.
4. Understand the processes of management in a scientific manner for the use of resources.

THEORY

Unit I: Introduction to management

(4 weeks)

Unit Description: The focus of this unit would be on understanding the concept of management, scope and approaches of management in context to changing scenario.

Subtopics:

- Concept, nature, universality and scope of management
- Theories and Approaches to management.
- Ethics in management
- Motivation in management

UNIT II: Understanding resources

(3 weeks)

Unit Description: This unit attempts to acquaint the students with the available resources, their uses and conservation approaches.

Subtopics:

- Meaning, classification and characteristics of resources.
- Resource conservation- maximizing use of resources, factors affecting utilization of resources.
- Family life cycle in context to resource use: Time, energy, money.

Unit III: Functions of management: An overview

(4 weeks)

Unit Description: This unit will orient the students in understanding the functions and processes of management in a scientific manner for the optimization of resources.

- Decision Making: Concept, significance and steps involved in decision-making process.
- Planning: Nature and characteristics, classification of plans & steps in planning.
- Organizing: Concept, significance and steps involved in organizing process.
- Supervision: Types of supervision (directing & guiding), factors of effective supervision.
- Controlling: Types of control, steps in controlling, requirements of effective control.
- Evaluation: Types and steps of evaluation.

Unit IV: Management of time and energy resources

(4 weeks)

This unit will familiarize students with effective management of time and energy resources and their functional use in day-to-day life.

- Time Management: Concept, tools of time management, types of time plans, steps in making a time plan.
- Energy Management: Concept, principles of body mechanics, types of fatigue.
- Work Simplification: Techniques, Classes of Change.

ESSENTIAL READINGS

- Combe, C. (2014). *Introduction to management*. Oxford University Press.
- Drucker, P. F. (2007). *Management: Tasks, responsibilities, practices*. Transaction Pub, ISBN-13: .0750643894-978
- Goel, S. Ed. (2016). *Management of resources for sustainable development*. New Delhi: Orient Blackswan Pvt. Ltd, ISBN: 9788125063490, 9788125063490.
- Griffin, R. W. (2013). *Management: Principles and practices (11th ed.)*. South-Western Cengage Learning, ISBN: 9788131530917, 8131530914.
- Hill, C. W., & Stevenane. (2006). *Principles of management (1st ed.)*. McGraw-Hill/Irwin. ISBN: 9780073530123.
- Koontz, H., & O' Donnel, C. (2005). *Management: A systems and contingency analysis of managerial functions*. New York: McGraw-Hill Book Company, ISBN-13: .0070853775-978
- Moore, T. J. (2021). *Family resource management (4th ed.)*. ISBN-13: 978-1544370620.
- Rao, V.S.P. (2008). *Principles & practice of management*. Konark Publishers Pvt. Ltd, ISBN-13: .8122000283-978

SUGGESTED READINGS:

- Jyoti, A. (2009). *Principles of management*. Gennext Publication. ISBN-13: 9789380222127.
- Kreitner, R. (2009). *Management*. Canada: Houghton Mifflin Harcourt Publishing Company.
- Nickel, D. (2002). *Management in family living, 4e (4th ed.)*, ISBN-13: -9788123908519.
- Robbin, S.P. (2009). *Fundamentals of management*, 11th edition, Pearson Education.
- Steidl, R. & Bratton, E. (1968). *Work in the Home*. USA: John Wiley & Sons, Inc, ISBN-13: 9780471820857.

PRACTICAL

Unit I: Identification and Development of managerial competencies (7 weeks)

Activities:

- Micro Lab and Who am I
- SWOC analysis
 - Self
 - Case studies: Individuals
 - Case studies: Organizations
- Building Decision making abilities
- Team building management games
- Decision Making: Case Analysis

Unit II: Management of Time and Energy (8 weeks)

Activities:

- Time Management:
 - Evaluation of time plans through case analysis:

- Case Study-1
- Case Study-2
- Analysis of time use pattern of self
 - Preparation and evaluation of time plans
- Work improvement using time and motion study techniques
 - pathway chart or travel chart / process chart - observe, record, and analyze an activity.
 - pathway chart or travel chart / process chart - observe, record, and analyze an activity with improvement.

