DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,
CHHATRAPATI SAMBHAJINAGAR.

CIRCULAR NO.SU/B.Sc./CBC&GS/94/2024

It is hereby inform to all concerned that, the Revised syllabi prepared by the Board of Studies/ Ad-hoc Boards & recommended by the Dean, Faculty of Science & Technology, **Academic Council at its meeting held on 08 April 2024 has accepted** the following Syllabi under the Faculty of Science & Technology **as per Norms of Choiced Based Credit Grading System** run at the Affiliated Colleges, Dr.Babasaheb Ambedkar Marathwada University as appended herewith.

Sr.No.	Courses	Semester
1.	B.Sc.Zoology (Optional)	Vth & VIth semester
2.	B.Sc. Statistics (Optional)	Vth & VIth semester
3.	B.Sc.Home Science (Degree)	Vth & VIth semester
4.	B.Sc.Biotechnology (Degree)	Vth & VIth semester

This is effective from the Academic Year 2024-25 and onwards.

All concerned are requested to note the contents of this circular and bring the notice to the students, teachers and staff for their information and necessary action.

University Campus,
Aurangabad-431 004.
REF.NO.SU/2024/2685-89
Date:- 20.05.2024

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Deputy Registrar,
Academic Section

Copy forwarded with compliments to :-

1] **The Principal of all concerned Colleges,**
Dr. Babasaheb Ambedkar Marathwada University,

2] **The Director, University Network & Information Centre, UNIC, with a request to upload this Circular on University Website.**

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1] **The Director, Board of Examinations & Evaluation,** Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

2] The Section Officer,[B.Sc.Unit] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

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Dr. Babasaheb Ambedkar Marathwada University Chhatrapati Sambhajinagar- 431001

Course Structure and syllabus of third year
(V and VI semester)
(outcome-based curriculum)

Undergraduate bachelor's degree programme in
B.Sc. Home Science

Choice based credit system.

(Effective from academic year 2024-25)

Dr Swati S Ardhapurkar

Chaiman

Ad-hoc board

B.Sc.Home science

Semester V

Course code	Course title	Total periods (teaching periods/week)	Credits	Scheme of examination			
				Max marks	CIA	UA	Min marks
BHS 511	DSC-1A Household equipment	45(3/week)	2	50	10	40	20
BHS 512	Children with developmental challenges and assessment	45(3/week)	2	50	10	40	20
BHS521	Lab course based on BHS 511	45(3/week)	1.5	50	10	40	20
BHS522	Lab course based on 512	45(3/week)	1.5	50	10	40	20
BHS513	DSC-2A Food service management	45(3/week)	2	50	10	40	20
BHS514	Traditional textile, embriodory and costumes of india	45(3/week)	2	50	10	40	20
BHS523	Lab course based on 513	45(3/week)	1.5	50	10	40	20
BHS524	Lab course based on 514	45(3/week)	1.5	50	10	40	20
BHS515	DSC-3A Entrepreneurship development and management	45(3/week)	2	50	10	40	20
BHS 516	Community development	45(3/week)	2	50	10	40	20
BHS525	Lab course based on BHS515	45(3/Week)	1.5	50	10	40	20
BHS 526	Lab course based on BHS 516	45(3/week)	1.5	50	10	40	20

BHS 517	SEC-3 Sociology of working with families and community	45(3/week)	2	50	10	40	20
		585	23	650	130	520	

Semester V Total credits foe semester V :23(theory 14,laboratory 9)

Semester VI

Course code	Course title	Total periods (teaching periods/week)	Credits	Scheme of examination			
				Max marks	CIA	UA	Min marks
BHS 611	DSC-1B Women and child welfare	45(3/week)	2	50	10	40	20
BHS 612	Fashion designing and textile industry	45(3/week)	2	50	10	40	20
BHS 621	Lab course based on BHS 611	45(3/week)	1.5	50	10	40	20
BHS622	Lab course based on 612	45(3/week)	1.5	50	10	40	20
BHS613	DSC-2B Food analysis and quality control	45(3/week)	2	50	10	40	20
BH6514	Dietetics	45(3/week)	2	50	10	40	20
BHS623	Lab course based on 613	45(3/week)	1,5	50	10	40	20
BHS624	Lab course based on 614	45(3/week)	1.5	50	10	40	20
BHS615	DSC-3B Child rights and gender empowerments	45(3/week)	2	50	10	40	20
BHS 616	Participatory programme management	45(3/week)	2	50	10	40	20

BHS625	Lab course based on BHS615	45(3/Week)	1.5	50	10	40	20
BHS 626	Lab course based on BHS 616	45(3/week)	1.5	50	10	40	20
BHS 617	SEC-4 Home based catering	45(3/week)	2	50	10	40	20
		585	23	650	130	520	

Total credits foe semester VI :23(theory 14,laboratory 9)

Semester V

DSC-1A	Household Equipment's	credits 2
Code No.	: BHS 511	Max Marks : 50
Periods/ Week	: 3	credits 2

Learning Objectives: The course will make understand.

