Learning Outcomes-Based Curriculum Framework (LOCF) for Undergraduate Programme (Honours) HOME SCIENCE (2020)
Foreword

UGC has been taking several initiatives for quality improvement in higher education system in the country. Curriculum revision is one of the focus areas of these initiatives. Curriculum development is defined as planned, a purposeful, progressive, and systematic process to create positive improvements in the higher educational system. The ever evolving and fast changing educational technology have posed various challenges as far as curriculum in the Higher Educational Institutions (HEIs) is concerned. The curriculum requires to be updated more often keeping in view the latest developments in the society and to address the society’s needs from time to time.

The Quality Mandate notified by UGC was discussed in the Conference of Vice-Chancellors and Directors of HEIs during 26-28th July, 2018; wherein it was inter-alia resolved to revise the curriculum based on Learning Outcome Curriculum Framework (LOCF).

Learning Outcome Curriculum Framework (LOCF) aims to equip students with knowledge, skills, values, attitudes, leadership readiness/qualities and lifelong learning. The fundamental premise of LOCF is to specify what graduates completing a particular programme of study are expected to know, understand and be able to do at the end of their programme of study. Besides this, students will attain various 21st century skills like critical thinking, problem solving, analytic reasoning, cognitive skills, self directed learning etc. A note on LOCF for undergraduate education is available on the UGC website www.ugc.ac.in. It can serve as guiding documents for all Universities undertaking the task of curriculum revision and adoption of outcome based approach.

To facilitate the process of curriculum based on LOCF approach, UGC had constituted subject specific Expert Committees to develop model curriculum. I feel happy to present the model curriculum to all the HEIs. Universities may revise the curriculum as per their requirement based on this suggestive model within the overall framework of Choice Based Credit System (CBCS) and LOCF.

I express my gratitude and appreciation for the efforts put in by the Chairperson/Member/Co-opted members/experts of the committees for developing model curriculum. I also take the opportunity to thank Prof. Bhushan Patwardhan, Vice-Chairman, UGC for providing guidance to carry forward this task. My sincere acknowledgement to Prof. Rajnish Jain, Secretary, UGC for all the Administrative support. I also acknowledge the work done by Dr. (Mrs.) Renu Batra, Additional Secretary, UGC for coordinating this important exercise.

All the esteemed Vice-Chancellors are requested to take necessary steps in consultation with the Statutory Authorities of the Universities to revise and implement the curriculum based on the learning outcome based approach to further improve the quality of higher education.

New Delhi
30th July, 2019

(Prof. D. P. Singh)
Chairman
University Grants Commission
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PREAMBLE

The role of education is paramount in nation building. One of the major objectives of UGC is maintenance of standards of higher education. Over the past decades the higher education system of our country has undergone substantial structural and functional changes resulting in both quantitative and qualitative development of the beneficiaries. Such changes have gained momentum with the introduction of Choice Based Credit System (CBCS) which further expects Learning Outcome-Based curriculum to maximize the benefits of the newly designed curriculum. The Learning Outcome-Based Curriculum in Home Science/ Family and Community Sciences will help the teachers of the discipline to visualize the curriculum more specifically in terms of the learning outcomes expected from the students at the end of the instructional process. The commission strives to promote the link of students with the society/industry such that majority of the students engage in socially productive activities during their period of study in the institutions and at least half of the graduate students will secure access to employment/self-employment or engage themselves in pursuit of higher education. The model curriculum envisages to cater to the developmental trends in higher education, incorporating multi-disciplinary skills, professional and soft skills such as team work, communication skills, leadership skills, time management skills and inculcate human values, professional ethics, and the spirit of innovation/entrepreneurship and critical thinking among students and promote avenues for display of these talents, linking general studies with professional courses. Besides imparting disciplinary knowledge to the learners, curriculum should aim to equip the students with competencies like problem solving, analytical reasoning and moral and ethical awareness. Introduction of internship and appropriate fieldwork/case studies are embedded in the curriculum for providing wider exposure to the students and enhancing their employability.

Learning outcomes specify what exactly the graduates are expected to know after completing a programme of study. The expected learning outcomes are used as reference points to help formulate graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes.

Keeping the above objectives of higher education in mind the Learning Outcome-Based Curriculum Framework (LOCF) for the discipline of Home Science has been prepared and presented here.
Learning Outcomes based Curriculum Framework (LOCF) for B.Sc. / B.A (Honours) Home Science Undergraduate Programme 2020

1. INTRODUCTION

Home Science is both science and social science-art related multi-disciplinary field of study. The Learning Outcomes-based Curriculum Framework (LOCF) for B.Sc./B.A (Home Science) degree programme has been designed to integrate the application of sciences and humanities to create a cadre of home scientists to improve the quality of life of individuals, family, community and nation. Home science program is predominantly practical oriented and therefore helps to develop and polish various skills to empower the cadre required towards innovation, incubation and entrepreneurship along with professional and employable skills. Hands on experience with Project work/internship/fieldwork would help and build capacities for conducting primary research among the students. The curriculum has been structured to prepare the undergraduates to achieve skills to move forward with the development of the society/community/nation and entrepreneurship.

The Curriculum incorporates multidimensional fundamental, core and applied aspects of various disciplines with Graduate Attributes (GAs) such as disciplinary knowledge, laboratory/field driven practical’s, the art of writing & communication, self-learning, critical thinking, analytical & problem solving abilities, use of ICT, application of knowledge, lifelong learning, research-related skills, team spirit, multicultural competencies, leadership qualities, global vision, professional commitment and sensitizing with Sustainable Development Goals (SDGs) of United Nations. It also aims to build future ready professionals who would be socially responsible global citizens contributing to the overall development of the country.

The model curriculum presented has a multidisciplinary approach keeping the New Education Policy of 2020 in mind.
2. LEARNING OUTCOMES-BASED APPROACH TO CURRICULUM PLANNING AND DEVELOPMENT: (LOACPD)

Nature and extent of B.Sc. /B.A. (Home Science)

Higher education encourages technical know-how, utility skills, employability, a sense of responsibility
and prosperity among the students of nation besides dealing with personality development and
entrepreneurship. The fundamental premise underlying the learning outcomes-based approach to
curriculum planning and development is that higher education qualification such as B.Sc. / B.A (Home
Science) are awarded on the basis of demonstrated achievement of outcomes based on Bloom’s
Taxonomy (in terms of knowledge, understanding skills, attitudes, employability and values) and
academic qualities expected from a graduate of professional programme such as B.Sc./ B.A. in Home
Science. The learning outcomes specify what exactly graduates after successfully completing degree
programme of study are expected to know, understand and able to practice at the professional level.
The expected learning outcomes are very important in present day context, as it helps to develop
professional curriculum based on outcomes. Therefore, higher education degrees must formulate
Graduate Attributes (GAs), qualification descriptors, learning outcomes and course learning outcomes
which will help in curriculum planning and development in the form of design and delivery. The overall
formulation of the curriculum has been developed keeping all these attributes to facilitate the
competencies of the learner to match with the expectations of the employer.
The overall objectives of the learning outcomes-based curriculum framework are to:

- Help formulate graduate attributes, qualification descriptors, programme learning outcomes and
course learning outcomes that are expected to be demonstrated by the holder of a qualification;
- Enable prospective students, parents, employers and other understand the nature and level of
learning outcomes (knowledge, skills, attitude and values) or attributes a graduate of a programme
should be capable of demonstrating on successful completion of the programme of study;
- Maintain national standards and international comparability of learning outcomes and academic
standards to ensure global competitiveness, and to facilitate student/graduate mobility;
- Provide higher education institutions an important point of reference for designing teaching-learning
strategies, assessing student learning levels, and periodic review of programmes and academic
standards.
Aims of Bachelor’s Degree Programme in Home Science subject

Program education objectives
Home Science with its new nomenclature of Family and Community Sciences is an inter disciplinary course encompassing variety of subjects with the result it covers all the branches of Home Science namely Food Science & Nutrition , Food Service Management and Dietetics, Human Development & Family Studies, Resource Management, Textile & Clothing, Communication & Extension etc. Keeping the inter & multidisciplinary nature in mind the Program Educational Objectives (PEOs) have been given below

- To impart the fundamental knowledge in all the major domains of Home Science and related areas of studies.
- To develop competency in application of knowledge in different settings i.e. family, community, workplace etc
- To impart and develop skills for professional life
- To prepare for higher degree with specializations, create professionals in different related areas, foster research & development, teaching, government and public service and entrepreneurship.

3. GRADUATE ATTRIBUTES:
The graduate attributes reflect the particular quality and feature or characteristics of an individual, including the knowledge, skills, attitudes and values that are expected to be acquired by a graduate of B.Sc. (Honours) Home Science through studies at the higher education institution (HEI).

The graduate attributes for the undergraduate students pursuing Home Science (Honours) Programme include capabilities that help them to strengthen their abilities for widening current knowledge base and skills, gaining new knowledge and skills in the specific areas of Home Science viz. Textiles and Clothing, Extension and Communication, Food Science & Nutrition , Food Service Management and Dietetics, Family Resource Management, Human Development and Family Studies, Environment and Personal development, undertaking future studies to bring solutions to the societal, family and personal problems, performing professionally well in
careers related to Home Science discipline and alike and playing a constructive role as a responsible member in the family and citizen in the society and nation at large.

The attributes of a graduate student of Home Science (Honours) programme define the characteristics of a student's university degree programme(s), and describe a set of characteristics/competencies that are transferable beyond study of a particular subject area and programme contexts in which they have been developed.

Graduate attributes are fostered through meaningful learning experiences made available through the updated curriculum, the total university experiences, and a process of critical and reflective thinking. The characteristics attributes of graduates of Home Science (Honours) Programme include:

1. **Disciplinary knowledge and skills:** Capable in demonstrating basic theoretical and practical knowledge and understanding in subjects like:
   - b) **Extension and Communication** from Social work, Journalism, Mass Communication, Media production and promotion, Theatre, Law, Film Making.
   - c) Food Science & Nutrition, Food Service Management and Dietetics from Biology, Nutrition, Chemistry, Biotechnology, Microbiology, Dietetics, Medicine, Extension, Front Office Management, Hospitality Industry, Catering technology etc
   - e) **Human Development and Family Studies** from Psychology, Sociology, Social Work, Pediatrics, Anthropology.

2. **Effective Communicator:** Ability to communicate precisely, confidently and with clarity among the rural and urban communities using attention seeking media on the various educational topics for creating awareness and making better lives. Competency to express thoughts and ideas through folk media, Social media, print media, PPT’s, role plays, displays and exhibitions along with oral and writing skills.
3. **Critical thinking, Analytical reasoning and Problem solving**: Ability to employ critical thinking in identifying the problem, developing analytical skills and capabilities to resolve the problems efficiently related to all the five specific areas on a tailor made basis for a client, customer, an individual, family and society either independently or with the support of concerned authorities.

4. **Research and Scientific reasoning**: Skills in undertaking small researches by way of Term paper, Case Studies, Market Surveys, Field visits, Laboratory Experiments etc. on the related topics/problems of the discipline and arrive at the results based on the scientific reasoning wherever applicable.

5. **Cooperation/ Team Work**: Capability of working enthusiastically and united with the working teams in organizing events in the Department/ Faculty/ University/ Community, and accomplishing group work/ assignments / tasks by willing cooperation of all and well-coordinated group living through during educational visits.

6. **Reflective thinking**: Ability to practice empathy and objectivity in dealing with the personal and community interactions and problems.

7. **Digital Literacy**: Competency in accessing relevant and authentic information and data from Electronic media with a motive to learn and synthesize it on the given topics in Home Science discipline for academic and extension work presentation and to prepare computer aided designs by using the needed software’s.

8. **Self-directive learning**: Potential to complete the assigned projects successfully either at Residential / Commercial level or Community level by managing the resources independently and wisely.

9. **Multicultural competence**: Ability to learn about different cultures by way of practicing traditions, traditional cooking, ethnic designing and stitching, developing itineraries, and making traditional arts.
10 Moral and Ethical awareness/reasoning: Development of a sense of moral responsibility and values to refrain from unethical practices such as plagiarism, fabrication, falsification, misinterpretation of the data, breaching intellectual property rights, adopting unbiased and truthful actions and motivate to make efforts to save the Mother Earth.

11. Leadership readiness/qualities: Persuasion to imbibe leadership skills by providing hands of experience to exercise the leadership skill. Evaluate and guide to practice and acquire the required acumen to lead successfully.