ESSENTIAL READINGS

1. Goel, S. Ed. (2016). *Management of resources for sustainable development*. New Delhi: Orient Blackswan Pvt. Ltd, ISBN: 9788125063490, 9788125063490.
2. Arora, R., Magu, P., Singh, P., Meghna, Gupta, S. (2013). *Resource Management: An Introductory Manual*. R. Gangadharan of Elite Publishing House Pvt. Ltd., Daryaganj, ISBN No: 978-81-88-901-50-0.
3. Drucker, P. F. (2007). *Management: Tasks, responsibilities, practices*. Transaction Pub, ISBN-13: 0750643894-978

DISCIPLINE SPECIFIC CORE COURSE – 6 (DSC HS 206): LIFE 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		
LIFE SCIENCE FOR HOME SCIENCE DSC HS	4	2	-	2	12 th Pass	NIL

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Learning Objectives

- To impart the basic knowledge of animal diversity, plant diversity and its significance for human life.
- To make students aware of the fundamental process of plant growth and its regulation.
- To enable students to learn about methods of sustainable agriculture, plant conservation and propagation.
- To make students aware of immunology, genetics and biotechnology.

Learning Outcomes

- The students would be able to identify and appreciate some common plant and animal diversity in their vicinity.
- The students would understand the fundamentals of genetics and its significance in human life.
- The students would gain hands-on experience and training on gardening and plant propagation techniques along with the artificial methods of vegetative propagation.
- The students would acquire the basic knowledge of biotechnology along with recent trends and its applications in agriculture, animal husbandry and human welfare and associated ethical and social issues.
- The students would acquire knowledge about various zoonotic diseases, pandemics and learn about its control and management.
- The students would understand the importance prenatal screening and natal health.

THEORY

Section A – Botany

Unit I: Introduction to Plant Kingdom

(4 weeks)

Plant kingdom, plant growth and regulation, Economically Important Plants

- Introduction to Plant Diversity
- Economic importance of Microbes (Industrial & Household Products, Sewage treatment, Biogas production, Biocontrol agents, Bio-fertilizers)
- Angiosperm plants: Morphology (Parts of plants with modifications and Life cycle)
- Plant Nutrition and Soil: Essential Elements and Functions, Nutrient cycles, Human Impact on nutrient cycles and effects of pollution
- Plant growth and Development- Regulation and control (Hormones)
- Enzymes: principles and biotechnological applications
- Introduction to Economically important plants: Food Crops, Fibre Crops, Medicinal Plants, Oil Crops, Timber Plants

Unit II: Propagation, Gardening and Conservation of Plants (3 weeks)

Plant propagation methods, Sustainable Agriculture, Biotechnology in Agriculture

- Seed Propagation
- Vegetative Propagation: Cuttings – stem leaf and root, Layering, Grafting, Tissue Culture
- Gardening: Concept and Types with example of Kitchen Garden, Green Roofs, Maintenance of plants
- Sustainable Agriculture: Concept of Organic farming, IPM, Biopesticides, Climate smart agriculture, Seed bank, Urban Agriculture
- Concept of Sustainable development with Sustainability Indicators
- Role of Plants in Air Pollution Control
- Principles and Applications of biotechnology in agricultural crops

Section B – Zoology

Unit III: Animal Diversity and Human Needs (4 weeks)

Animal diversity and its importance to humans

- Types, Structure and Function of Animal Cell and its components (Chromosomes and Nucleus)
- Animal diversity and its distribution
- Animals and their ecosystem services: role of animals in soil health, pollination, biological control of pests, food security
- Threatened species of animals and their conservation
- Zoonotic and Parasitic diseases- Life cycle, pathogenesis and control. (*Plasmodium*, *Giardia*, *Entamoeba*, *Taenia*, *Ascaris*, *Covid-19*, *malaria*, *tuberculosis*)
- Animals as economic resources: sericulture, apiculture, aquaponics (concept and applications)

Unit IV: Immunity, Genetics and Biotechnology (3 weeks)

Basics of human immunity, Pandemics, genetic diseases, application of biotechnology, developmental biology

- Basics of Human Immunity: introduction to humoral and cell mediated immunity; Vaccination
- Introduction to Pandemics and its management
- Genetic diseases and importance of Genetic counselling
- Birth defects and its causes (genetic and environmental factors)
- Application of biotechnology: Stem cells, cloning and animal improvements