- Various types of households equipments ie electrical and non-electrical
- Functions and uses of household equipments
- Selection , use and maintenance of household equipments.

Learning Outcomes: after studying the course students will

- Gain the knowledge of various types of households equipments
- Be able to select proper equipments for household purposes.
- Be able to learn maintenance of household equipmwents.

Unit - I:

Introduction to household equipment's, Materials used for household equipments: base materials, finishes and insulating materials.

Unit- II :

Classification of equipment's Electrical (Microware oven, Refrigerator, Mixer and Grinder, Washing Machine, Vacuum Cleaner etc.) & Non-Electrical (Cooker, Gas stove, water filter etc.). Basics of electricity wiring & circuits, motors, safety devices and electrical accessories.

Unit III:

Factors affecting selection of equipment, use and maintenance of household equipments.

Unit-IV:

Energy crisis conventional and non-conventional energy sources, conservation of energy, solar household equipment's.

Books Recommended:

1. Household equipment – By Louise Jenisor Peet
2. Home appliances By Wikipedia
3. Household equipment- Selection & Management – By Wilson Patricia P.
4. Household Appliances – By Braves & Noble

5. Trouble shooting and repairing of major appliances – Eric Weiner

DSC 1A : ;labcourse on household equipment (Practical)

Code No.	: BHS 521	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

1. functions of various household equipments like refrigerator, microwave oven, mixture grinder, washing machine, vacuum cleaner, cooker, gas stove ,filter etc.

2. energy conservation by using solar equipments like solar panels for electricity, solar cooker, solar water heater etc

DSC 1A Children with Developmental Challenges & Assessment (theory)

Code No.	: BHS512	Max Marks	: 50
Periods/ Week	: 3	CREDITS 2	

Learning Objectives

- Orient the students about the need and importance of studying children with differentdisabilities and how needs of these children differ from others.
- Develop an understanding and awareness of the basic terms, issues and concepts related todisability.
- Explain students about the educational and welfare programs, facilities and services availableand the efficacy of the same.
- Develop sensitivity towards parental coping and acceptance of the situation concerningdisability in the family.

Learning Outcomes

- Explain the need and importance of studying children with different disabilities.
- Describe the causes, the characteristics, assessment and intervention of various disabilities.

- Identify the common disabilities prevalent in childhood.
- Demonstrate first- hand experience of interacting and understanding children with disabilities.
- Distinguish the education patterns between children with disability and other children.
- Describe the coping strategies adopted by parents and family while dealing with children with

  disabilities.
- Design academic and extra- curricular activities for children with special need.

Unit- I: Mentally Challenged and gifted children

a) Definition, Classification
b) Causes, characteristics, prevention
c) Educational considerations, management, intervention and rehabilitation

Unit- II: Children with sensory disabilities:- Visual and Hearing impaired and children with communication disorders

a) A Definition, Classification
b) Causes, characteristics, prevention
c) Educational considerations, management, intervention and rehabilitation.

Unit- III: Children with physical disabilities and neurological impairments.

a) Definition, Classification
b) Causes characteristics, prevention
c) Educational considerations, management, intervention, treatment and rehabilitation.

Unit- IV: Socially and emotionally maladjusted children:

a) Definition, Classification
b) Causes, characteristics, prevention
c) Management and Rehabilitation

Books Recommended (Theory and Practical)

1. Berdine W.H., Black Hurst A.E. (1985) Introduction to special education (2nd edition) Lexington, Harper Collins
2. Werner, D (1994). Disabled village children (Indian edition) New Delhi, Voluntary Health Association of India.

3. Berdine W.H., Cegelka P.T. (1980). Teaching the trainable retarded, Ohio: Bell and Howell.
4. Bhargave M. (1994). Introduction to exceptional children their nature and educational provisions, New Delhi: Sterline pub. Ltd.
5. Chattopadhyay A (1986). All India directories of educational and Vocational Training institutes for the handicapped, New Delhi: Patriot Publishers.
6. Smith D.D. (1981). Teaching the learning disabled, New Jersey Prentice Hall.
7. Suran B.G. & Rizzo J.V. (1983). Special children: An Integrative approach, London Scott foreman and Co.
8. NCERT (1987). Planning and Management of ICD programs. New Delhi.

DSC 1A : Children with Developmental Challenges & Assessment (Practical)

Code No.	: BHS 522	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

Practicals:

Developing educational tools for:

1. Mentally challenged and gifted children
2. Children with sensory disabilities.
3. Children with physical and neurological impairments
4. Socially and emotionally maladjusted children

Books Recommended (Theory and Practical)

9. Berdine W.H., Black Hurst A.E. (1985) Introduction to special education (2nd edition) Lexington, Harper Collins
10. Werner, D (1994). Disabled village children (Indian edition) New Delhi, Voluntary Health Association of India.
11. Berdine W.H., Cegelka P.T. (1980). Teaching the trainable retarded, Ohio: Bell and Howell.
12. Bhargave M. (1994). Introduction to exceptional children their nature and educational provisions, New Delhi: Sterline pub. Ltd.
13. Chattopadhyay A (1986). All India directories of educational and Vocational Training institutes for the handicapped, New Delhi: Patriot Publishers.
14. Smith D.D. (1981). Teaching the learning disabled, New Jersey Prentice Hall.
15. Suran B.G. & Rizzo J.V. (1983). Special children: An Integrative approach, London Scott foreman and Co.
16. NCERT (1987). Planning and Management of ICD programs. New Delhi.