12. Lifelong Learning: Motivation to be updated regularly and consistently throughout the life with the content, concepts, theories, upcoming specializations/fields, technologies, books, avenues by self-paced and self-directed learning with a motive to achieve economic, social, cultural and personal development goals.

4. QUALIFICATION DESCRIPTORS

A qualification descriptor of Home Science (Honours) undergraduate programme indicates the generic outcomes and graduate attributes expected for the award of the Bachelor’s degree with Honours in Home Science. The qualification descriptors also describe the academic standard for a specific qualification in terms of the levels of knowledge and understanding, skills and competencies and attitudes and values that the holders of the qualification are expected to attain and demonstrate in terms of actual outputs after acquiring B.Sc. (Honours) degree in Home Science. These descriptors also indicate the common academic standards for the qualification and help the degree-awarding bodies in designing, approving, assessing and reviewing academic programmes. The learning experiences and assessment procedures are expected to be designed to provide every student with the opportunity to achieve the intended programme learning outcomes. The qualification descriptors reflect disciplinary knowledge, professional skills and understanding of Home science discipline under five sub-areas as “Textiles and Clothing (TC)”, “Extension and Communication (EC)”, “Resource Management (RM)”, Food Science & Nutrition (FN), Food Service Management and Dietetics and “Human Development and Family Studies (HDFS) including generic skills, and global competencies, that all students in different academic fields of study should acquire/attain and demonstrate. The students who will complete three years of full-time study of an undergraduate programme of study of Home Science will be awarded Bachelor’s Degree with
Honours. Some of the expected learning outcomes that a student should be able to demonstrate on completion of a degree –level programme includes the following:

The qualification descriptors for a Bachelor’s degree with Honours in Home Science include the following:

- Demonstrate (i) a systematic, extensive and coherent knowledge and understanding of an academic field of study as a whole and its applications, and links to related disciplinary areas/subjects of study; including a critical understanding of the established theories, principles and concepts, and of a number of advanced and emerging issues in the field of Home Science; (ii) procedural knowledge that creates different types of professionals related to the varied subject areas of Home Science, including research and development, teaching and government and public service; (iii) professional skills in varied areas related to Home Science and current developments in the academic field of Home Science, including a critical understanding of the latest developments in the area of specialization, and an ability to use established techniques of analysis and enquiry within the area of specialization.

- Demonstrate comprehensive knowledge about materials, including current research, scholarly, and/or professional literature, relating to essential and advanced learning areas pertaining to Home Science field of study, and techniques and skills required for identifying related problems and issues.

- Demonstrate skills in identifying information needs, collection of relevant quantitative and/or qualitative data drawing on a wide range of sources, analysis and interpretation of data using methodologies as appropriate to the subject of Home Science for formulating evidence-based solutions and arguments.

- Use knowledge, understanding and skills for critical assessment of a wide range of ideas and complex problems and issues relating to the academic field of study Home Science.

- Communicate the results of studies undertaken in an academic field of Home Science accurately in a range of different contexts using the main concepts, constructs and techniques of the subject of Home Science.

- Address one’s own learning needs relating to current and emerging areas of study relating to Home Science, making use of research, development and professional materials as appropriate, including those related to new frontiers of knowledge in Home Science.
• Apply one’s disciplinary knowledge and understanding relating to Home Science and transferable skills to new/unfamiliar contexts and to identify and analyse problems and issues and seek solutions to real-life problems.

• Demonstrate subject-related and transferable skills that are relevant to the Home Science related job and employment opportunities.

5. PROGRAMME LEARNING OUTCOMES IN COURSE

Home Science is a science-oriented, multidisciplinary subject which encompasses the multifarious activities that occur in families, households, and communities. Over years, the discipline has evolved and expanded to encompass activities and services of relevance, not only to the micro contexts of the family and community, but also to the macro context of the larger society. Home Science is both multidisciplinary and interdisciplinary in its context encompassing the five major disciplines of Family Resource Management, Food Science & Nutrition, Food Service Management and Dietetics, Textiles and Clothing, Human Development, and Extension and Education. Each discipline has one or more specific areas of specialization. The term 'programme' refers to the entire scheme of study followed by learners leading to a qualification which essentially is a combination of the five disciplines. Offering the Programme as a value-laden one needs to be reflected in The Programme Outcomes (PO) and the Programme Specific Outcomes (PSO) are for both regular B.Sc and B.Sc (Honours). Furthermore, specific programme outcomes pertaining to Bachelor’s Degree in Home Science (Honours) are also delineated

**Programme Outcome (PO) statements (Regular and Honours Degree in B.Sc in Home Science)**

• Deliver quality tertiary education through learning while doing.
• Reflect universal and domain-specific values in Home Science.
• Involve, communicate and engage key stakeholders.
• Preach and practice change as a continuum.
• Develop the ability to address the complexities and interface among of self, societal and national priorities.
• Generate multi-skilled leaders with a holistic perspective that cuts across disciplines.
• Instill both generic and subject-specific skills to succeed in the employment market.
• Foster a genre of responsible students with a passion for lifelong learning and entrepreneurship.
- Develop sensitivity, resourcefulness, and competence to render service to families, communities, and the nation at large.
- Promote research, innovation and design (product) development favouring all the disciplines in Home Science.
- Enhance digital literacy and apply them to engage in real-time problem solving and ideation related to all fields of Home Science.

**Programme Specific Outcomes – PSO:** On completion of the specific programme (Regular and Honours Degree in Home Science) following are the outcomes expected from students:

I. Describe and analyze the discipline of Home Science as a holistic field of study covering multiple facets and requirements of human beings in day to day living, for example, achievement of appropriate milestones in personal development; awareness, need and use of family resources; access to adequate nutrition for wholesome development, qualified and professional work force for food service industries, clothing fundamentals and advances; and effective strategies for community extension and communication.

II. Demonstrate skills/talents and proficiency in specialized areas of study.

III. Demonstrate proactive networking in specific areas of study involving significant stakeholders including professionals, researchers, and public service personnel.

IV. Address concern for the community (urban, rural and tribal) with genuine sensitivity and dedicate transferable knowledge and research findings for the benefit of the community.

V. Develop sensitivity, resourcefulness, and competence to render service to enhance development of individuals, families, communities, and the nation at large.

VI. Manifest a wide range of knowledge regarding sources of data (information) collection and transfer enabling exchange of ideas and notions; access to resources including e-resources and libraries; trends in knowledge gaining and transfer (teaching-learning processes); techniques of skill acquisition and understanding existing basic issues related to the disciplines in Home Science and methods to resolve and ratify them.

VII. Demonstrate interest in engaging in active need based, innovative and community-oriented
research using appropriate methods, collect and process data and present evidence-based solutions and defend arguments related to the field of research in Home Science.

VIII. Analyze and apply research findings for the use of societal needs and contribute to nation building strategies.

IX. Demonstrate inclination toward acquiring knowledge and doing in-depth studies on allied subjects of Home Science, for instance Ergonomics in Resource Management; Chemistry in Textiles and Clothing.

X. Demonstrate abilities involved in acting as proactive agents of change in promoting the discipline of Family and Community Sciences.

XI. Explore and decide upon viable avenues of self-employment and entrepreneurship plus career options in different facets of Home Science disciplines.

XII. Demonstrate ethical values in scholarship and social applications.

6. STRUCTURE OF B.Sc. HOME SCIENCE (HONOURS)

Bachelor of Science in Home Science (Honours)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Courses</th>
<th>Number of Courses</th>
<th>Credits per Course</th>
<th>Total credits</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Theory</td>
<td>Practical</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
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<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>DSE</td>
<td>04</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE</td>
<td>03</td>
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<td>2</td>
</tr>
<tr>
<td>4</td>
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<td>4</td>
</tr>
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<td>5</td>
<td>Ability Enhancement</td>
<td>02</td>
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<tr>
<td>Total</td>
<td></td>
<td>26</td>
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Each domain (Area/branch of Home Science) will offer three Core papers (18 credits), four DSE papers (24 credits) and two Skill Enhancement papers (8 credits) making up a total of 50 credits each.
**List of Courses framed under five areas of Home Science (Core/ DSE/SEC)**

<table>
<thead>
<tr>
<th>Branch of Home Science</th>
<th>Core Courses (6 Credits each 4 Theory +2 Practical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles and Clothing</td>
<td>Introduction to Textiles</td>
</tr>
<tr>
<td></td>
<td>Fundamentals of Clothing Construction</td>
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<tr>
<td></td>
<td>Traditional Textiles and Costumes of India</td>
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<tr>
<td>Human Development and Family Studies</td>
<td>Fundamentals of Human Development</td>
</tr>
<tr>
<td></td>
<td>Early Childhood Care and Education</td>
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<td></td>
<td>Developmental Challenges and Children with Disability</td>
</tr>
<tr>
<td>Food Science &amp; Nutrition, Food Service</td>
<td>Basics of Food Science and Nutrition</td>
</tr>
<tr>
<td></td>
<td>Family Meal Management</td>
</tr>
<tr>
<td></td>
<td>Dietetics</td>
</tr>
<tr>
<td>Resource Management</td>
<td>Resource Management Concepts and Contexts</td>
</tr>
<tr>
<td></td>
<td>Planning and Designing Interior Space</td>
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<tr>
<td></td>
<td>Family Finance and Consumer Behaviour</td>
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<tr>
<td>Extension and Communication</td>
<td>Communication and Extension</td>
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<td>Communication Model in Extension</td>
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<td>Participatory Program Management</td>
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<table>
<thead>
<tr>
<th>Branch of Home Science</th>
<th>Discipline Specific Electives (6 Credits each 4 Theory +2 Practical)</th>
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<tbody>
<tr>
<td>Textiles and Clothing</td>
<td>Fashion Marketing and Merchandising</td>
</tr>
<tr>
<td></td>
<td>Apparel Construction</td>
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<tr>
<td></td>
<td>Textile Design and Illustration</td>
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<tr>
<td></td>
<td>Dyeing, Printing and Finishing of textiles</td>
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<tr>
<td>Human Development and Family Studies</td>
<td>Childhood and Adolescence</td>
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<tr>
<td></td>
<td>Adulthood and Aging</td>
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<tr>
<td></td>
<td>Interpersonal Relationships and Family Dynamics</td>
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<td>Gender, Society and Human Development</td>
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### Branch of Home Science | Skill Enhancement Courses (4 Credits Practical)

<table>
<thead>
<tr>
<th>Branch of Home Science</th>
<th>Skill Enhancement Courses (4 Credits Practical)</th>
</tr>
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<tbody>
<tr>
<td>Textiles and Clothing</td>
<td>Surface Ornamentation</td>
</tr>
<tr>
<td></td>
<td>CAD in Textiles and Apparel</td>
</tr>
<tr>
<td>Human Development and Family Studies</td>
<td>Life Skills Education</td>
</tr>
<tr>
<td></td>
<td>Skills for Working with Children</td>
</tr>
<tr>
<td>Food Science &amp; Nutrition, Food Service Management and Dietetics</td>
<td>Techniques of Food Preservation</td>
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<tr>
<td></td>
<td>Bakery and Quantity Cookery</td>
</tr>
<tr>
<td>Resource Management</td>
<td>Computer Aided Interior Designing</td>
</tr>
<tr>
<td></td>
<td>Art of Enterprising</td>
</tr>
<tr>
<td>Extension and Communication</td>
<td>Entrepreneurship Management</td>
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<td></td>
<td>Training and Professional Development</td>
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</tbody>
</table>
Ability Enhancement Course (4 Credits Theory)
AEC1: English
AEC2: Environmental Science

Generic Elective (6 Credits each- 4 Theory +2 Practical)
GE1: Basics of Research
GE 2: Statistical Methods for Social Sciences
GE 3: Academic Writing
GE 4: Basic Skills in Computer
GE 5: Personality Development

Structure of B. Sc Home Science (Honours)

Proposed Scheme of Choice based credit system

<table>
<thead>
<tr>
<th>Semester</th>
<th>Core Course (CC)- (15)</th>
<th>Ability Enhancement Course (AEC) – (2)</th>
<th>Skill Enhancement Course (SEC) – (2)</th>
<th>Discipline Specific Elective DSE – (4)</th>
<th>Generic Elective (GE) -3</th>
<th>Credits</th>
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<tbody>
<tr>
<td>I</td>
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<td>2*4 =8</td>
<td></td>
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<td></td>
<td>26</td>
</tr>
<tr>
<td>II</td>
<td>3 * 6=18</td>
<td></td>
<td></td>
<td></td>
<td>1* 6=6</td>
<td>24</td>
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<tr>
<td>III</td>
<td>3*6=18</td>
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<td>1*4=4</td>
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<td>1*4=4</td>
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<td>2*6=12</td>
<td></td>
<td>1*6=6</td>
<td>1* 6=6</td>
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<td>24</td>
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<tr>
<td>VI</td>
<td>2*6=12</td>
<td></td>
<td></td>
<td>2*6=12</td>
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</table>
### Distribution of Courses
#### Conceptual Framework