PRACTICAL

SECTION A- BOTANY

1. Preparation of soil mixture, potting and re-potting
2. Raising of healthy seedlings in a nursery bed
3. Assessment of soil quality: determination of soil pH, test for nitrates, nitrites
4. Propagation of plants through stem cutting, air layering and underground layering
5. Propagation of plants by approach grafting and veneer grafting

6. Identification and classification of economically important Food crops, Medicinal plants
7. Identification and classification of economically important plants: Fibre crops, Timber plants and Oil crops
8. Identification, Care and maintenance of important plants in controlling air pollution
9. A visit to Home Garden/ Organic farm/ Tissue culture Lab
10. Demonstration of Urban Home Gardens/ Kitchen Garden / Nutrition Garden
11. Study of techniques of biotechnology through audio visual aids

SECTION B- ZOOLOGY

1. Study of cell Structure through temporary slides: Blood Cells
2. Study of cell Structure through temporary slides: Neurons
3. Study of cell cycle stages through permanent slides: Mitosis
4. Study of cell cycle stages through permanent slides: Meiosis
5. Identification of few common animals and birds in the human environment
6. Estimation of species richness and abundance of animal/ birds in the human environment using point count method
7. Estimation of species richness and abundance of animal/ birds in the human environment using transect method
8. Soil biomonitoring using Burlese-Tullgren method: concept and importance of micro and macrofauna in soil health
9. Detection of chromosomal abnormalities: concepts and interpretation of diagnostic tests: Karyotyping
10. Detection of chromosomal abnormalities: concepts and interpretation of diagnostic tests: Dual marker test
11. Visit to any one of the following: Aquaponic facility/organic farm/ bee farm
12. Case study of a zoonotic/ parasitic disease: COVID-19 pandemics/ bird flu

ESSENTIAL READINGS

- Jordan E. L. and Verma P. S., 2009. Invertebrate Zoology, S. Chand and Co. Ltd, New Delhi.
- Park K., 2016. Textbook of preventive and social medicine. Banarsidas Bhanot Publishers.
- Raven P. and Johnson G., 2010. Biology. Tata McGraw Hill Publication, New Delhi.
- Singh J. S, Singh S. P. and Gupta S. R., 2017. Ecology, Environment Science and Resource Conservation. S. Chand (G/L) & Company Ltd, India.
- Soni N. K. and Soni V., 2010. Fundamentals of Botany. Tata McGraw Hill Publication, New Delhi.

SUGGESTED READINGS

- Chadha K. L.2012. Handbook of Horticulture. ICAR Publication, New Delhi.
- Gopaldaswamianger K.S. 1991. Complete gardening in India, Messers Nagaraj and Co., Madras.
- Gupta R. 2015. Fundamentals of Zoology: Theory and Practice. Elite Publishing House Pvt. Ltd., New Delhi.

- Hartman H.T and Kester D. 1986. Plant Propagation: Principles and Practices Prentice Hall of India Pvt. Ltd., New Delhi.
 - Kotpal R. L. 2000. Modern Textbook of Zoology, Rastogi Publications, Meerut.
 - Magurran, A. E. 1988. Ecological Diversity and Measurement. Croom Helm Limited, Australia.
 - Upadhyay R. 2017. Elements of Plant Science, Elite Publishing House, New Delhi.
- Vij, U. and Gupta, R. 2011. Applied Zoology Phoenix Publishing House, New Delhi

B.Sc (Prog.) Home Science (SEMESTER - II)

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

COMMON POOL OF GENERIC ELECTIVES (GE) COURSES

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	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
Self Development and Wellbeing	4	3	-	1	12 th Pass	NIL	Home Science

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand the concepts of self-development and wellbeing
- To study theoretical perspectives and stages of self-development
- To understand framework and dimensions of wellbeing
- To understand the context and significance of managing emotions and wellbeing
- To study and understand activities for enhancing self-development and wellbeing

Learning outcomes

The Learning Outcomes of this course are as follows:

- The student will be able to understand the concept of self-development and parameters of wellbeing
- The student will be able to understand the theoretical perspectives on self-development and wellbeing
- The students will be able to demonstrate skills in developing and using contextually appropriate methods to promote well-being
- The student will be able to enhance their self-development and wellbeing through reflection and introspection

SYLLABUS OF GE HS 002

Unit I: Understanding the self (4 weeks)

To introduce various approaches and theories of self.