DSC 2A Food Service Management (Theory)

Code No.	: BHS 513	Max Marks	: 50

Periods/ Week : 3 credits 2

Learning objectives:

- Understand the organization in a hospital dietary service.
- Gain knowledge on planning and organization of work in a dietary department.
- Comprehend the basic concepts in financial and personnel management.
- Know the different styles of food service.
- Develop managerial skills.

Learning outcomes:

After completion of the course the student will be able to

- Suggest an efficient design by effective allocation of space to ensure smooth work flow in a hospitaldietary.
- Plan and organize food production and service in a hospital dietary by effective utilization ofresources.
- Implement attributes of financial and personnel management.
- Acquire good managerial skills.

Unit- I: Types of Food service management- Styles of food services, Floor planning & layout

Unit-II: Principles, functions & tools of Management:

- Personal management – Selection & Training, Desirable qualities, personal appearances.
- Financial management- terms used, budgeting & account keeping

Unit-III:

- Selection, care & use of equipments.
- Food & personal hygiene.
- Types of menu & menu planning.

DSC-2A Food Service Management (Practical)

Code No. : BHS 523 Max Marks : 50

Periods/ Week : 3 credits 1.5

Practicals

1. Preparation of various types of menu cards.
2. Table setting
3. Maintenance of accounts & record keeping

4. Visit to different food service institutions.

Books Recommended (Theory & Practical)

1. Catering Management – Mohini Sethi and Sujeet Malhan, Pub. Wiley, Eastern, Delhi, Mumbai, Pune
2. Theory of Cookery – Krishna Arora, Pub. Frank brothers & Co., New Delhi
3. Modern Cookery- Thunganna Philips, New Delhi
4. Food and beverages services – Sudhir Andrews, Tata McGraw hill Pub, New Delhi
5. Hotel Front Office- Systems and Procedures – Ravi Aggarawal, Sublime Pub., Jaipur

DSC 2A Traditional Textiles, Embroidery and Costumes of India (Theory)

Code No.	: BHS514	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives:

- Understand the Indian traditional history and its unique textile traditions
- Develops an understanding of the classification of traditional textiles based on the process ofmaking it.
- Learn to differentiate traditional textiles from different parts of the country.
- Learns the characteristic features of the traditional costumes of different states of the India.
- Develop an understanding of the techniques of traditional embroidery

Learning Outcomes:

A successful completion of this course will enable students to

- Acquaint with Indian Textile and Clothing culture
- Analyze traditional textiles based on the process of making it.
- Understand the physical, geographical, cultural influence on costumes and textiles.
- Differentiates traditional textiles from different parts of the country.
- Appreciates the traditional Textiles and Costumes
- Utilize traditional costume and textiles in contemporary context.

- Understands the techniques of traditional embroidery.

Unit-I: Traditional Textiles of India

- Study of woven textiles and its significance- Patola, Maheshwari, Chanderi, BuluchariButtidar, Brocades of Banaras, Dacca Muslin, Paithani, Himroo- Amroo, Pitambari, Poccampally, Kum-Khwab, BafthaAbiravan.

Unit-II: Traditional embroideries of India: Study of regional embroideries, its types and significance

- Kashmiri
- Manipuri
- Kantha of Bengal
- Kasuti of Karnataka
- Kutch and Kathiyawar of Gujarat
- Phulkari of Punjab
- Applique work of Bihar
- Chambarumal of Himachal Pradesh
- Chikankari of Uttar Pradesh

Unit-III: Traditional costumes of India: Region wise study of contemporary costumes of men and women

- Northern region Kashmir, Punjab
- Western region Maharashtra, Gujarat, Rajasthan, Uttar Pradesh.
- Eastern region- Bengal, Assam, Manipur
- Southern region- Karnataka, Andhra Pradesh, Kerala, Tamil Nadu.

DSC 2A Traditional Textiles, Embroidery and Costumes of India (Practical)

Code No.	: BHS 524	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

1. Preparation of traditional hand embroidery samples using traditional motif, stitches, colors and fabrics of the following regions.