<table>
<thead>
<tr>
<th>Semester</th>
<th>CC</th>
<th>AEC</th>
<th>DSE</th>
<th>SEC</th>
<th>GE</th>
<th>Cr</th>
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<tbody>
<tr>
<td>I</td>
<td>CC-1 Basics of Food Science, Nutrition</td>
<td>AEC-1 English</td>
<td>AEC-2 Environmental Science</td>
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<td>CC-2 Fundamentals of Human Development</td>
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</tr>
<tr>
<td></td>
<td>CC-3 Introduction to Textiles</td>
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</tr>
<tr>
<td>II</td>
<td>CC-4 Resource Management Concepts and Contexts</td>
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<td>CC-5 Communication and Extension</td>
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<tr>
<td></td>
<td>CC-6 Early Childhood Care and Education</td>
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<td>III</td>
<td>CC-7 Dietetics</td>
<td>SEC1 Surface Ornamentation</td>
<td>SEC2 Life Skills Education</td>
<td>SEC3 Entrepreneurship Management</td>
<td>SEC4 Techniques of Food Preservation</td>
<td>SEC5 Computer Aided Interior Designing</td>
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<td>CC-8 Fundamentals of Clothing Construction</td>
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<td>CC-9 Planning and Designing Interior Space</td>
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<tr>
<td>IV</td>
<td>CC-10 Communication Model in Extension</td>
<td>DSE1 Fashion Marketing and Merchandising/ Childhood and Adolescence/ Nutrition for Health and Physical Fitness/ Principles of Interior Design/ NGO Management</td>
<td>SEC6 CAD in Textiles and Apparel</td>
<td>SEC7 Skills for Working with Children</td>
<td>SEC8 Training and Professional Development</td>
<td>SEC9 Bakery and Quantity Cookery</td>
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<td>CC-11 Family Meal Management</td>
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</tr>
<tr>
<td>V</td>
<td>CC-12 Participatory Program Management</td>
<td>DSE2 Apparel Construction, /Adulthood and Aging/Food Service Management/Designing and Furnishing Life Space /Extension Management</td>
<td></td>
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<tr>
<td></td>
<td>CC-13 Developmental Challenges and Children with Disability</td>
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</tr>
<tr>
<td>VI</td>
<td>CC-14 Traditional Textiles and Costumes of India</td>
<td>DSE3 Textile Design and Illustration /Interpersonal Relationships and Family Dynamics/ Food Safety, Sanitation and Hygiene/ Creative Applied Arts/ Communication for Development</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>CC-15 Family Finance and Consumer Behaviour</td>
<td>DSE4 Dyeing, Printing and Finishing of textiles/ Gender, Society and Human Development/ Public Health Nutrition/ Garden and Landscape Designing/Community Development (OR) Project</td>
<td></td>
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</tr>
</tbody>
</table>

**Total** | 90 | 8 | 24 | 8 | 18 | 148
Distribution of Courses

Core Courses (15 Courses to be taken)
(Credits: Theory 15x4=60, Practical 15x2=30)

Three core courses have been planned from each area in the discipline of Home Science to provide an in-depth understanding of relevant theories, concepts, and principles of this discipline. The students are likely to have a strong foundation in all the five branches of Home Science/ Community Sciences.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Opted</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>I</td>
<td>CC-1 - Theory</td>
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<tr>
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<td>CC-1 - Practical</td>
<td>Basics of Food Science and Nutrition</td>
</tr>
<tr>
<td></td>
<td>CC-2 - Theory</td>
<td>Fundamentals of Human Development</td>
</tr>
<tr>
<td></td>
<td>CC-2 - Practical</td>
<td>Fundamentals of Human Development</td>
</tr>
<tr>
<td></td>
<td>CC-3 - Theory</td>
<td>Introduction to Textiles</td>
</tr>
<tr>
<td></td>
<td>CC-3 - Practical</td>
<td>Introduction to Textiles</td>
</tr>
<tr>
<td>II</td>
<td>CC-4- Theory</td>
<td>Resource Management Concepts and Contexts</td>
</tr>
<tr>
<td></td>
<td>CC-4- Practical</td>
<td>Resource Management Concepts and Contexts</td>
</tr>
<tr>
<td></td>
<td>CC-5- Theory</td>
<td>Communication and Extension</td>
</tr>
<tr>
<td></td>
<td>CC-5- Practical</td>
<td>Communication and Extension</td>
</tr>
<tr>
<td></td>
<td>CC-6- Theory</td>
<td>Early Childhood Care and Education</td>
</tr>
<tr>
<td></td>
<td>CC-6- Practical</td>
<td>Early Childhood Care and Education</td>
</tr>
<tr>
<td>III</td>
<td>CC-7- Theory</td>
<td>Dietetics</td>
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<td>CC-7- Practical</td>
<td>Dietetics</td>
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<td>CC-8- Theory</td>
<td>Fundamentals of Clothing Construction</td>
</tr>
<tr>
<td></td>
<td>CC-8- Practical</td>
<td>Fundamentals of Clothing Construction</td>
</tr>
<tr>
<td></td>
<td>CC-9- Theory</td>
<td>Planning and Designing Interior Space</td>
</tr>
<tr>
<td></td>
<td>CC-9- Practical</td>
<td>Planning and Designing Interior Space</td>
</tr>
<tr>
<td>IV</td>
<td>CC-10- Theory</td>
<td>Communication Model in Extension</td>
</tr>
<tr>
<td></td>
<td>CC-10- Practical</td>
<td>Communication Model in Extension</td>
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<tr>
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<td>CC- 11- Theory</td>
<td>Family Meal Management</td>
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<td>CC- 11- Practical</td>
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<td>CC-12- Practical</td>
<td>Participatory Program Management</td>
</tr>
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<td></td>
<td>CC-13- Theory</td>
<td>Developmental Challenges and Children with Disability</td>
</tr>
<tr>
<td></td>
<td>CC-13- Practical</td>
<td>Developmental Challenges and Children with Disability</td>
</tr>
<tr>
<td>VI</td>
<td>CC-14- Theory</td>
<td>Traditional Textiles and Costumes of India</td>
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<td>CC-14- Practical</td>
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<td>CC-15- Theory</td>
<td>Family Finance and Consumer Behaviour</td>
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<tr>
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<td>CC-15- Practical</td>
<td>Family Finance and Consumer Behaviour</td>
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</table>
List of Discipline Specific Elective (DSE) 4 Courses Compulsory, 01 each in IV & V Semester and 2 in VI Semester
(Credits: Theory 4x4=16, Practical 2x4=8 Total=24)

The course content is largely subject specific and will enhance their understanding of the different core areas of study. The courses are likely to help students acquire subject-specific, cognitive and transferable skills to solve complex problems.

<table>
<thead>
<tr>
<th>Semester</th>
<th>DSE</th>
<th>Branch of Home Science</th>
<th>Course name</th>
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</thead>
<tbody>
<tr>
<td>IV</td>
<td>DSE 1</td>
<td>Textiles and Clothing</td>
<td>Fashion Marketing and Merchandising</td>
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<td>Human Development and Family Studies</td>
<td>Childhood and Adolescence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Science &amp; Nutrition, Food Service Management and Dietetics</td>
<td>Nutrition for Health and Physical Fitness</td>
</tr>
<tr>
<td></td>
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<td>Resource Management</td>
<td>Principles of Interior Design</td>
</tr>
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<td>Extension and Communication</td>
<td>NGO Management</td>
</tr>
<tr>
<td>V</td>
<td>DSE 2</td>
<td>Textiles and Clothing</td>
<td>Apparel Construction</td>
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<tr>
<td></td>
<td></td>
<td>Human Development and Family Studies</td>
<td>Adulthood and Aging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Science &amp; Nutrition, Food Service Management and Dietetics</td>
<td>Food Service Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resource Management</td>
<td>Designing and Furnishing Life Space</td>
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<tr>
<td></td>
<td></td>
<td>Extension and Communication</td>
<td>Extension Management</td>
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<tr>
<td>VI</td>
<td>DSE 3</td>
<td>Textiles and Clothing</td>
<td>Textile Design and Illustration</td>
</tr>
<tr>
<td>(Or) Project</td>
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<td>Human Development and Family Studies</td>
<td>Interpersonal Relationships and Family Dynamics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Science &amp; Nutrition, Food Service Management and Dietetics</td>
<td>Food Safety, Sanitation and Hygiene</td>
</tr>
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<td></td>
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<td>Resource Management</td>
<td>Creative Applied Arts</td>
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<td>Extension and Communication</td>
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<td>DSE 4</td>
<td>Textiles and Clothing</td>
<td>Dyeing, Printing and Finishing of Textiles</td>
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<td>(Or) Project</td>
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<td>Human Development and Family Studies</td>
<td>Gender, Society and Human Development</td>
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<tr>
<td></td>
<td></td>
<td>Food Science &amp; Nutrition, Food Service Management and Dietetics</td>
<td>Public Health Nutrition</td>
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<td></td>
<td>Resource Management</td>
<td>Garden and Landscape Designing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extension and Communication</td>
<td>Community Development</td>
</tr>
</tbody>
</table>
**Dissertation /Project work:** It is considered as a special Course involving application of knowledge in solving/analyzing/exploring a real-life situation/difficult problem. A Dissertation/Project work would be of 6 credits. A Dissertation work may be given in lieu of a Discipline Specific Elective paper in the sixth semester.

**Skill Enhancement Courses (2 Courses Compulsory)**
**(Credits: 2x4 Credits for Practical = 08)**

These courses aim to encourage and enhance the exploratory and analytical skills of students resulting in their ability to formulate problems clearly. These Courses would also be helpful in enhancing skills and provide confidence to start an enterprise or helpful in fetching jobs.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Suggestive Courses</th>
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<tbody>
<tr>
<td><strong>III</strong></td>
<td>Surface Ornamentation</td>
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<tr>
<td></td>
<td>Life Skills Education</td>
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<td>Entrepreneurship Management</td>
</tr>
<tr>
<td></td>
<td>Techniques of Food Preservation</td>
</tr>
<tr>
<td></td>
<td>Computer Aided Interior Designing</td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td>Computer aided design in Textiles and Apparel</td>
</tr>
<tr>
<td>(As Internship)</td>
<td>Skills for Working with Children</td>
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<tr>
<td></td>
<td>Training and Professional Development</td>
</tr>
<tr>
<td></td>
<td>Bakery and Quantity Cookery</td>
</tr>
<tr>
<td></td>
<td>Art of Enterprising</td>
</tr>
</tbody>
</table>

At least 02 skill enhancement courses to be opted, one in each SEM-III&SEM-IV (Can be combined with internship in related fields)
**Ability Enhancement Courses (2 Courses Compulsory)**
(Credits: 2x4=8)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>AEC-1</td>
<td>English</td>
</tr>
<tr>
<td>I</td>
<td>AEC-2</td>
<td>Environmental Science</td>
</tr>
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</table>

**List of Generic Electives (GE) 3 Courses Compulsory**
(Credits: Theory 3x4=12, Practical 3x2=6Total=18)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>GE1</td>
<td>Basics of Research</td>
</tr>
<tr>
<td>IV &amp; V</td>
<td>GE2</td>
<td>Statistical Methods for Social Sciences</td>
</tr>
<tr>
<td></td>
<td>GE3</td>
<td>Academic Writing</td>
</tr>
<tr>
<td></td>
<td>GE4</td>
<td>Basic Skills in Computer</td>
</tr>
<tr>
<td></td>
<td>GE5</td>
<td>Personality Development</td>
</tr>
</tbody>
</table>

**Course Learning Outcomes**

Course Learning Outcomes delineate the significant graduate attributes and the qualification descriptors essentially to be acquired by the students in a very discrete nutshell highlighting four major sequels. They project the exclusive benefits students would accrue on completion of the Course. They emerge as reference points that had helped not only in designing the academic programme but also in delivery and review of the same. All syllabi – Course contents are prefixed with Course description, Course learning objectives and learning outcomes envisaged in framing the individual syllabi.