Subtopics:

- Definitions and concepts of self
- Perspectives on self
- Phases of self-development
- Theories of self-development

Unit II: Components of self-development (3 weeks)

To understand various aspects of self-development.

Subtopics:

- Components of Self- An integrated approach
- Self-concept and self esteem
- Social self and development
- Factors influencing self

Unit III: Concept, approaches and importance of wellbeing (4 weeks)

To understand basic definitions and concepts of wellbeing and interlink these with self-development.

Subtopics:

- Definitions and concept of Wellbeing
- Frameworks and dimensions of wellbeing
- Health and Wellbeing
- Happiness and Wellbeing

Unit IV: Promoting self-development and wellbeing (4 weeks)

To understand significance of activities related to wellbeing.

Subtopics:

- Managing relationships and emotions
- Happiness and emotional wellbeing
- Mindfulness and decision making
- Academics and Work-life balance
-

Practical component (if any)

PRACTICAL (Credit 1; Periods 30)

- An activity on self-reflection from early childhood to adolescence.
- Focused group discussion on self and wellbeing.
- Narrative analysis/: biographies and autobiographies/ Diagrammatic representation of the self)

- Selected exercises to promote wellbeing: Music, dance, literature, poetry, art, yoga, meditation, play, and theatre
- Psychometric tests- on self and wellbeing
- Session on basics of counselling
- Profile an organisation work in sector of counselling

Essential Readings

1. Burkitt, I. (2008). *Social selves: Theories of self and society*. Sage
2. Emmons, R. A., & Shelton, C. M. (2002). Gratitude and the science of positive psychology. *Handbook of positive psychology*, 18, 459-471.
3. Kakar, S. (1978). *The inner world*. Delhi: Oxford University Press.
4. Kakar, S. and Kakar, K. (2007). *The Indian: The portraits of a people*. London: Penguin/Viking.
5. Mathews, G., & Izquierdo, C. (Eds.). (2008). *Pursuits of happiness: Well-being in anthropological perspective*. Berghahn books.
6. Rice, F. P. (2007). *Adolescent: Development, Relationship and Culture*.
7. Sabharwal, N., Ranganathan, N., Singh, I. V., & Basu, S. (2017). *Unit-1 Dimensions of Self: An Integrated Approach*.
8. Santrock, J. (2010). *LifeSpan Development: A Topical Approach*, New Delhi: Tata McGraw Hill.
9. Snyder, C. R., Lopez, S. J., Edwards, L. M., & Marques, S. C. (Eds.). (2020). *The Oxford handbook of positive psychology*. Oxford university press.
10. Snyder, C.R., & Lopez, S.J. (2007). *Positive psychology: The scientific and practical explorations of human strengths*. Thousand Oaks, CA: Sage.
11. Winnicott, D. W. (2012). *The family and individual development*. Routledge.
12. Gough, I., & McGregor, J. A. (Eds.). (2007). *Wellbeing in developing countries: from theory to research*. Cambridge University Press.

Suggested Readings

1. Snyder, C.R., Lopez, S.J., Pedrotti, J.T. (2011). *Positive psychology: The scientific and*
2. *Practical explorations of human strengths*. New Delhi: Sage.
3. Seligman, M. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being*, Atria Books. Peterson, C. A. (2006). *A Primer in Positive Psychology*, Oxford University Press.
4. Nettle, D.S. (2006). *Happiness: The Science Behind Your Smile*, Oxford University Press.
5. Lyubomirsky, S. (2013). *The Myths of Happiness: What Should Make You Happy, but Doesn't, What Shouldn't Make You Happy, but Does*, Penguin.

GENERIC ELECTIVES (GE HS 006): NUTRITION FOR THE FAMILY

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	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
Nutrition for the Family	4	3	-	1	12 th Pass	NIL	Home Science

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable students in understanding the principles of planning nutritionally adequate diets.
- To acquire knowledge about the nutritional needs and concerns of an individual throughout the life cycle.
- To make them exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

Learning outcomes

The Learning Outcomes of this course are as follows:

The students will be able:

- The student will be able to comprehend the principles of planning nutritionally adequate diets.
- The student will be able to acquire knowledge about the nutritional needs and concerns of an individual throughout the life cycle.
- The student will be able to exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

SYLLABUS OF GE HS 006

Unit I: Basics of nutrients requirements (2 weeks)

Concepts of estimated average requirements, recommended allowances and methods of assessing nutrient requirements in general for Indians

Subtopics:

- Concept of EAR, RDA and TUL
- Methods of assessment of nutrient requirements

Unit II: Principles of Meal Planning (2 weeks)

Concepts of food groups and food exchange lists for meal planning, factors affecting meal planning will be dealt with. Students will also be introduced to dietary guidelines for Indians.