- Kashmiri
- Manipuri
- Kantha of Bengal
- Kasuti of Karnataka
- Kutch and Kathiyawar of Gujarat
- Phulkari of Punjab

- Applique work of Bihar
- Chambarumal of Himachal Pradesh
- Chikankari of Uttar Pradesh

Books Recommended (Theory and Practical)

1. Traditional embroideries India- Shailaja Naik
2. Indian Embroidery- Kamaladevi Chattopadhyay
3. Ethnic Embroidery of India- Usha Shrikant
4. Household Textiles and Laundry work- Durga Deulkar
5. Traditional Indian Costumes and Textiles- Parul Bhatnagar
6. Indian costume- Anamika Pathak
7. Indian costume – A. Biswas
8. Master piece of Indian textiles- Rustam Mehta
9. Vastra- Shastra- Sow. Vimal Adhau
10. Vastra- Shastrachisankalpana and Fashion designing- Dr. Vairagade, Prof. Anvita Agrawal

DSE 3A Entrepreneurship Development and Management (Theory)

Code No.	: BHS 515	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives

- Initiate entrepreneurial motive and impart skills and capabilities for entrepreneurship
- Comprehend nuances of entrepreneurship
- Gain knowledge on Governmental plans and programs
- Ignite / kindle aspirations to become entrepreneurs and successful managers

Learning Outcomes

- Understand the concept of entrepreneurship, entrepreneur and enterprise
- Identify ways to approach supportive Institutions and Banks for starting an enterprise
- Analyze the steps in product selection and form of ownership Focus on the formation of project proposal and practice effective accounting processes

Unit-I: Entrepreneurship: Definition, Need, Scope, Characteristics of an entrepreneur, entrepreneurship development, employment promotion, identification of opportunities.

Unit-II: Business environment for the entrepreneurs, central government & state government policies towards promotion of entrepreneurship.

Unit-III: Marketing & Sales management marketing strategy packaging, advertising, labeling and pricing.

Unit-IV: Legislations: Licensing, registration, municipal laws, business ethics, consumer complaint redresser.

DSC 3A Entrepreneurship Development and Management (Practical)

Code No.	: BHS 525	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

Practicals

1. Development of processed food products & its marketing such as spices & condiments, nuts & oil seeds.
2. Survey of 5 successful entrepreneurs from the field of home science.

Books Recommended (Theory & Practical)

1. A Handbook of Entrepreneurship, Edited by BS Rathore and Dr JS Saini; Aapga Publications, Panchkula (Haryana)
2. Entrepreneurship Development by CB Gupta and P Srinivasan, Sultan Chand and Sons, New Delhi
3. Environmental Engineering and Management by Suresh K Dhamija, SK Kataria and Sons, New Delhi
4. Environmental and Pollution Awareness by Sharma BR, Satya Prakashan, New Delhi
5. Thakur Kailash, Environmental Protection Law and policy in India: Deep and Deep Publications, New Delhi
6. Handbook of Small Scale Industry by PM Bhandari
7. Marketing Management by Philip Kotler, Prentice Hall of India, New Delhi
8. Total Quality Management by Dr DD Sharma, Sultan Chand and Sons, New Delhi,
9. Principles of Management by Philip Kotler TEE Publication
10. Entrepreneurship Development by Desai V., Himalaya Publishing house, Mumbai.

DSC 3A		Community Development	
Code No.	: BHS 516	Max Marks	: 50
Periods/ Week	: 3	credit 2	

Learning Objectives

- Understand the conceptual meaning of community development and communityorganization
- Become aware of community development approaches
- Study community organization modalities in various settings
- Learn to evaluate of community development programmes

Learning Outcomes

- Distinguish community development from community organization
- Comprehend significant phases in community development
- Gain knowledge on sustainability and community development concepts
- Envisage the role of community-based organizations in community development

Unit I: Community Development

- Meaning & Principles, Philosophy of community development organization
- Functions of community development organization
- Community problems Rural and Urban regarding social, educational and health

Unit II: Community development programmes

- Integrated Rural development programmes
- Self-help group
- National rural employment programmes
- Integrated child development scheme
- National adult education programmes

Unit III: Characteristics and goals of rural & urban community

- Factors affecting the urban & rural development

Books Recommended:

1. Educational techniques in C.C. – J Bosc, Bombay orient Longmans, 1965, Hand book of A.V. Aids, Mohanty B.B., Kitab Mandal, 1961)
2. Extension education in community development directorate of extension, Ministry of food & agriculture, Government of India, New Delhi.
3. Rural development in India-Patnayak .

DSC 3A lab course onCommunity Development

Code No.	: BHS 526	Max Marks	: 50
Periods/ Week	: 3	credit 1.5	

1. Assessment of selected community development programmes
2. Visit to Award won Panchayats to understand their success story
3. Visit to villages to observe community activities
4. Prepare a document on community development activities in a model village
5. Preparation of plan of work
6. Organize community development programmes in a selected rural area
7. Follow up and evaluation of the programmes in progress

Learning Experience

- Lectures, discussion, field visit, ICT enabled teaching, project work

Evaluation

- Class tests, assignments, conduct of programmes in the field, records and reports

References

- Banta Sharma Nidaugmayum (2015). Community organization and social registration. NewDelhi: Janadaprakashan
- Indra Godara (2013). Committee and community organization. New Delhi : Black printspublishing

- Kunal Bhatia (2012). Social Work and Community Development. New Delhi: Sonalipublications
- Reddy A.S.A (2001). Extension Education. Bapatla :Sree Lakshmi Press
- Thomas William,A.J. (2015). Rural Development Concept and Recent approaches. NewDelhi, RAWAT publications

DSC 3A SOCIOLOGY OF WORKING WITH FAMILIES AND COMMUNITIES

Code No. : BHS 517 Max Marks : 50

Periods/ Week : 3 credit 2

Learning Objectives: this course will make students to understand

- Various dimensions of family, society, and culture
- Changing gender spaces in family, work, and implication with individual and society,

Learning Outcomes: after completion of course, students will be able to

- Understand family and society relationship.
- Learn social mobility social change.
- Aware about conflict and consequences in society

Unit 1

- Various dimensions of family, society and culture, cultural stereotypes, **10**
- Poverty and deprivation.
- Customs, belief and folklore in everyday life.
- Cultural plurality, practices and ethnic identity.
- Role of media.