**Contents for Each Course**

Contents for Courses are given in a complete format under individual syllabi with specific notations for Code number of paper/ Course/ subjects, type of Course (Course nomenclature – Core, Ability Enhancement and the like), credits allotted for theory and practical etc. Further Course description, learning objectives, learning outcomes, Contents in uniform five Units of Theory followed by list of Practical is presented cogently in each template. Intended learning experiences and suggestive assessment methods and reading material as References have also been clearly spelt out.
References for each Course

All Course contents or syllabi end up in an exhaustive list of References including textbooks, reference books, reading materials, e-resources, Journals, reports etc presented in APA format. Special attention was taken to see that the references recommended were of recent publication except certain unavoidable Textbooks of higher order belonging to old editions.

7. TEACHING LEARNING METHODOLOGIES

Creating an enabling environment for students to enjoy autonomy in knowledge gaining and application remains a sustained objective of Learning Outcomes based approach to education. It is time the pedagogy changed from defending rote learning to associative and active learning. Framing a Curriculum incorporating feasible/essential practical interfaces facilitating attainment of well defined learning outcomes stands significant. Paradigm shift in focusing ideals of vision on knowledge transfer pedagogies appreciating conventional and modern teaching methods and interlacing with adequate supportive practicum and library resources (especially e-resources) and ICT enabled teaching and learning is the need of the hour. A judicial mix of both theoretical and practical exposure is what is envisioned now through lectures, tutorials, library use and e-learning on one hand coupled with project work, internships, training (skill orientation),field-based learning and laboratory experiments on the other. Unlike teacher-centric learning approaches motivation to students to pursue self-study, acquisition of subject-specific knowledge and skills and industry- Institute linkages to enhance learning ambience with a futuristic mission on employability (capacity building) and nation building receives supremacy. Thrust on digital literacy and add – on of extra credits is made open to all students. Learning experiences escalating their proficiency levels and reflecting their learning outcomes – knowledge, skills, attitudes and value systems – to the society, also help them shine in global competitiveness. The process strives to bring out student’s value laden expressions of leadership, team spirit, self-motivation and coordinating qualities and sow the seeds for raising quest for lifelong learning. By imparting transferable skills the process envisions building a genre strong in generic and transferable skills. The teaching learning process in instilling qualities of healthy and quality living, resourcefulness, family dynamics, promotion of cultural and social aspects of Indian textiles, glimpse on Indian consumer and their behaviour, milestones of growth and development of individuals and the delicate strand of the
fragile society around spreads the milieu where the Programme on B. Sc Home Science (Honours) is vested.

8. ASSESSMENT AND OUTCOME MEASUREMENT METHODS

Philosophy of higher education lies in laying proper inroads for a sandwiched pedagogy of domain – specific exploration and critical examination of the environment and people around through ample spicing of community sensitiveness. As the programme forms the threshold not only for efficient home making but also to glow in the employment market, assessment methods start with examining demonstrable performance parameters as in other Institutions. Thrust on comparable academic standards enable reviewing the Programme based on benchmarks ensuring pan India/ global performance levels and credits. Students need to per se demonstrate and reflect their graduate attributes by addressing / delivering domain-specific knowledge, abilities of reflective and critical thinking, problem solving, justifying rationale, innovation and research bend, peer group activities, digital literacy, quest for self-study, expressions of ethical and moral values, lifelong learning, e- learning, responsive citizenship, exposition of procedural knowledge and demonstrate value laden expressions of leadership, team spirit, self-motivation and coordinating qualities. Autonomy to choose extra credits and elective papers paves way for gaining credits more than what is expected.
8.1 CORE COURSES
CORE COURSE
INTRODUCTION TO TEXTILES
(Credits: Theory - 4, Practical-2)

Course Description

An introduction to Textiles course covers the fundamental classification of the textiles along with the physical analysis of the fiber, yarn and fabric of different textiles. The course is designed to help the students understand the basics of textiles, the processes and technology used for manufacturing it. It explains about the properties and end uses of fiber, yarn, fabric and its co-relation. The course is based on systematic dissemination of textile science information followed by practical experiments for the students in the areas of identification of identification and properties, dyeing, printing and finishing treatments of textiles. This knowledge will be base for "Textile designing", "Garment technology", "Fashion designing", "Interior designing" courses. The course will be useful to those entering in textile related manufacturing, design and product development, selection, sourcing, quality control and research.

Learning Objectives:
- Obtain a broad understanding of textiles
- Develop understanding of technical terms involved in textiles.
- Get acquainted with the properties and uses of various textile fibers.
- Develop the skills for identification of fibers and fabrics
- Understand different types of yarns, weaves and finishes.
- Develop skills in making wise selection of textiles.
- Acquire knowledge of methods of laundry and stain removal.
- Learn the methods of dyeing, printing, and finishing of fabrics.

Learning Outcomes:
- Develop an understanding of concepts and basics of textiles.
- Understands and define the key textile terms.
- Develop critical understanding of the techniques of yarn and fabric manufacture.
- Identify the fibres, yarn and fabrics for its appropriate use.
- Analyze and asses dyed and printed textiles.
- Recommend the dyes, printing and finishing of textiles for specific use.

Course Content
Unit-I. Introduction to Textiles
   Definition of textile fibers and terminology
   Classification of textile fibers
   Basic unit and polymer bonds in textile fiber
       Physical and Chemical properties of fibers

Unit-II. Fibers
   Natural fibers (Morphology and polymer system, production, properties and end uses)
      - Cellulosic (Cotton, Jute)
      - Protein (Silk, Wool)
   Man-made fibers (Manufacturing process, chemical spinning, properties and end uses)
      - Viscose Rayon
      - Acetate Rayon
      - Nylon
      - Polyester
      - Acrylic
      - Elastomeric

Unit-III. Yarn and Fabric
   Yarns
      - Classification of yarns: simple, ply and cord
      - Types of Yarn: Textured and novelty
      - Twist in yarn: “s” and “z”, number of twist
      - Properties of yarn: strength, extension, fineness, length, diameter, composition.
   Woven fabrics
      - Looms and its part
      - Classification Basic weaves Plain, Twill, Satin.
      - Novelty weaves – Pile, Leno-Gauze, Honeycomb
      - End uses of fabrics with different weaves
   Knitted fabrics
      - Types and terminology used
      - Hand knitting
      - Machine knitting
Nonwoven fabrics

Unit-IV. Coloration and Finishing of Textiles

Dyes
- Terms related to dyes
- Classification of dyes
- Components of dyeing and its relation to dye material (auxiliaries, temperature and dye bath)
- Direct, Acid, Basic and Reactive dyes

Printing
- Styles of printing
- Modern methods of printing
- Pre-preparation for printing (printing paste, printing table)

Finishing
- Basic finishes - Singeing, Scouring, Bleaching, Sizing, Weighting, Degumming, Mercerizing, Sanforizing and Calendaring
- Special finishes

Unit-V. Laundry, storage and care of textiles

Introduction, Types, Uses
Water, Soaps, Detergents
Methods and care during laundering of different textiles

Practicals

1. Fiber identification: Identification of natural and manmade fibers by following three methods i.e. microscopic test, burning test and solubility test.

2. Study of Yarn: Detail study of the ply of yarn, count of yarn using beesley yarn count balance, twist by twist tester, crimp by crimp tester and strength of the yarn by single yarn or lea strength tester

4. Dyeing: Dyeing of yarn/fabric with different classes of dyes
   a. Dyeing of cotton yarn and fabric with direct dyes
   b. Dyeing of silk, wool and nylon yarn and fabrics with basic and acid dyes.
   c. Dyeing of polyester yarn and fabric with disperse dyes.
5. Printing of fabrics using:
   i. Direct style - block, stencil and screen
   ii. Resist style - Tie &Dye, Batik
6. Care of Textiles
   i. Stain removal
   ii. Mending of textiles
   iii. Starching using different types of starches

Learning Experience

- Regular lectures, interactive sessions, demonstrations, ICT enabled teaching and learning experiences in terms of video lessons hand on experiences for fiber identification, yarn characteristics and ornamentation of textiles. Working fabric specimens (fabric swatches) will be used in conjunction with the assignments to enhance the combined textbook/hands-on format.

Evaluation

- Unit test/theory exam/assignment/ swatch file/journal/evaluation of lab work

Reference

- Gohl, E., Vile sky, L. (2003), Textile Science: an explanation of fiber properties (2 edition), New
Delhi.

CORE COURSE
Fundamentals of Clothing Construction
(Credits: Theory - 4, Practical-2)

Course Description
The course provides basic principles for clothing manufacturing techniques. It is designed to develop skills in students related to body measurements using appropriate tools and preparation of fabric for clothing construction. It deals with the components of garments, material selection and techniques of construction. It further explains about the selection and use of sewing equipment. The knowledge of fundamentals of clothing construction will enable the students to make sound decisions related to material resources through the application of clothing construction and application skills. This will prepare students for advanced studies and professional employment in the areas of clothing and textiles.

Learning Objectives:
- Develop an understanding about the basics of clothing construction
- Learn about the principals involved in clothing construction.
- Know about various sewing equipment that are essential in a sewing room.
- Learns to construct articles.
- Develop skill in coordinating fabrics, patterns and supportive materials

Learning Outcomes:
A successful completion of this course will enable students to
- Understand basic principles of clothing construction.
- Comprehend the importance and function of clothes.
- Identify the common fabrics used for clothing construction
- Utilize design components in garment construction
- Gain an insight of various sewing machines and other sewing equipment’s available in the market, their functioning & common problems faced while usage.
- Understands various garment construction process.
- Co-ordinates fabrics, patterns and supportive materials
- Construct the garment

Course Content
Unit-I. Introduction
History of Clothing.

Origin of Clothing

Use of clothing among primitive people

Functions and theories of clothing

Clothing in relation to culture

Psychological aspects of clothing

Self-respect, self-enhancement, self-expression, gender desirability and individuality

Socio-psychological aspects of clothing among children

Significance of uniforms and national costumes.

Clothes for conformity, mobility and aesthetic appearance.

Terminology: Clothing, fabric, fashion, fad, silhouette, weaving, knitting, felting, plackets, brands, clothing symbolism, tradition,

**Unit-II. Sewing Machines**

Types of sewing machines

Mechanical Sewing Machine.

Electronic Sewing Machine.

Computerized or Automated Sewing Machine.

Embroidery Machine.

Parts of sewing machine

Types and function

Maintenance

Common problems and its remedies.

Tools and equipment used for clothing construction

Measuring tool

Drafting tool

Marking tool

Cutting tool

Stitching tool

Pressing tool

Needles, threads and their relation to fabric

Types of needles for hand and machine sewing
Types of threads hand and machine sewing  
Selection of right thread, needle for the fabric to be sewn.

**Unit-III. Introduction to Clothing Construction**

Anthropometric measurements  
Introduction and importance  
Instruments used for anthropometric measurements  
Standardization and size charts.  
Importance and use of size charts  
Size charts of child, woman and man  
Factors affecting selection of fabrics  
Social factors  
Economic factors  
Physiological factors  
Environmental factors

**Unit-IV. Design Components**

Elements and Principles of Design  
Introduction  
Basic elements of design  
Basic principles of design  
Relation between elements and principles of design to the Clothing and Fashion  
Color, line and texture in relation to:  
Age  
Season  
Occasion  
Figure and  
Complexion
Unit-V. Components of Garments

Garment Silhouettes
Introduction to basic Garments
Skirts
Blouses
Pants
Introduction to Garment detailing for
Necklines
Fullness
Pockets
Seams
Sleeve
Yoke and
Plackets.

Practical

1. Preparation of fabric for cutting
   a. Preshrinking
   b. Identification and straightening of Grain.
2. Taking measurements directly from body
3. Tools and Equipment used in Garment Construction: Squares and Scales, French curves – for armhole, necklines etc.
   a. Preparing sample of:
4. Basic hand stitches- basting, back stitch, hemming visible/invisible, Lock stitch.
5. Seams- plain seams and decorative seams
6. Fullness
   a. Darts-Single point, Fish dart
   b. Tucks- Pin tucks, wide tucks, corded tucks, criss crossed tucks
   c. Pleats- Knife, box, inverted box, accordion pleat
   d. Gathers – Hand and machine
e. Shirring
f. Ruffles and frills
7. Neckline finishes- Binding and facing
8. Plackets: Faced and continuous bound
9. Pockets: Patch, in seam pocket
10. Snap button and fastener attachment
   a. Introduction to drafting method and stitching of the following garments.
   b. Petticoat/ Apron/Kalidar Kurta
11. Drafting on paper
12. Transferring pattern markings from paper
13. Fabric cutting
14. Stay stitching
15. Sewing on machine

Learning Experiences
- Regular lectures, Videos, Presentations, films, Hands on experience for taking body measurements, making samples, operating sewing machine, construction of garments.