Subtopics:

- Food groups
- Food exchange list
- Factors affecting meal planning and food related behaviour
- Dietary guidelines for Indians

Unit III: Nutrition during adulthood (6 weeks)

Physiological influence on nutrient requirements during adulthood (EAR/RDA), energy balance in adulthood, nutritional concerns and changes in requirements during pregnancy, lactation, and old age will be dealt with.

Subtopics:

- Adult men and women
- Pregnant women
- Lactating mothers
- Elderly

Unit IV: Nutrition during childhood (5 weeks)

Physiological changes during infancy, childhood and adolescence – growth and development; and their influence on nutrient requirements (EAR/RDA), concepts of nutrient requirements during these ages and nutrition concerns keeping in mind the changing food habits and importance of physical activity will be dealt with.

Subtopics:

- Infants
- Preschool children
- School children
- Adolescents

Practical component (if any)

PRACTICAL **Credit 1; Periods 30)**

Introduction to meal planning:

- Rich sources of nutrients
- Use of food exchange lists

Planning nutritious diets for:

- Adult (Male and Female)
- Pregnant and Lactating woman
- Pre-schooler
- Adolescent
- Elderly

Planning and cooking of nutrient rich snacks/dishes for:

- Infants (Freshly prepared complementary foods)
- Packed tiffin
- Pregnancy/Lactation

Essential Readings

1. Chadha R and Mathur P eds. (2015). Nutrition: A Lifecycle Approach. New Delhi: Orient Blackswan
2. ICMR-NIN (2020). Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020
3. Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Delhi: Elite Publishing House Pvt. Ltd.
4. Longvah T, Ananthan R, Bhaskarachary K and Venkaiah K (2017). Indian Food Composition Tables. National Institute of Nutrition, Indian Council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India, Hyderabad.
5. NIN (2011). Dietary Guidelines for Indians-A manual. Second Edition. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
6. Puri S, Bhagat A, Aeri, BT, Sharma A (2019). Food Exchange List: A Tool for Meal Planning. New Delhi: Elite Publishing House.
7. Seth V, Singh K, Mathur P (2018). Diet Planning Through the Lifecycle Part I: Normal Nutrition- A Practical Manual. 6th Edition. New Delhi: Elite Publishing House.
8. Siddhu, A, Bhatia, N, Singh, K, Gupta, S (2017). Compilation of Food Exchange List, Technical Series 6, Lady Irwin College, University of Delhi Publ. Global Books Organisation, Delhi.

Suggested Readings

1. Byrd-Bredbenner C, Moe G, Beshgetoor D, Berning J (2013). Wardlaw's Perspectives in Nutrition, McGraw- Hill International Edition, 9th edition
2. B Srilakshmi Eighth Edition (2019). Nutrition Science. New Age International Publishers.
3. Punita Sethi, Poonam Lakra (2015). Aahar Vigyan Suraksha evam Poshan. Delhi: Elite Publishing House Pvt.Ltd

GENERIC ELECTIVES (GE HS 009): GENDER AND MEDIA STUDIES

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	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
Gender and Media Studies	4	3	-	1	12th Pass	NIL	Home Science

Learning Objectives

The Learning Objectives of this course are as follows:

- To introduce the concepts relating to gender and to sensitize the students to the construction of gender.
- To highlight the various aspects in gender and development, and its dimensions, theories and approaches.
- To understand the gender-based issues of equality and equity through a study of development indices and feminist theories and perspectives.
- To learn about the inter-relationships between portrayal of women in media and the status of women as well as the role media can play in empowerment of women.

Learning outcomes

The Learning Outcomes of this course are as follows:

After studying, students will be able to:

- The student will be able to understand the concept of gender and socio-cultural practices impacting the construction of gender.
- The student will be able to understand the theories and approaches of feminism.
- The student will be able to comprehend the various aspects in gender and development, and its dimensions, theories
 - and approaches.
- The student will be able to critique the role of the media in promoting gender equity and empowerment.