Unit 2 Social mobility and social change ***10***

- Forms of stratification and their interrelationships: class, ethnicity, gender, caste, race and occupation.

- Ethnographic approaches to the study of groups.

Unit 3 Emergence of New Ideological Orientations *10*

- Conflicts and consensus in society.
- Changing gender spaces in family, work and its implication on the individual and society across cultures.
- Experiences of exclusion on the individual: caste, minority, disability, violence, immigration.

RECOMMENDED READINGS

- Abhraham, M. F. (2006). Contemporary Sociology: An introduction to concepts and theories: New York: Oxford University Press.
- Beattie, J. (1964). Other cultures. Cohen and West.
- Das, V. (Ed.) (2003) The Oxford companion to sociology and social anthropology: volume 1 and 2.New Delhi: Oxford University Press.
- Johnson, M.H. (2001). Sociology: A systematic introduction. New Delhi: Allied Publishers Limited.
- Rawat, H.K. (2007). Sociolgy: Basic concepts. New Delhi: Rawat Publications.
- Srinivas, M.N. (Ed.) (1996). Caste: Its twentieth century avatar. New Delhi: Viking Penguin.

Semester VI

DSC 1B Women and Child Welfare (Theory)

Code No.	: BHS 611	Max Marks	: 50
Periods/ Week	: 3	Credits 2	

Learning Objectives : this course will make students to understand

- Relevance of women child welfare in India,
- National policy of women and child welfare
- Problems and issues related to women and child.
- Need of women empowerment.

Learning Outcomes: after completion of the course students will be able to gain knowledge about

- Various national and international child welfare programmes
- Problems and issues related to women and child.
- Women empowerment policies.

Unit-1:

Welfare: Definition, Objectives & Philosophy of Child Welfare, National policy of child welfare, Relevance of Child Welfare in India.

Unit-II:

Problems of school dropouts, problems of child labor, nutritional, educational & emotional deprivation in children specially girl child, child welfare agencies- Government, non-government, national & international child welfare programs.

Unit-III:

Problems & issues related to women: violence, abuse & dowry victimization of women, exploitation of women.

Unit-IV:

Women empowerment: mass media & women empowerment, education, employment & empowerment. Social welfare agencies- Government, non-government, national & international, women welfare programs.

DSC1B		Women and Child Welfare (Practical)	
Code No.	: BHS621	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

Practicals

1. Visit to child welfare centers such as ICDS, remand home.
2. Visit to non-government organizations working for welfare of child & Women.
3. Survey of child labor.
4. A survey of 5 malnourished children

Books Recommended (Theory & Practical)

1. Augustine, J.N.(Ed) (1992). The family in Transition, New Delhi, Vikas Publishing House.
2. Corser, Rose (1975). The family; its structure and function. New York
3. Rao P. and Rao V.N.(1982). Marriage-The family and women in India, New Delhi. Vikas Publication.
4. Srivastava, A.K.(1986). Social class and family life in India.
5. Walter A. Friedlander and Robert Z Apte (1982). Introduction to social welfare by 3rd edn. PHI PVT. LTD. New Delhi.
6. Jai Shree Chandra (1993). Woman and child. Rawat publication, New Delhi.
7. Arya and Subhash C. (1972). Infant child care for the mother. Vikas Publication, New Delhi.
8. Bernard H.W.and Fullness D.W. (1972). Principles of guidance. Allied publishers.
9. Ambron S.R. (1975). Child Development, Rinchart Prep, San Francisco.
10. Saraswathi, T.S. and Kaur, B.(1993). The development of Children, New York: Scientific American Books.

DSC 1B Fashion Designing and Textile Industry (Theory)

Code No.	: BHS612	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives: this course will make students to understand.

- Concept and elements of fashion
- Various trimming materials used for dresses.
- Computer technology aided fashion designing.
- Revolutionary changes in clothing industry.

Learning Outcomes: after completion of the course students will gain the knowledge about

- Trending todays fashion
- Use of CAD for drawing and drafting
- Designing of various types of garments
- Textile industry management.

Unit-I: Fashion:

Definition, Elements of fashion, Fashion terminology, Fashion cycle, Fashion Merchandizing-marketing and sales management.

Unit-II: Fabric embellishment:

Study of trimmings and decoration-types of trimmings and application in various dresses.

Unit-III: Computer aided Fashion Designing:

Introduction to software (Basics of coral draw, Photoshop and illustrator.) Tool bars and menus command, creating movement in drawing.