Evaluation
- Class test, presentations and practical evaluations

Reference
- Dorothy wood, the practical encyclopaedia of sewing, Anneess publishing Ltd, London.
- Holman, Gillian. (1997), Pattern Cutting Made Easy, BSP.
• Thomas, A, (1986), the Art of Sewing UBSPD Publishers Distributors Ltd. New Delhi.
CORE COURSE  
Traditional Textiles and Costumes of India  
(Credits: Theory - 4, Practical-2)

Course Description
India has a diverse and rich textiles and costume tradition. Textiles and costumes of each states in India speaks volume of their culture. The course includes the traditional textiles and costumes from different regions of India. It deals with the history and designing details of each textiles and costumes. It also explains factors like changing times, social life, work style, seasons reciprocal cultural exchanges, physical features, cultural affinities, political history, religious beliefs and climatic conditions influencing the costume and textile designing. It gives hand on experience to create traditional embroidered samples.

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 of making 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.
Course content

Unit-I. Introduction
  Textile Arts of India
  Weaving and weaving communities, Embroideries, Rugs and carpets, Saris
  Shawls and wraps
  History of Indian Traditional Textiles
  Chronological development of spinning, weaving and dyeing
  Various trade routes
  Classification of Traditional Textiles of India
  Painted and printed, Resist dyed, woven and embroiderred
  Traditional Costume and Culture
  Influence of historical, economic, political and socio cultural aspects on the evolution of traditional costumes.

Unit-II. Ornamented and resist dyed textiles (Origin, material & techniques used)
  Pigment painted textiles
  Patachitra, Pichhavi and Phad
  Mordant painted textiles
  Kalamkari-Masulipatnam and Srikalahasti, Mata-ni- pacchedi
  Printed textiles
  Hand block printed, Ajrakh, Rogan, Sanganer, Bagh
  Yarn resist
  Patola, Mashru, Ikat, Bandhana
  Fabric resist
  Sugadi, Bhandej, Laheriya

Unit-II. Woven textiles (From Northern India)
(Origin, material & techniques used)
  Rajasthan – Kota Doria
  Gujarat –Sujani, Tangaliya, Pachhedi
  Madhya Pradesh – Chanderi, Maheshwari
  Uttar Pradesh – Brocades
  West Bengal – Dacca muslin, Baluchari Tangail,
Shawls from Kashmir, Assam and Nagaland

**Unit-IV. Woven textiles (From Southern India)**
(Origin, material & techniques used)
- Maharashtra- Paithani, Himroo
- Andhra Pradesh and Telangana – Dharvaram, Venkatgiri, Gadwal and Narayanpet
- Karnataka – Ilkal, Khann
- Tamil Nadu- Kanjeevaram

**Unit-V. Traditional Costumes of India**
- Traditional costumes of Northern India Jammu and Kashmir, Punjab, Haryana
- Traditional costumes of Western India Rajasthan, Gujarat, Maharashtra
- Traditional costumes of Southern India Andhra Pradesh, Tamil Nadu, Kerala, Karnataka
- Traditional costumes of Eastern India Orissa, West-Bengal, Assam, Nagaland, Meghalaya, Manipur, Arunachal, Mizoram, Tripura
- Traditional costumes of Central India Uttar Pradesh, Madhya Pradesh and Bihar

**Practical**
Learning the techniques of following traditional embroideries with emphasis on base material, threads and motifs used.

1. Kashida of Kashmir
2. Chamba of Himachal Pradesh
3. Phulkari and Bagh of Punjab
4. Chikankari of Uttar Pradesh
5. Kantha of Bengal
6. Embroideries of Manipur
7. Embroideries of Gujarat
8. Gold and Silver embroidery
9. Bead work

Preparation of portfolio with
- Pictures of traditional textiles with the descriptive analysis
- Pictures of the traditional costumes with constructional details.
• Samples of embroidery with its theoretical details.

**Learning Experience**

• Regular lectures supported with visuals, visit to textile museum and demonstration of the embroideries and presentation of the traditional costumes of India

**Evaluation**

• Class test/quiz/ practically identification of textiles/evaluation of practical work done/journal/presentations

**References:**

• Chisti R.K., (2013) Sari tradition and beyond, Roli Publication
• Ghurye G. S.(1995), Indian Costume, Popular Prakashan, Bombay
CORE COURSE
Fundamentals of Human Development
(Credits: Theory - 4, Practical-2)

Course Description

The course introduces students to the concept of human development. It then moves on to discuss the various schools of thought that gave rise to different theoretical frameworks to understand human development. It explains basic developmental principles and factors like heredity and environment which influence growth and development. It deals with development during different stages of life span, starting from conception to old age. It further discusses the principles of working with human beings and methods of studying human development.

Learning Objectives

- Develop an understanding about the need and importance of studying human growth and development across life span
- Learn about the biological and environmental factors that affect development
- Learn about the characteristics, needs and developmental tasks of different stages in the human life cycle
- Understand the different theoretical frameworks fundamental to HDFS
- Learn about the classic human development theories
- Develop professional attitude for working with human beings across life span

Learning Outcomes

- Explain the need and importance of studying human growth and development across life span.
- Identify the biological and environmental factors affecting human development.
- Describe the characteristics, needs and developmental tasks of different stages in the human life cycle
- Explain the broad theoretical perspectives and frameworks of HDFS
• Apply the theoretical approaches to work with human being across life span

Detailed Course

Unit-I History and Evolution of the Field of HDFS

Who is a child? What is development?

History and future of the field of Human Development

• Growth and development – concepts, determinants and principles
• Principles of growth and development

Debates and issues in Human Development

• Nature vs. nurture
• Continuity vs. discontinuity
• Organismic vs. Mechanistic
• Plasticity
• Individual differences

Perspectives in HDFS

• Life Span and Life Course
• Feminist
• Evolutionary
• Symbolic Interaction
• Systems

Focus and scope of the discipline of HDFS

UNIT-II Theoretical Frameworks and Theories

Theoretical Frameworks

• Biological-maturational
• Environmental learning
• Constructivist
• Culture-contextual

Overview of theories of human development

• Freud’s theory of psychosexual development
• Erikson’s theory of psychosocial development
• Piaget’s theory of cognitive development
• Bronfenbrenner’s ecological systems theory
• Vygotsky’s Socio-cultural theory
• Learning theories (Watson, Skinner, Bandura)
  ➢ Indian Thinkers (selected) on Child Development
  • Mahatma Gandhi
  • Rabindranath Tagore
  • Jiddu Krishnamurti
  • Gijubhai Badeka and Tarabai Modak
  • Hansa Mehta
  • Amita Verma
  • Sarojini Naidu
  • Mina Swaminathan

UNIT- III Prenatal Development and Birth Process

Prenatal Development – stages, factors affecting, diagnostics techniques

Birth Process
  • Stages of birth
  • Types of delivery (natural, c-section, breech, home vs. assisted delivery)

Immediate care of newborn, adjustments made by newborn, types of feeding - natural and artificial, weaning, infant and mother mortality and morbidity, immunization schedule.

UNIT-IV Stages in the Human Life Cycle: An Overview

Characteristics, needs and developmental tasks of individuals in relation to physical, cognitive, socio-emotional domains of development in the following life stages:

• Neonate (birth-1 month)
• Infancy (1 month-2 years)
• Early childhood (2-6 years)
• Middle childhood (6-11 years)
• Adolescence (12-18 years)
• Emerging and Young adulthood (18-35 years)
• Middle age / mature adulthood (35-60 years)
• Late adulthood / Old age (60 years and above)

UNIT-V Professional Skills for working with Human Beings

Research Methods
  • Case study, interview, naturalistic observation, laboratory observation,
experimental methods, cross sectional and longitudinal and sequential studies.

- Ethics of research with human subjects – written consent, privacy, no harm, no plagiarism, debriefing

Self-awareness and contextual sensitivity

- Building professional attitudes
- Understanding development in different contexts and circumstances
- Developing contextual sensitivity and preparation for field experiences
- Personal and Professional issues involved in a career as HDFS professional (Identify entry level jobs, career path and job tasks/requirements)

**Practical(s)**
1. Preparation of an album on developmental milestones of children.
2. Visit to maternity ward and ante-natal clinics.
3. Visit to an Anganwadi
4. Plotting growth monitoring chart and interpretation.
5. Observation of motor activities of a toddler.
6. Visit to an old age home
7. Carry out case studies to know more about the different life stages, e.g., school going children, adolescents, middle adults.
8. Engaging in games and activities that enhance self-understanding in building professional skills.
9. Observations of infant child rearing practices in families from different social classes.
10. Interviews of adolescent girls and boys to understand their life style and behaviour based on gender and socio-economic status

**Learning Experiences**

- Regular lectures, exercises on observation and follow up discussion, case studies, films and documentaries, group games and activities

- Films and documentaries about prenatal development and cultural variations in human development.

- Internet searches followed by class presentations on topics across the life span, for example, children’s play, female feticide, condition of children from low socio-economic status, new born babies and infants, elderly, middle age, adolescent time use, peer pressure
Evaluation

- Class test, presentation and one essay/take home based on observations

References

CORE COURSE
Developmental Challenges and Children with Disability
(Credits: Theory-4, Practical-2)

Course Description
The course introduces students to various disabilities in childhood years. It highlights aspects such as aetiology, characteristics and management of different disabilities. The educational practices in special education and inclusive education are also dealt. It also provides an overview of policies and laws related to disability.

Learning Objectives
- Orient the students about the need and importance of studying children with different disabilities and how needs of these children differ from others.
- Develop an understanding and awareness of the basic terms, issues and concepts related to disability.
- Explain students about the educational and welfare programs, facilities and services available and the efficacy of the same.
- Develop sensitivity towards parental coping and acceptance of the situation concerning disability 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
designabilities.

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

**Detailed Course**

**UNIT- I Historical Background to Special Needs as a Discipline**

- History of the field
- Pioneers in the field
- Emergence of special needs as a discipline
- Present status of the field (with focus on special education and inclusion)

**UNIT- II Introduction to Childhood Developmental Disorders and Disabilities**

- Developmental disorders, disability, impairment, handicap: Concept and definition
- Models of disability
- Classifying disabilities
- Social construction of disability
- Demography of disability in India

**UNIT- III Common Childhood Developmental Disorders and Disabilities**

Causes, Characteristic, identification, assessment and intervention with reference to:

- Loco motor disability
- Visual disability
- Auditory and speech disability
- Intellectual disability
- Autism
- Learning disability
- ADHD
- Cerebral Palsy
- Social and Emotional Disability

**UNIT-IV Family having Children with Disabilities**

Role of parents in upbringing special children
Parental acceptance and coping with the presence of special child in the family
Stages parents go through to come to the terms with the condition of the disabled child
Facilitating and debilitating parental behavior in the development of special child
Role of HDFS professionals in dealing children with special needs.

UNIT - V Programs and Policies for Children with Disabilities

- Rights of the child with disability
- Policy and laws related to children with disability
- Interventions strategies adopted for children with disabilities
- Issues related to policies and programs in the area of special needs in India

Practical(s)

1. Visits to organizations working with children with disabilities.
2. Observing children with disabilities in families and institutions.
3. Planning developmentally appropriate material for children with disabilities.
5. Interview the teachers of special school and parents to find out about their experiences, hopes, attitudes and difficulties faced.
6. Gather information of latest trends, services available etc. through newspapers, magazine and other media.

Learning Experiences

- Regular lectures, exercises on observation and follow up discussion, case studies, films and documentaries.

Evaluation

- Class tests on theoretical concepts.
- One evaluation on practical field experiences.

References


CORE COURSE:  
**Early Childhood Care and Education**  
*(Credits: Theory-4, Practical-2)*

Course Description

This course explores the range of issues related to Early Childhood Care and Education (ECCE). The focus of the course is on understanding the importance of early years and early interventions. The course further aims to familiarize students with indigenous (Indian) models of ECCE, pedagogical approaches and programmatic trends as they evolved in the Indian context.