SYLLABUS OF GE HS 009

Unit I: Social Construction of Gender (4 weeks)

The Unit aims to critically understand the concept of gender and socio-cultural practices impacting the social construction of gender.

Subtopics:

- Concept of gender and sex
- Socialization and construction of gender
- Patriarchal social order and status of women
- Shifts in Status of women – historical and contemporary perspectives on status of women

Unit II: Gender and Development (4 weeks)

The Unit highlights the various aspects in gender and development and focuses on its dimensions, theories and approaches.

Subtopics:

- Concept of Gender, Development and Indicators
- Approaches to women's participation in development
- Invisibility of women's work and economic participation
- Gender differentials in various sectors of development
- Life Cycle Approach to gender studies (violence against women)

Unit III: Feminism, Gender and Media (4 weeks)

This Unit focuses on historical evolution of feminism and perspectives on gender and media.

Subtopics:

- Feminist theories; A short introduction
- Gender and Media; Theoretical perspectives - portrayal and representation
- Theory of Visual Pleasure - Male Gaze (Laura Mulvey);
- Queer Theory (Judith Butler)
- Masculine Hegemony (R.W. Connell)
- Framework for gender responsive media and gender mainstreaming

Unit IV: Gender and Empowerment (3 weeks)

This Unit provides an insight on the concept of empowerment and gender equality.

Subtopics:

- Advocacy of women's rights through media
- Women's Empowerment; Historical and Contemporary Perspectives
- Women's Legal Rights and Redressal System
- Media laws related to women

Practical component (if any)

PRACTICAL (Credit 1; Periods 30)

- Exercises on sex and gender
- Data interpretation on gender-related indicators
- Review and content analysis of various Media: print, films/documentaries on gender issues and their critical analysis.
- Case studies on representation of gender in mainstream media from a gender perspective (print, broadcast and new media)
- Critical analysis of Laura Mulvey's notion of Male Gaze

Essential Readings

- Bhasin, Kamla (2000). *Understanding Gender*. New Delhi. Kaali for Women.
- Butler, J. (1999). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society*, 19(6), 829–859.
- Human Development Reports. (n.d.). Hdr.undp.org. <https://hdr.undp.org/en/towards-hdr-2022>
- Mulvey, L. (1989). Visual Pleasure and Narrative Cinema. In *Visual and other pleasures* (pp. 14-26). Palgrave Macmillan, London.

Suggested Readings

- Beauvoir, S. (2015). *The Second Sex*. London: Vintage Books.
- Chattopadhyay, S (2018). *Gender Socialization and the Making of Gender in the Indian Context*. New Delhi: Sage Publications.
- Dube, L. (2001). *Anthropological Explorations in Gender-Intersecting Fields*. New Delhi: Sage Publications.
- Ghadially, R (2007). *Urban Women in Contemporary India*. New Delhi: sage Publications.
- Goel, A. (2004). *Education & Socio-Economic Perspectives of Women Development and Empowerment*. New Delhi: Deep & Deep.
- Goel, A. (2004). *Organisation & Structure of Women Development and Empowerment*. New Delhi: Deep & Deep.
- Goel, A, Kaur, A and Sultana, A (2006). *Violence against women: Issues and Perspectives*. New Delhi, Deep & Deep Publishers.
- Khanna, S. (2009). *Violence against Women and Human Rights*. Delhi: Swastik
- Krishna, S. (Ed) (2003) *Livelihood and Gender Equality in Community Resource Management*. New Delhi: Sage Publications.
- Madhi, V. J et al (2014) *Women's Studies in India*. New Delhi: Rawat.
- Sohoni, K Neeraja, (1994), *Status of Girls in Development Strategies*, New Delhi, Har-Anand Publications.

GENERIC ELECTIVES (GE HS 014): FABRIC STUDY

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	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
Fabric Study	4	3	-	1	12 th Pass	NIL	Home Science

Learning Objectives

The Learning Objectives of this course are as follows:

- To briefly study the fabric components.
- To enhance awareness of various commercially available fabrics.
- To understand the properties and end uses of the various types of fabrics.

Learning outcomes

The Learning Outcomes of this course are as follows:

After studying, students will be able to:

- The student will be able to understand the components of a textile fabric.
- The student will be able to identify the various commercially available fabrics.
- The student will be able to appropriately select fabrics based on their properties, cost and recommended end-use.