Unit-IV: Textile Industry:

- Revolution in clothing industry.
- Textile industry management Terminology used, planning of textile business, capital management, support system banks, costing and pricing of products. Industrial organization and management practices.

DSC 1B		Fashion Designing and Textile Industry (Practical)	
Code No.	: BHS622	Max Marks	: 50
Periods/ Week	: 3	credits 3	

Practicals

1. Use CAD draw croqui figure using free hand drawing command.
2. Fashion illustration- Drawing of mechanical croqui, Fleshing of croqui, draping of croqui.
3. Designing five garments on croqui and construction of two garments on any one theme:
    - Summer wear
    - Winter wear
    - Bridal wear
    - Casual wear
    - Formal wear

Books Recommended (Theory & Practical)

1. Fashion design & product management-Corr. Harold & Pomerory John.
2. Clothing for modern-Erwin M.D.
3. Mix & Match trends & traditions-Prakash K.
4. "Fashion Retailing" A multi-channel approach, second edition-Ellen Diamond.
5. Know about fabric and their manufactures-K. Thomas.
6. Handbook of fashion designing-Titu Jindal.
7. Zarapkar cutting and sewing, Part-I & II- Zarapkar, Mumbai.

DSC2B	Food Analysis and Quality Control (Theory)		
Code No.	: BHS 613	Max Marks	: 50
Periods/ Week	: 3	Credits 2	

Learning Objectives: this course will make students to understand

- Principles and functions of quality control
- Properties of food and their relationship with purity
- Sensory quality control.
- Food safety and regulatory laws in India.

Learning Outcomes: after completion of the course students will be able to gain knowledge about

- Various methods of food analysis.
- Food adulteration tests for various foods
- Sensory evaluation of food
- Various laws for food safety and regulatory norms and food quality controls in India.

Unit-1: Introduction

- Concept, objectives and need of quality, quality control and quality assurance
- Principles and functions of quality control, quality attributes qualitative, hidden and sensory, plan and methods of quality control

Unit-II: Sampling:

- Definition of sampling, purpose, sampling techniques requirements and sampling procedures for liquid, powdered and granular materials
- Physio-chemical and mechanical properties: Colour, gloss, flavour, consistency, viscosity, texture and their relationship with food quality.
- Sensory quality control: Definition, objectives, panel selection and their training, subjective and objective methods, TQM and TOC, consumer preferences and acceptance

Unit-III: Food Laws and Regulations in India:

- Objectives, requirements and benefits of food grades and standards (BIS, AGMARK, PFA, FPO, CAC (Codex Alimantarious Commission), Food Safety and Standards Act (FSSA) etc.
- General Hygiene and Sanitation in food industry (GHP, GMP, HACCP, ISO etc.)
- Food adulteration and detection techniques for processed foods.

DSC2B	Food Analysis and Quality Control (Practical)	
Code No.	: BHS 623	Max Marks : 50
Periods/ Week	: 3	credits 1.5

Practicals

1. Proximate analysis of food samples
2. Food adulteration tests for processed foods
3. Detection of food additives in market samples
4. Cut-out analysis of canned foods
5. Test of sensory evaluation
   a) Hedonic scale
   b) Duo-trio test
   c) Ranking difference
   d) Triangle test
6. Detection of basic tastes and their threshold values
7. Study of consumer acceptability trial
8. Preparation of various types of food products and their sensory analysis
9. Visits to the quality control laboratories of the food industry, Educational institutions and food testing laboratories/Centres.

Books Recommended (Theory & Practical)

1. Food Analysis Theory and Practices by Pomranz and Meloan
2. Quality Control for the Food Industry (Vol. I and II) by Kramer and Twigg
3. Hand Book of Analysis of Fruits and Vegetables by S Ranganna
4. Laboratory Methods of Sensory Evaluation by Larmond
5. Principles of Food Sanitation by Mariett NG; CBS Publication.
6. Sensory Analysis by Piggot.
7. Food Additives by Mahindru.
8. Hand Book of Food Analysis by S.N. Mahindru
9. The Chemical Analysis of Food and Food Products by Jacobs
10. A First Course in Food Analysis by A.K. Sathe

DSC 3B	Dietetics (Theory)
Code No. : BHS614	Max Marks : 50
Periods/ Week : 3	credits 2

Learning Objectives

- Understand the role of dietitian and to maintain good nutritional status, correct deficiencies ordisease conditions of the patients
- Gain knowledge on the principles of diet therapy and designing or formulating differenttherapeutic diets for various disease conditions
- Develop skill to plan and prepare therapeutic diets for prevention of disease conditions
- Diet therapy may include prescribing specialized dietary regimes or meal plans. As entrepreneur.

Learning Outcomes:

- Integrate knowledge of research principles and methods associated with nutrition and dieteticspractice.
- Use effective and appropriate communication skills in providing information, advice andprofessional opinion to individuals, groups and communities.
- Collect, organize and assess data relating to the health and nutritional status of individuals,groups and populations.
- Demonstrate initiative and judgment using a professional, ethical and entrepreneurialapproachadvocating for excellence in nutrition and dietetics.
- Independently plan and execute a research project in regard to nutrition and dietetics practice.