Learning Objectives

1. Know the importance of early childhood years and significance of intervention programs for early childhood development.
2. Develop insight into the historical developments – global and Indian including the current programs and policies in ECCE.
3. Develop awareness of ECCE programs in different contexts in India.
4. Familiarize with indigenous (Indian) models of Early Childhood Education and explore the current early childhood research, theoretical trends and issues. To learn about different curriculum models and pedagogical approaches in early childhood education.
5. Impart knowledge on programme planning for young children.

Learning Outcomes

1. Explain the importance of early childhood years and significance of intervention programs for early childhood development.
2. Describe the historical developments – global and Indian including the current programs and policies in ECCE.
3. Identify various indigenous (Indian) models of Early Childhood Education and apply it to understand the current early childhood research, theoretical trends and issues.
5. Create developmentally appropriate programs for young children.
UNIT-I Introduction to Early Childhood Care and Education

Concept, meaning, scope and significance of ECCE

- Developmental perspective
- Neuroscience perspective
- Human rights perspective

Expansion from ECE to ECCE to ECD.

Aims and objectives of ECCE—General and specific

Types of ECCE service delivery – Formal and informal; Government funded, Philosophy oriented, Laboratory nursery school, Franchise oriented

UNIT-II ECCE in India

History of Early Childhood Care and Education in India.

Overview of ECCE in pre and post-independence period. Preschool education in the pre and post-independence era (very brief). How the international trends have influenced the national trends.

Contributions of educational philosophers: global and Indian perspective - views of educationists and philosophers: Comenius, Rousseau, Pestalozzi, Froebel, Robert Owen, McMillan Sisters, John Dewey and Montessori, Sri Aurobindo, Tagore, GijubhaiBadheka, TarabaiModak, Mahatma Gandhi

Present status of young children in India.

Policy perspectives in ECCE

Recent Policies in ECCE-Various Education commissions of India:

- National Curriculum Framework 2005
- National Policy on Early Childhood Care and Education 2013
- Curriculum Framework for Early Childhood Care and Education 2012/2013
- New Education Policy, 2020
UNIT-III Early Childhood Curriculum

Definition and concept of curriculum
Curriculum approaches – subject centered, learner centered, community centered
Developmentally Appropriate Practice (DAP) – definition and core considerations, myths and consequences of developmentally inappropriate ECE practices
Components and essential features of developmentally appropriate ECCE curriculum
Planning a developmentally appropriate curriculum- approaches, key principles and types of plans

UNIT-IV Play and its importance

Play and its characteristics
Theories of play- surplus energy theory, recreational theory, recapitulation theory
Stages and types of play
Role of play in overall development of children
Teacher's role in creating environment and promoting play
Use of play way approach in the curriculum for young children.

UNIT-V Innovative ECCE Models

Nutan Bal Shikshan Sangh, India
Daxinamurti Bal Mandir, India
Gram Bal Shikshan Kendra, India
Lok Jumbish Program, India
Mirambika, India
Rishi Valley, India
High/Scope Model, USA
Reggio Emilia Approach, Italy
TeWhāriki Model, New Zealand
The ECEC Model, Sweden
SetoGurans National Child Development Services, Nepal
Practical(s)

1. Observation of early childhood programs at government and non-governmental institutions.
2. List the activities for each domain to promote all round development in young children.
3. Plan and record activities and methods of playful interactions to foster development in children (birth –two years and two –six years)
4. Conduct workshops in any two of the following:
   Developing worksheets to teach readiness concepts
   Enhancing social and language skills
   Music, movement and drama for children
5. Prepare a developmentally appropriate plan and its implementation
6. Methods and tools to assess progress of children and program
7. Prepare low cost play materials/equipment’s

Learning Experiences

- Observation of early childhood programs (government and private)
- Exercises on basics of ECCE program planning
- Observation of free play situations and classifying children’s play

Evaluation

- Regular class tests
- Presentations on select topics

References


CORE COURSE
Basics of Food Science and Nutrition
Credits: Theory-4; Practical-2

Course Description

The course “Basics of Food Science and Nutrition” aims at developing the basic understanding of food and nutrition, it’s the effect on human health and newer advances in food technology. This course encompasses the physiological, biochemical and social aspects of food and discusses the relationship between metabolites and human health. Moreover, the Course is focused on the advances in the most emerging area of Applied Science of Neutraceuticals (where food is the medicine) and provides a detailed insight into understanding the composition, molecular interaction and bio mechanisms of food metabolites. The knowledge and skills to utilize food and nutrients are as the powerful tools for physical, mental and social well-being.

Learning objectives:

- Study the different methods of cooking foods
- Obtain knowledge of different food groups, their composition and nutrients present in the foods.
- Understand the vital link between foods, nutrition and health
- Gain knowledge on functions, requirements and effects of deficiency of nutrients

Learning outcome:

A successful completion of this course will enable students to

- Summarize and critically discuss and understand both fundamental and applied aspects of Food Science and nutrition and Food Production
- Able to explain functions of specific nutrients in maintaining health
- Identifying nutrient specific force and apply the principles from the various factors of foods and related disciplines to solve practical as well as Real world problems
- Use current information Technologies to locate and apply evidence-based guidelines and protocol and get imported with critical thinking to take leadership roles in the field of health, diet special nutritional needs and nutritional counseling.
Course Content

Unit-I. Introduction of Food Groups, Food Pyramid and Cooking Methods

- Definition and Terms used in Food Science and Nutrition
- Health, Food, Nutrition, Nutrients: Macronutrients (Carbohydrates, Proteins and lipids) and Micronutrients (Vitamins and Minerals), and Malnutrition
- Various classifications of Foods and Food Groups
- Definition, Classification and Functions of Foods, Basic Food Groups and Need for Grouping Foods and Application of Food Groups In Planning Adequate/Balanced Diets
- Culinary terms and Methods of Cooking
  - An Overview of culinary terms
  - Different Modes of heat transfer like Radiation, Conduction and Convection
  - Moist heat methods like Boiling, Simmering, Poaching, Steaming, Pressure cooking
  - Dry heat methods: Air as medium of cooking: Grilling, broiling, roasting, Baking,
  - Fat as medium of cooking: Sautéing, Shallow fat frying, Deep fat frying
  - Combined (Moist and dry) Methods: Braising, Stewing
  - Other cooking methods:-Microwave cooking, and Solar cooking.
  - Advantages and Disadvantages of Cooking methods

Unit-II. Nutritional Significance of different Food Groups

Basic Concepts, classification, Composition, nutritive value and Role in Cookery

- Pulses and Legumes
- Fruits, and Vegetables,
Salt, Sugar and Jaggery
Nuts, oils and Oil seeds
Milk and Milk Products: including Fortified milk & its importance
Eggs - Basic structure of an egg and biological value, Quality evaluation and grading of eggs
Meat, poultry and fish
Spices & Condiments - Importance and functional properties of

**Unit-III. Macronutrients**
Definition, Classification, Dietary Sources, Functions, Recommended Dietary Allowances, clinical signs and symptoms of Deficiency diseases and Excess of
Energy
Carbohydrates
Proteins
Lipids
Water

**Unit-IV. Minerals**
Definition, Classification, Distribution of minerals in the body, Functions, sources, requirements and effects of deficiencies of Minerals of
Calcium
Phosphorus
Magnesium
Sodium
Potassium
Selenium
Iron
Zinc
Iodine
Copper
Fluorine

**Unit-V. Vitamins**
Classifications, functions, sources, Clinical signs and symptoms of deficiency, requirements of
Fat Soluble Vitamins - A, D, E and K

Water Soluble Vitamins-B Complex Vitamins- Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, Cyanocobalamin and Vitamin C

Practical

1. Market survey of locally available food items like cereals, pulses, fruits and vegetables, milk and milk products, fats and oils, nuts and oilseeds, sugar and jaggery, meat, fish, and poultry and miscellaneous food items like biscuits, jams, jellies, ketchup etc. and their cost

2. Classify foods on the basis of nutrients:- Protein, Iron, Calcium, Vitamin A, Vitamin C

3. Controlling techniques: Weights and measures - standard and household measures for raw and cooked foods

4. Weights and Measures, Determination of Edible Portion of Foods, preparing market order and table setting

5. Food Preparation, understanding the principals involved, nutritional quality and portion size of 5-7 commonly consumed recipes in each food group
   - Cereals: rice, pulao, Roti, chapathi, paratha, poori, pastas etc
   - Pulses: Whole, dehusked- Dal, sambar, kootu, Chole, Rajmah, etc
   - Vegetables: Dry preparations, Curries
   - Milk and milk products: Kheer , Custard,
   - Meat, fish and poultry preparations
   - Egg preparations- Boiled, poached, fried, scrambled, omelettes, egg pudding

Learning Experience

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows. Hands on experience in laboratory

Evaluation

- Announced and unannounced class tests, seminars and assignments and Record works related to their Practical works.
Reference


CORE COURSE
Dietetics
(Credits: Theory-4, Practical-2)

Course Description
This course prepares the students to use advanced knowledge about food and nutrition for prevention as well as treatment of diseases and also maintain human health. Dietetics focuses on food management through proper planning, preparation, monitoring, implementation and supervision of a patient’s modified diet and to develop basic counseling skills as dietitian.

Learning Objectives
- Understand the role of dietitian and to maintain good nutritional status, correct deficiencies or disease conditions of the patients
- Gain knowledge on the principles of diet therapy and designing or formulating different therapeutic 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 dietetics practice.
- Use effective and appropriate communication skills in providing information, advice and professional 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 entrepreneurial approach advocating for excellence in nutrition and dietetics.
- Independently plan and execute a research project in regard to nutrition and dietetics practice.

Course Content
Unit-I. Concepts in diet therapy

Growth and Scope of Dietetics
Purposes and Principles of Therapeutic Diets
Modifications of Normal Diets
Classification of the Therapeutic Diets,
Role of Dietitians
Characteristics of Dieticians,
Hospital Dietary Food Service, Diet Counseling, Team Approach to Nutritional Care, Principles of Food Prescription
Indian Dietetic Association,
Computer Assisted Instructions (CAI) - Diet Planning using computers, Use of Technology in diet counseling.

Unit-II. Medical Nutrition Therapy in Obesity, Underweight and Diabetes Mellitus

Etiology, Pathophysiology, Clinical symptoms, metabolic alterations, Assessment/Indicators,
Lifestyle & Dietary guidelines for the following conditions

**Obesity** (Bariatric Surgery: types, Management)

**Underweight**

**Diabetes Mellitus** (Acute and Chronic Complications of Diabetes
Diet Modifications, Use of Food Exchange Lists, Insulin-Types and Use, Oral Hypoglycemic Agents, Carbohydrate counting, Glycemic Index, Glycemic Load)

Unit-III. Medical Nutrition Therapy in GastroIntestinal Disorders and Diseases of the liver

Etiology, Pathophysiology, Clinical Symptoms, Assessment/Indicators, Lifestyle & Dietary guidelines for the following conditions

Diarrhea,
Dysentery,
Constipation and
Peptic Ulcer
Jaundice
Hepatitis
Fatty Liver
Cirrhosis
Hepatic Coma

Unit IV. Medical Nutrition Therapy in Diseases of the Cardio Vascular System and Kidney Diseases

Etiology, Pathophysiology, Clinical Symptoms, Lifestyle & Dietary guidelines for the following conditions:

Atherosclerosis,
Hyperlipidemia,
Ischemic Heart Disease,
Congestive Heart Failure,
Bypass Surgery
Hypertension (DASH Diets)
Nephrotic Syndrome
Nephrolithiasis
Acute and Chronic Renal Failure
4.10 Dialysis – Principles and Types
4.11 Kidney Stones

Unit-V. Medical Nutrition Therapy for Fever, Food Allergy and Cancer

Febrile Conditions

Acute and chronic infectious disease-Typhoid, Tuberculosis And HIV and AIDS
Food Allergy - Definition, Causes, Science and Symptoms, Types of Allergy, Diagnosis,
Dietary Modifications
Gluten sensitivity and Lactose intolerance
Cancer: Etiology, Metabolic alterations, Types of Cancer, Dietary Recommendation for Cancer Survivors. Nutritional therapy for Cancer

**Practical Topics**

1. Preparation of Hospital Diets- Modification of diet with respect to texture, consistency and nutrients
2. Modification of Diets in Obesity
3. Modification of Diets in Underweight
4. Modification of Diets in Diabetes Mellitus
5. Diets for Febrile Conditions – TB, Typhoid
6. Modification of Diets in Peptic Ulcer, Constipation and Diarrhoea
7. Modifications of Diets in Liver Diseases – Jaundice, Hepatitis and Cirrhosis
8. Diets for Nephritis, renal Failure and renal Calculi, Protein Restricted Diets
9. Diets for Cardiovascular diseases – Sodium Restricted, Fat Controlled
10. Modification of Diet for Cancer Patients and HIV Infected Person
11. An Overview/desk review on DASH diet, Mediterranean diet, Paleo diet, FODMAP diet, Keto diet VLCD etc.