SYLLABUS OF GE HS 014

UNIT I: Fabric components

(3 weeks)

In this unit, students will be able to understand the basics of fibres, yarns and fabric.

Subtopics:

- Fibres and yarns
- Methods of fabric construction

Fabric finishing- dyeing, printing, aesthetic and functional finishes

Unit II: Commercially important woven fabrics: Identification, properties and end use (7 weeks)

In this unit, students will gain an understanding of various types of woven fabrics

Subtopics:

- **Cotton and other Cellulosic Fabrics**

- Lightweight fabrics- Mulmul, Voile, Organdy, etc.
- Medium weight fabrics- Cambric, Poplin, Cotton, Rubia, Denim, Chambray, Seer-sucker, Eyelash dooby, Schiffli, Jute, Linen, etc.
- Heavy weight fabrics- Canvas, Casement, Gabardine, Damask, Corduroy, Velvet, Terry, etc.

- **Silk and Wool fabrics**

- Lightweight fabrics- Silk Crepe, De Chine, Georgette, Chiffon, Organza, etc.
- Medium/Heavy weight fabrics- Flat silk, Satin, Taffeta, Dupion, Shantung, Raw silk, Tussar silk, Habutai silk, Tweed

- **Man-made fibre and blended fabrics**

Art silk, Lizzy-Bizzy, Terivoile, Semi-crepe, Moss crepe, Artificial chiffon, Artificial georgette, Terrycot, Poly-satin, Lycra, Modal, Viscose

Unit III: Commercially Important Knitted and Non-woven fabrics: Identification, properties and end use (3 weeks)

In this unit, students will learn about various types of knitted and non-woven and other types of fabrics

Subtopics:

- Knitted Fabrics- Knitted Terry, Jersey, Rib Knit, Interlock knit, Pique, Velour, Scuba, Fleece, etc.
- Non-wovens- Different types and weights
- Others- Leatherette, Suede, Nets and Laces

Unit IV: Traditional Indian Fabrics: Identification, properties and end use (2 weeks)

In this unit, students will be learn to identify various types of traditional Indian fabrics

Subtopics:

Selected woven, embroidered, painted, printed and dyed traditional Indian textiles.

Practical component (if any)

PRACTICAL (Credit 1; Periods 30)

Unit I: Identification of various types of fibres, yarns, fabrics and weaves

- Learn to identify the different components of a fabric, its construction and other essential properties

Subtopics:

- Identification of common textile fibres
- Identification of textile yarns
- Identification of fabric types: Woven, Knitted, Non-Wovens and others
- Identification of fabric weave
- Identification of various types of woven fabrics in terms of Weight
- Thread Count

Unit II: Collection of swatches for portfolio preparation of woven, knitted, non-woven and traditional Indian fabrics

Learn to recognise various types of commercially available fabrics

Subtopics:

- Preparation of portfolio of commonly available fabrics
- Commercially important Woven Fabrics

Commercially important Knitted, Non-Woven and other fabrics o Traditional Indian Fabrics

Essential Readings

- Corbman P. B., (1989), Textiles- Fibre to Fabric, 6th edition, McGraw Hill, New York.
- Hollen N., Saddler J., Langford A.L., Kadolph S.J., (1988), Textiles, 6 th Edition, Macmillan Publishing Company New York, USA
- Joseph, M.L., (1988) Essentials of Textiles (6th Edition), Holt, Rinehart and Winston Inc., Florida.
- Rastogi, D. (Ed.) and Chopra, S. (Ed.), (2017), Textile Science, Orient Black Swan.
- Sekhri S., (2011) Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning, Delhi.
- Chattopadhyay, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi.

Suggested Readings: (Practical)

- Corbman P. B., (1989), Textiles- Fibre to Fabric, 6th edition, McGraw Hill, New York.
- Chelna Desai, 1988, Ikats Textiles of India, Chronicle Books, India.
- Pizzuto's J.J. "Fabric Science", Fairchild Publication, New York.
- Hollen N., Saddler J., Langford A.L., Kadolph S.J., (1988), Textiles, 6th Edition, Macmillan Publishing Company New York, USA
- Das, Shukla, 1992, Fabric Art- Heritage of India, Abhinav Publications, N Delhi.
- Chelna Desai, 1988, Ikats Textiles of India, Chronicle Books, India
- Tholia A., (2013) Understanding Fabrics- A practical Approach, 2nd edition, Sarv

GENERIC ELECTIVES (GE HS 018): INNOVATIVE DESIGN PRACTICES

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	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
Innovative Design Practices	4	3	-	1	12 th Pass	NIL	Home Science

Learning Objectives

The Learning Objectives of this course are as follows:

- To sensitize students towards innovation in design to improve the quality of life of users as well as comply with environment protection.
- To stimulate the students to engage in creativity and integrate sustainability in their design endeavours.