Unit-I: Principles of Diet therapy

- Role of Dietitian
- Patient Care & Counseling
- Modification of normal diet for therapeutic purpose
- Soft diet, fluid diet
- Modes of feeding-enteral & parenteral feeding.

Unit-II: Etiology, metabolic changes, clinical manifestations, dietary management in

1. Gastrointestinal disorders
    - Diarrhoea
    - Constipation
    - Peptic ulcer
    - Ulcerative colitis
2. Liver disorders-hepatitis, cirrhosis.
3. Weight management- underweight, overweight

Unit-III:

1. Diabetes Mellitus
2. Cardiovascular diseases-Hypertension atherosclerosis
3. Renal disorders-nephritis, Urinary calculi.

DSC 2B		Dietetics (Practical)	
Code No.	: BHS624	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

Practicals

1. Planning & preparation of diet for gastrointestinal disorders.
2. Planning & preparation of diet for liver disorders.
3. Planning & preparation of diet for weight management
4. Planning & preparation of diet for diabetics mellitus
5. Planning & preparation of diet for cardiovascular diseases
6. Planning & preparation of diet for renal disorders.

Books Recommended (Theory & Practical)

1. Davidson and Passmore, 'Human Nutrition Dietetics, Churchill living- store, New York.
2. Wilson & Fisher, Principles of nutrition, Wiley Eastern Pvt. Ltd, New Delhi.
3. Proudfit and Robinson, Normal and Therapeutic Nutrition, Oxford and IBH Publishing Co, Calcutta, Bombay.
4. Jean Bogert and Briggs, Nutrition and Physical Fitness, W. B. Saunders Company, London.
5. M. Swaminathan, Hand Book of Food and Nutrition, the Bangalore Printing and publishing Co. Ltd. 88 Mysore Road, Bangalore 560 018.
6. B. Srilakshmi, Dietetics, New age-International Pvt. Ltd. Publishers, Madras.
7. Shubhangini Joshi, Nutrition & Dietetics, Tata McGraw hills publications, New Delhi
8. M. Swaminathan, Essential of Foods & Nutrition- Vol. I & II.
9. Antia, F.P., Clinical Dietetics and Nutrition. Oxford Univ. Press: Delhi / Bombay.

DSC 3B CHILD RIGHTS AND GENDER EMPOWERMENT

Code No.	: BHS615	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives: this course will make students to understand

- Meaning, concepts and various child rights
- Childres in adverse conditions
- Concepts of sex, gender, masculinity, and femineity
- Gender empowerment.

Learning Outcomes: after completion of the course students will gain the knowledge about

- Various child rights
- Laws and policies for child
- Socialisation for gender
- Gender empowerment

Unit 1 Understanding Child Rights

- Meaning of Child Rights and Convention on Child Rights
- Knowing disadvantage and exclusion in relation to children
- Demographic profile of the child in India
- The role of state, family and children in promotion and protection of child rights
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Unit 2 Children in Difficult circumstances

- Street children, working children and homeless children
- Child Abuse
- Child Trafficking
- Children in conflict with law
- Laws and policies

Unit 3 Conceptualizing Gender

- Defining terms- sex, gender, masculinity, femininity
- Socialisation for gender- gender roles, gender stereotypes
- Patriarchy and social institutions
- Perspectives on feminism

Unit 4 Gender Empowerment

- Demographic profile
- Issues and concerns related to girls and women in India
- Media and gender
- Laws, policies and programmes for girls and women in India

DSC 3B CHILD RIGHTS AND GENDER EMPOWERMENT(PRACTIAL)

Code No.	: BHS625	Max Marks	: 50
Periods/ Week	: 3	credits 1.5	

1. Understanding child rights and gender in diverse social groups through visits
2. Interactions with children in difficult circumstances
3. Understanding gender realities in different social groups
4. Exploring the concept of child rights and gender through audio-visual sources and workshops
5. Programme planning for child rights and gender

RECOMMENDED READINGS:

- Agarwal, A. & Rao, B.V. (2007). Education of Disabled Children. New Delhi: Eastern Book Corporation.
- Agnes, F. (1999). Law and Gender Inequality: The politics of Women's Rights in India. Oxford University Press.
- Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press.
- Kishwar, M. (1999). Off the Beaten Track: Rethinking Gender Justice for Indian Women. New Delhi: Oxford University Press.
- Satyarthi, K. and Zutshi, B. (Ed) (2006). Globalization, Development and Child Rights. New Delhi: Shipra Publication.
- Saikia, N. (2008). Indian women: A socio-legal perspective. New Delhi: Serials Publication.

DSC 3B PARTICIPATORY PROGRAMME MANAGEMENT

Code No.	: BHS616	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives

- Understand the concept and process of programme planning
- Comprehend PRA techniques adopted in the villages to locate local resources
- Learn the Characteristics, tools and techniques of evaluation and recording

- Gain knowledge on project management techniques

Learning outcomes

- Understand programme planning and related models
- Identify the needs of the community and develop programmes
- Analyze techniques of implementing a programme
- Examine assessment of programmes and documentation.