***As recommended by the Board of Studies of the University

**Learning Experience**

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows, visit to Hospital Dietary Department

**Evaluation**

- Announced and unannounced class tests, seminars and assignments and Record works related to their Practical’s
Reference

CORE COURSE
FAMILY MEAL MANAGEMENT
(Credits: Theory-4, Practical-2)

Course Description

Course investigates how nutrition requirements and challenges change throughout the human lifecycle and how alteration in nutritional requirements impact on human health. The course also investigates the influence of nutrition prior to and during conception and to highlight the importance of good maternal nutrition during pregnancy and lactation and the impact of poor nutritional balance on fetal and infant development and maternal health. The course will cover the assessment of normal growth and body development during childhood and adolescence and will conclude with a full review of current literature and research on nutrient needs and factors affecting the nutritional status of adults and the elderly.

Learning Objectives:

- Study the growth and development during various stages of life span
- Understand the basics for recommending the dietary allowances
- Study nutritional needs at different stages of life span
- Gain experience in planning adequate diets for different age groups and for different income groups.

Learning Outcomes:

- Design food plans and assess the adequacy of diets to meet the nutritional needs of humans at various stages of life cycle.
- Assess nutrition issues and conditions and also recommend nutrition intervention and support to promote the health and wellbeing.
- Have the knowledge, both to develop and critique nutritional interventions designed to improve human health and well-being at specific age associated time points.
- On completion of the course students will be able to critically assess nutritional requirements and nutritional health status of an individual.
Course Content

Unit-I. Introduction to RDA and Balanced Diet

- Basic concept and purposes of Recommending the Dietary Allowances,
- Factors Affecting Recommended Dietary Allowances
- Requirements and Recommended Dietary Allowances for various age groups
- Uses of ICMR- RDA in planning balance diet
- Exchange system and Dietary Diversity

Unit-II. Nutrition in Pregnancy and Lactation

- Physiological Changes occurring during Pregnancy
- Importance of Food and Nutritional Care and Requirement during pregnancy
- General Dietary and nutritional Problems and Complications,
- Physiology and Hormones involved in Lactation
- Food supplements and galactogogues.
- Factors Affecting the Volume and Composition of Breast Milk,
- Nutritional Requirements during lactation

Unit-III. Nutrition in Infancy

- Growth and Development of Infants,
- Composition of Human Milk and Human Milk Substitute,
- Bottle Feeding and related Problems,
- Weaning and Supplementary Feeding Foods,
- Feeding Problems and Complications.
- Use of growth charts and standards and prevention of growth faltering
Unit-IV. Nutrition in Childhood and Adolescence

Growth and Development of Pre School, School Going Children and Adolescence.

Food and Nutritional Requirements,

Factors to be considered while Planning Diet for Children and Adolescents,

Growth Spurt during Adolescence.

Food Habits, Dietary Guidelines, Food and Nutritional Requirements,

Nutritional and Behavioral Problems and Eating Disorders

Unit-V. Nutrition for Adults and Elderly

Reference Man and Reference Woman,

Food and Nutritional Requirements for Adults doing Different Activities

Processes of Aging,

Food and Nutritional Requirements of Elders,

Nutrition Related Problems of Old Age,

Dietary Guidelines and diet Modifications.

Practical

Practical / Related Experience

1. Planning, Preparing and Evaluating Menu during Pregnancy
2. Planning, Preparing and Evaluating Menu during Lactation
3. Planning, Preparing and Evaluating Menu for Infants (Supplementary Foods)
4. Planning, Preparing and Evaluating Menu for Preschoolers
5. Planning, Preparing and Evaluating Menu for School Going Children
6. Planning, Preparing and Evaluating Menu for Adolescents
7. Planning, Preparing and Evaluating Menu for Adults
8. Planning, Preparing and Evaluating Menu for Elderly
As decided by Board of Studies of the university.

Learning Experiences

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows.

Evaluation

- Announced and unannounced class tests, seminars and assignments and Record works related to their Practical’s.

Reference

CORE COURSE
Resource Management Concepts and Contexts
(Credits: Theory-4, Practical-2)

Course Description

Resources and their management is the ultimate goal of all families. The Course introduces the conceptual and contextual meaning of resources and their management in micro level family settings in the changing world in a simple format with experiential learning to the learners. Presenting optimal initiatives and equipping students with appreciable management acumen to imbibe the contexts in their family system and the environment is the major scope.

Learning Objectives

- Learning to identify and manage the use of resources available for functional use
- Comprehending the purpose of managing resources
- Setting realistic goals and being practical and prudent in the use and management of limited resources by making intelligent decisions
- Becoming money, time and energy conscious in daily living

Learning outcomes

- Understanding on the concepts related to family resource management
- Appreciation of the significance of management process in efficient use of resources
- Imbibing nuances of human values and standards for successful management and decision making
- Focus on management of human energy as a family resource

Unit I Introduction to Resource Management in Family Settings

Introduction to home management- meaning, definitions, conceptual framework, need and philosophy
- Concept, definition, universality and scope of family resource management
- Approaches to resource management – family resources Vs home management
- Ethics in management of resources – essential qualities for success
- Motivating factors in management – Values, Standards and Goals – meaning, types/
classification and influences.
Theories of Motivation- Maslow’s hierarchy of needs theory; human wants – nature and role in management

Unit II Resources

Concept, classification and characteristics of family resources
Factors affecting utilization of family resources
Maximizing use of resources and resource conservation.
  Natural resources: renewable and non – renewable resources, methods of harnessing renewable resources for residential use

Unit III Functions of Management: An Overview

Decision Making- the crux of management, Types of decisions; factors of control, role of values, standards and goals in decision making process
Management process: Definitions and steps in management process: Planning, Controlling, Organizing and Evaluation
  Significance of managing resources of the family
  Relation of Family Resource Management to other areas of Home Science

Unit IV Resource Management Process

Management process applicable to specific resources:
Money- sources of income, meaning of income and expenditure, steps in money management,
Budgeting- budget items, methods of handling money
Time – concept of time schedule, time norms and peak loads
Energy – Types of effort (Manual, pedal, visual etc)., Concept of body posture, drudgery and fatigue, fatiguing activities, classification of activities (sedentary, moderate and heavy), use of labour saving devices in management of time and energy, methods of alleviating fatigue
  Principles of Work simplification, Mundel’s Classes of Change, time and motion studies, working heights at different levels
Unit V Ergonomics: Role in Management of Human Resources

Ergonomics – concept and principles, work, worker and work environment relationship, role of work, workplace and equipment’s (appliances) as sources of drudgery
Occupational health hazards – sources, problems and solutions
Waste management: home level solid and liquid waste management practices
Application of Management Processes in:
Event Planning &Execution

Practical

1. Comprehend and give a write up on values held and goals set – different age groups
2. Identify resources in and around a family, their use and benefits accrued: Prepare an Inventory
3. Harnessing natural resources: model making – solar devices, windmills, rainwater harvesting, water conservation measures
4. Conservation of community and natural resources for optimization: Portfolio
5. Identification and development of self as a resource.
   - SWOC analysis – who am I and Microlab
   - Building Decision Making abilities through management games
   - Role play
   - Goal setting exercise for one academic year
6. Elucidate changing value systems in Indian conditions – pros and cons
7. Preparation of time plans for self and family
8. Drafting family budget for different income groups
9. Time and Motion Studies for simplifying work - Flow process chart etc
10. Ergonomic analysis of different work, work places and appliances as sources of drudgery
11. Trial experiments on time and energy management using different household appliances
12. Determining working heights for different individuals at different levels
13. Planning an Event - management and evaluation, with reference to
   - Managerial process
   - Resource optimization - time, money, products, space, human capital and natural resources
Learning Experiences

- Lectures, demonstrations, role plays, debates, field visits, blended teaching-learning, projections, ICT enabled learning experiences

Evaluation

- Class tests, assignments, records, portfolio presentation, model making

References


CORE COURSE
Planning and Designing Interior Space
(Credits: Theory-4, Practical-2)

Course Description
Shelter and the living space enclosed within are the determinants of healthy, safe and satisfied living. The Course is a launch pad for the students to understand the rudiments of functional as well as aesthetic designing of interior spaces so as to render them more livable and comfortable for occupants. The Course further facilitates experiential learning on designing spaces.

Learning Objectives
- Develop comprehension on the nuances of design, design elements and principles
- Draft house plans based on standard guidelines and principles
- Understand space design organization for optimum comfort and functionalism.
- Evaluate residential interior space for aesthetic and ergonomic feasibility

Learning Outcomes
- Practicing knowledge gained on selection of site and building principles in real life situations
- Enable reading and comprehending building plans, evaluating and drafting them
- Examining market trends, merits and demerits of building materials and finishes
- Appreciate principles of design and the contributing factors and refine personal aesthetic senses

Course Content

UNIT I: Design Fundamentals in Designing Interior Space
- Life space and Proxemics – significance in interior space designing
- Concept and meaning of aesthetics, perception and good taste in designing
- Interior design Vs interior decoration
- Design: Definition, types and classification
- Plastic elements - elements of design – application in interiors
- Rudiments of design - Principles of design – application in interiors
UNIT II: Aesthetic and Functional Considerations in Designing Interior Space

Colour – definition, colour spectrum, Prang Colour system, classification of colours, colour harmonies – use and application in interiors. Factors influencing choice of colours

Furniture – definition, importance, classification, styles, use, factors influencing selection and placement, case goods Vs upholstered furniture, ergonomically designed furniture, modular units, multi-purpose furniture; concept of furniture detailing

Lighting – Sources, kinds and types of lighting, requirements of good lighting, use/role, brightness - measurement for adequacy, avoidance of glare and shadow

Soft furnishings in the interior – definition, classification and use in different areas; window treatments- hard and soft

Accessories in the interior – definition, functions, use and classification; role in completing a design needs in an interior

Creating interface between interior and exterior - Introducing flower arrangements, indoor plants, Bonsai and hydroponics

Unit III: Concept of Housing

Definition, importance and functions of a house; Family’s housing needs; Housing as a symbol of standard of living

Sustainable Development Goals (SDGs) - Pollution and Environment protection, Acts (EPA)

Housing shortage and housing problems in India

Housing standards- role of ISI and BIS

Residential structural features of Indian houses and cultural influences

Unit IV: Constructional Considerations in Designing Interior Spaces

Selection of site for houses: Factors influencing and legal aspects

Principles of planning, space allocation and organization in independent houses, apartments and flats

Building materials: materials for foundation, construction and finishes – types, characteristics and use

Concept of green buildings and eco-friendly materials as modern trends in building construction

Levels of construction and components of a building

Spatial organization in interiors: work zones, space bubble and schematic diagram
Symbols used in drafting plans, reading plans and blueprints

Types of plans – site, floor, cross-section, elevation, landscape, perspective

Drafting plans – concept drawings for different income groups; functional designs to suit different age groups and purposes; designs for people with special needs (PWD)

Ergonomics in designing kitchens, the nerve centre of the house: role of anthropometry, working heights, work triangle- significance in drafting various kitchen layouts and designing modular kitchens

Modular coordination and prefabrication

Housing finance: Availability and supporting agencies - Government and non-governmental agencies

UNIT V: Building Services in an Interior

HVAC
Plumbing
Wiring
Waste disposal methods and provisions
Rain water harvesting units
Safety features – concept of BIMs, IAQ, fire safety, exhausts/ alarms
Ergonomic considerations ensuring health and safety of inmates
Fixtures, fittings and operating shutters
Spatial organization considerations with special reference to people with disabilities (PWD)