Learning outcomes

The Learning Outcomes of this course are as follows:

After studying, students will be able to:

- The student will be able to get sensitized towards innovation and creativity through innovative and sustainable design practices and techniques.
- The student will be able to carry out development of product and prototyping from a sustainability perspective.
- The student will be able to brainstorm new product ideas in a systematic manner.

SYLLABUS OF GE HS 018

Unit I: Introduction to Innovation in Design

(3 weeks)

The focus of this unit would be on understanding the theoretical concepts related to innovation, design and creativity.

Subtopics:

- Concept of Design, Innovation, and Creativity
- Theories and principles of design and innovation
- Challenges to innovation

Unit II: Methods and techniques for Innovation in Design

(4 weeks)

This unit focuses on studying the various methods and techniques used for design innovation

Subtopics:

- Understanding disruptions in innovation approaches, case analysis
- Process of creativity and design
- Methods of ideating, creating and implementing innovative design ideas

Unit III: Approaches for Sustainability in Design

(4 weeks)

This unit attempts to acquaint the students with contemporary techniques and approaches for integrating concepts of sustainability in design.

Subtopics:

- Role of sustainability in design practice
- Emerging trends and sustainable methods and techniques of design
- Sustainable Materials: reclaimed and eco-friendly composite materials
- Contemporizing traditional designs
- Circular Economy as a pathway to sustainability in design

Unit IV: Design Development and Presentation

(4 weeks)

This unit will develop competence amongst students towards creating and executing their innovative design ideas.

Subtopics:

- Critical evaluation of existing designs:
 - Products
 - Interiors and Space
- Case study of Innovative design practices related to:
 - Interiors and Space
 - Product

Practical component (if any)

PRACTICAL **(Credit 1; Periods 30)**

Unit I: Brainstorming Methods

Activities:

- Sessions on Tinkering Lab
- Engaging students in a practical setup for brainstorming
- Narration / Documentation of brainstorming sessions
- Workshop/ Field Visits- Contemporary discussion with the artists and designers

Unit II: Project on Innovative Design Idea

Activities:

- Case study on Reuse/ Recycle/ Reclaim products
- Minor project on sustainable materials
- Portfolio on Innovative Design Idea
- Description
- Relevance of the idea in present context
- Digital Presentation / Prototype of Innovative Design Idea

Essential Readings

- Brown, T. (2019). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. ISBN-13: 9780062856623
- Soni, P. (2020) *Design Your Thinking: The Mindsets, Toolsets and Skill Sets for Creative Problem-solving*.
- Jones, J. C. *Design Methods*. ISBN-13: 978-0471284963
- Ashby, M.F, Johnson, K. *Materials and Design: The Art and Science of Material Selection in Product Design*.
- Allwood, J, Cullen, J. (2011). *Sustainable Materials*.
- Desai, A, Mital, A. *Sustainable Product Design and Development*. ISBN: 9780367343217
- William McDonough and Michael Braungart (2002). “*Cradle-to-Cradle: Remaking the Way We Make Things*”, North Point Press, New York.
- Lance Hosey, (2012). “*The Shape of Green: Aesthetics, Ecology, and Design*”, Island Press, Washington, D.C.

Suggested Readings

- Norman, A.D. *The Design of Everyday Things: Revised and Expanded Edition*.
- Kaptelinin, V. *Affordances and Design*.
- Pivot. *From Concept to Product Launch: A guide to Product Development*.
- Monto Mani and Prabhu Kandachar (Eds) (2015), “*Design for sustainable well-being and empowerment: Selected Papers*”, IISc, Bangalore and TU Delft, The Netherlands.

- Papanek, V. (1984), “Design for the Real World”, 2nd Edition, London: Thames & Hudson.
- White Lemon, “365 Days of DIY”, Create Space Independent Publishing Platform, 2016.
- Jaffe, S.B et.al. (2020). Sustainable Design Basics.