Course Content

Unit-I. Concept of Extension

Programme Planning Meaning, nature, scope and principle of programme planningElements, functions and criteria for developing a plan Importance of planned change

Programme development cycle and its components

Unit-II. Participatory Planning

Importance of peoples' participation in programme planning.Formation of Self Help Groups.

Role of women in project planning and management

Principles, methods, tools and techniques of PRA and application of PRA methods in fieldstudies.

Supportive techniques – secondary sources, direct observation, and semi structured interviews,case studies and stories, drama, games, role play, scenario, workshops, triangulation, continuous analysis and reporting.

Presentation techniques – Ranking, scoring and diagrammatic

Unit-III. Project Management Techniques

Project management techniques

Strength, weakness, opportunity and challenges (SWOC)
Network analysis –critical path method (CPM),
Programme (project) Management andReview
Technique (PERT)
Technical and monitory support from Government and
non-governmental organizationsavailability and access
Project management and
evaluation and
documentationTraining
personnel in PRA
techniques

Unit-IV. Extension Evaluation and Follow up

Definition, nature, types, purpose and
characteristics of evaluationPhases,
tools and techniques of evaluation,
uses of evaluation Need and methods
of follow up
Analysis of existing extension programmes, prospects for improvement

DSC 3B PARTICIPATORY PROGRAMME MANAGEMENT (practical)

Code No.	: BHS626	Max Marks	: 50
Periods/ Week	: 3	credits	1.5

1. Application of PRA methods in the real life situations.
2. Critical review of evaluation studies on women and rural development programmes.
3. Analysis of monitoring and evaluation of developmental programmes.
4. Preparation and implementation of home improvement work plan.
5. Evaluation of work plan using evaluation techniques.
6. Organizing and evaluating programmes for women and children at village level.

Learning Experiences

- Regular lectures, case studies, exercises, observation and follow up, discussion, field visits.

Evaluation

- Class test, Presentation and records, model preparation and seminars.

References

- Bandarkar, P.I. and T.S. (2000). Methodology and Techniques of Social Research. Mumbai:Himalaya Publishing House
- Dhama, O.P, and Bhatnagar O.P. (1991) Communication for Development. New Delhi: Oxford& IBH Publishing Co. Pvt. Ltd
- Narayanaswamy, N. (2009). Participatory Rural Appraisal: Principles, Methods andApplications. New Delhi: Saga Publications
- Neeta Mekherjee. (1997). Participatory Rural Appraisal: Methodology and Applications. NewDelhi: Concept Publishing Company
- Pankajam, G. (2000). Extension-Third Dimension of Education. New Delhi: Gyam PublishingHouse
- Prasanna,C.(1980). Project Planning, Appraisal, Budgeting and implementation. NewDelhi:Tata Megow Hill Publishing Company Ltd
- Ray, G.L. (2015). Extension Communication and Management. Ludhiyana: KalyanPublishers.
- Sandhu, A.S. (2015). Extension Programme Planning. New Delhi: Oxford & IBH PublishingCo.Pvt.Ltd

DSC 3B : HOME BASED CATERING

Code No.	: BHS617	Max Marks	: 50
Periods/ Week	: 3	credits 2	

Learning Objectives: this course will make students to understand

- Factors contributing to the growth of food service

- Food purchase and storage
- Quantity food production
- Planning of a food service unit

Learning Outcomes: after completion of the course students will be able to gain knowledge about

- Various kinds of food service establishments
- Food purchase and storage
- Quantity food production
- Planning of food service establishments

Unit 1 Introduction to Food Service

- Factors contributing to the growth of food service industry
- Kinds of food service establishments

Unit 2 Food Production

- Menu planning: Importance of menu, Factors affecting menu planning, Menu planning for different kinds of food service units
- Food Purchase and Storage
- Quantity Food production: Standardization of recipes, quantity food preparation techniques, recipe adjustments and portion control
- Hygiene and Sanitation

Unit 3 Resources

- Money
- Manpower
- Time
- Facilities and equipment
- Utilities
-

Unit 4 Planning Of A Food Service Unit

- **Preliminary Planning**
  Survey of types of units, identifying clientele, menu, operations and delivery

- *Planning the set up:*
  a) Identifying resources
  b) Developing Project plan
  c) Determining investments
  d) Project Proposal

RECOMMENDED READINGS

- West B Bessie & Wood Levelle (1988) Food Service in

Institutions 6th Edition Revised By Hargar FV, Shuggart SG, & Palgne Palacio June, Macmillian Publishing Company New York.

- Sethi Mohini (2005) Institution Food Management New Age International Publishers
- Knight J B & Kotschevar LH (2000) Quantity Food Production Planning & Management 3rd edition John Wiley & Sons
- Philip E Thangam (2008) Modern Cookery for teaching and Trade Part I & II Orient Longmam
- Taneja S and Gupta SL (2001) Enterpreneurship development, Galgotia Publishing