Practical
1. Brainstorming on current trends in interior design
2. Market Study on:
   - furniture construction and detailing, availability and cost of different types of furniture
   - Availability and popularity of eco-friendly materials
   - availability and cost of building materials and finishes
3. Submission of layout drawings for different rooms & furniture using cut outs
4. Developing 2D and 3D designs for furniture and rooms
5. Area arrangement - Interior design for different rooms as mock up spaces
6. Visits to:
   - hotels, restaurants, conference hall, corporate offices to study significant differences in designing of interiors and space organization
   - BIS office to gain knowledge on basic standards
   - HUDCO and Housing Board offices to learn about Scheme Rules and housing standards
7. Evaluation of art objects
8. Drawing exercises: development of motifs, illustrations for different kinds of designs, use of various elements and principles (of design) in designing objects, room arrangements etc
9. Lecture cum demonstrations - Use of elements and principles of design in making accessories of functional and aesthetic value like pottery, paintings (different types), floor decorations, flower arrangement
10. Hands-on experiences – collage, decoupage, papermache objects, macramé, posters, greeting cards, Bonzai, hydroponics
11. Planning lighting for residential and commercial spaces specifying requirements
12. Learning drafting symbols and reading/judging house plan exercises
13. Drawing a kitchen layout considering anthropometric data of an individual
14. Drawing house plans for different income groups
15. Determining the IAQ status in different rooms in the Institution and analyze daily bulletins for comparative study over a month
16. Analyzing spatial needs/organization in different business establishments, small to 5 Star and above hotels, corporate offices, educational institutions etc
17. Working drawings
   - Drawing sketches-two dimensional and three dimensional
   - Prang colour system, Colour harmonies, Colour schemes for various rooms
   - Model making – window treatments, furniture and art objects
18. Submission of a complete record
Learning Experiences

- Lectures, blended learning, projection techniques (slides, OHP), ICT based learning, flipped classroom

Evaluation

- Case study, surveys, field visits, record submission, drawing/ painting / rendering exercises, area arrangement, class tests, brainstorming sessions

References

- De, A.K. (2010), *Environmental Chemistry*, New Delhi: Willey Eastern Ltd,
- Deshpande, R.S. (2000). *Build Your Own Home*. Pune: United book Corporation,


• National Building Organization- Monograph of Housing Statistics


• *Encyclopedia of Interior Design*
CORE COURSE

Family Finance and Consumer Behaviour
(Credits: Theory-4, Practical-2)

Course Description
Consumer is the king in the consumer market. Consumers’ behaviour and attitude reflects their living styles which *per se* will be the delineation of their family finance management practices. The Course exposes students to real life situations for realizing their role as consumers as well as financial managers in family settings.

Learning Objectives
- Provide situations to understand significance of family income and expenditure and saving for future
- Register and react as responsible consumers
- Analyze relevance of consumer movement in India
- Gain knowledge on consumer protection Laws and Acts and reflect upon personal rights and responsibilities

Learning Outcomes
- Becoming familiarized to the changing trends in consumerism
- Enriched Knowledge on market systems
- Emerge as informed consumers
- Review the benefits of planned financial management

Unit I Consumer and the Market
- Consumer: definition and meaning; consumer Vs customer
- Role of consumers in the economy, National Income, Per Capita Income, Household wise distribution of income
- Classification of Consumer goods
- Consumer and the market: definition and classification of markets, types
- Consumer demand and supply
- Channels of distribution
- Consumer behaviour: changing nature of consumer behaviour to suit modern market and

Meaning, characteristics of buyer behaviour, buying motives – types; consumer buying process;
Change in consumer purchase practices in the digital market – concept of e-commerce, m-commerce, online shopping etc; Extended use of plastic currency and cards

Unit II Household Income and Expenditure

Household Income – Types, Sources, Supplementation of family income, use of family income, per capita income
Household expenditure: Items of expenditure, mental and written plans, Factors influencing expenditure pattern, expecting exigencies and tackling them
Account maintenance: methods of account keeping like balance sheets, account books, ledgers, income-expenditure records
Process of budgeting- steps in drafting a family budget, balancing income and expenditure, ways to meet emergent expenses
Personal finance management: Tax implications: significance in budgeting, measures adopted and instruments used to ensure tax benefits, calculation of personal income tax for an individual’s monthly income
Engel’s Laws of consumption, drafting well balanced family budgets

Unit III: Family Savings and Credit practices

Consumer credit- Concept, meaning, need, sources, credit cards, credit services availed by the family members, types of loans availed by families
Mortgages: Definition and conceptual meaning, significance in meeting emergent needs of expenditure
Financial security arrangements: Family savings and investments- need, principles, channels of investment
Savings and savings institutions, merits and demerits of each
Guidelines for wise savings practices
Unit IV: Consumerism in India
Consumerism: genesis, reasons for consumer movement
Historic Declaration of Consumer rights
Consumerism in India
Consumer problems – types, nature, causes and solutions

Concern for the Consumer: Consumer education: Meaning and definition; need and scope, objectives, aspects, methods, contents and resources, Problems
Consumer education and empowerment: meaning, need and achievements with specific relevance to India
Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service, Government and Voluntary Agencies,
Role of advertisements influencing consumer behaviour
Product labeling and packaging – significance to fair practices
Unfair consumer practices: adulteration and faulty weights and measures

Green Consumerism: Meaning and importance with respect to consumerism, need, consideration in daily consumption and significance, ethos of adopting sustainable/eco-friendly lifestyle as green consumers

Unit V: Consumer Protection
Consumer protection: concept, need and significance
Consumer rights and responsibilities in India
Consumer organizations – origin, functioning, role and types
Consumer cooperatives – role, history and growth in India
Consumer redress: role of consumer forums and consumer courts in safeguarding consumers
Basic legislative framework for consumer protection in India- Consumer Protection Act 1986 (COPRA), Alternative redressal mechanisms, Mediation centres
Standardization and quality control measures: Role of ISI, FPO, AGMARK, ISO, Eco mark, Wool mark, Silk mark, Cotton mark, Handloom mark, BEE Star labeling and others
Consumer Protection Act 2019

Practical

1. Evaluation and designing of advertisements in the print media including products, services and social ads.
2. Evaluation and designing of informative and attractive labels for different type of food products.
3. Case study of banks and post offices to understand their services and products
4. Learning to fill different bank forms for depositing money, start fixed deposit or recurring deposit
5. Analysis of consumer redress through case study approach under CPA.
6. Food adulteration tests
7. Debates on:
   - Consumer credit – merits and demerits
   - Online shopping – advantages and disadvantages
   - Credit and debit card usage – pros and cons
8. Visit to consumer Forums and consumer courts to understand their operational procedures
9. Visit to ISI regional office and learn their nexus of operation
10. Identify various marks of significance like Hall mark, wool mark, silk mark etc and know the complex modes of identity clauses
11. Visits to various types of consumer markets to find out how they function
12. Do an elaborate Market study to identify labels and packaging and the information transfer expected in different consumer products
13. Learn to distinguish one mark from another from the logo and colour of logo like eco labels, green labels
14. Calculate taxable income and accruing tax for an individual whose occupation, monthly income, savings and like are specified
15. Compare provisions made in Consumer Protection Act 1986 with COPRA 2019

Learning experiences

- Lectures, active learning, reflective learning, written exercises, collaborative learning,
problem solving, projection methods (OHP, slides)

**Evaluation**

- Surveys, drafting model budgets, market study, calculating taxable income, field visits, comparative studies

**References**

CORE COURSE

COMMUNICATION AND EXTENSION
(CREDITS: THEORY-4, PRACTICAL-2)

Course Description

The Course introduces to the students the concept of Communication and Extension. It will orient the students with creation, transmission and application of knowledge designed to bring out planned changes in the behavior of people. Communication is an exciting and challenging field of human interaction.

Learning Objectives

- Understand the concept of Communication and its role in exchange of information
- Examine the models and barriers to communication
- Learn about the concept of extension, extension approaches and models
- Enhance the students in the selection and use of media in different socio-cultural environment

Learning Outcomes

- Gain knowledge on the need and importance of communication and its significance in exchange of information
- Analyse the models of Communication and role of media in societal development
- Perceive the importance of extension education
- Acquire knowledge on the extension models and approaches

Course Content

Unit-I. Communication Concept

Meaning, definition, nature, scope and importance of communication

Functions of communication – information function, command or instructive function, influence or persuasive function and integrative function.

Elements of Communication – three elements – source, message, receiver, four elements – encoding, decoding, sender and receiver, five elements – communicator, communicate, message, channel and feedback

Means of Communication – Oral, Written, Sign / signal, action, object

Types of Communication – Formal and Informal Communication

Pattern - one way, two way, circular
Communication media – Print and electronic media
Advantages and Limitations of communication media

Unit-II. Communication Models
Importance of communication in extension
Models of Communication-Aristotle Model, Shanon – Weaver Mode, Berlo Model, Scharmm Model
Concept, purposes and significance of model in communication
Barriers to Communication – semantic, psychological, organizational and personal

Unit-III. Effective Communication
Characteristics – Clear, correct, complete and precise message, reliability, consideration of the recipient
Skills – Observance, clarity and Brevity, Listening and Understanding, self-efficacy and self-confidence
Significance – Team work, Team building, problem solving and decision making skills, facilitate creativity and reduces misunderstanding
Concepts relating to communication – perception, fidelity, communication gap, Empathy, Homophily, heterophily

Unit-IV. Communication and Extension
Concept, need, functions, principles and scope of extension
Steps in extension teaching
Elements of extension communication system
Communication methods in extension – group method, mass method and individual method
Advantages and limitations of communication and extension

Unit-V. Extension Models and Approaches
Models – Innovation transfer model, Social education model, Indigenization model, Social action / conscientation models, Empowerment participation model, Combination models
Approaches – General Extension, Commodity specialized, Training and visit, Agricultural, Extension participatory, project, farming systems development, cost sharing and Educational Institution approach

Practical

1. Developing skill in planning and conducting small group communication
2. Preparation of Communication Models
3. Apply communication methods in the implementation of programme
4. Interaction with villagers and understand the felt and unfelt need
5. Carryout a case study using any one Extension approach

Learning Experiences

- Regular lectures, exercises, group discussion, team building exercise, case studies and field visit.

Evaluation

- Class test, presentation, assignments, seminars, records and report

References

CORE COURSE
Communication Model in Extension
(Credits: Theory -4 Practical-2)

Course Description

The Course enables the students to understand the concept and process of communication. Apply knowledge of communication and be able to evaluate the theoretical approach used in the interdisciplinary field of communication and learn the concept of diffusion of innovations and adoption.

Learning Objectives

- Understand the concept and process of communication for development
- Acquire skill in information education and communication
- Learn the concept of diffusion and acquires skill to transfer the Innovation
- Strengthen the knowledge of traditional and modern media in development communication

Learning Outcomes

- Explain the basic concept, nature and significance of Communication model
- Learn the communication channel and skill
- Analyze the media in development communication
- Understand the adoption and diffusion process to help the extension agents to accelerate them

Course Content

Unit-I. Communication Model

Concept of communication model and significance

Functions – teaching elements of communication process, conducting research, predicting the success of failures of communication process.

Importance of communication model – easy understanding of communication process, showing information flow, introducing the parts of communication process, easy presentation of communication process and understanding the communication process.
Unit-II. Methods of Communication

Extension methods of communication – Individual method – Farm and home visit, farmer’s call, personal letter, adaptive or minikit trial, farm clinic
Group method – result demonstration, method demonstration, group meeting, small group training, field day or farmer’s day and study tour
Elements of extension communication system – communicator, message, channel treatment and presentation, audience, audience response
Characteristics of change agent – empathy, linkage, structure, synergy, energy, proximity, openers
Role and competencies of change agent – broad knowledge, operational and relational knowledge, sensitivity and maturity, authenticity

Unit-III. Media in Development Communication

Traditional media – types (folk songs, drama, and puppetry) characteristics and role in development communication
Radio – Origin and history, news, features and commentaries, role in development communication
Television and cinema – history, features and role in development communication
ICTs – scope and development communication

Unit-IV. Diffusion of Innovations

Diffusion-concept, elements of diffusion, difference between communication and diffusion
Innovation - form, functions and meaning of innovation, perceived attributes of innovation, preventive innovation

Unit-V. Adoption

5.1 Definition, adoption process – diffusion network – the innovation decision process, the innovation decision period, rate of adoption, mandates for adoption, over adoption, adopter categories, measurement of adoption, role of extension agent in the adoption and diffusion of innovation.

Practical

1. Preparation of charts, posters, flash cards
2. Preparation of IEC material on various topics for different target audience
3. Project preparation on specific area in development communication
4. Case studies in development communication

**Learning Experiences**
- Regular lectures, exercises on innovations and adoption and group discussion, case studies, films and documentaries

**Evaluation**
- Class test, seminar, project preparation, report and records

**References**
- Mukhopadhyay Abhisheek Publication
CORE COURSE
PARTICIPATORY PROGRAMME MANAGEMENT
(CREDITS: THEORY-4, PRACTICAL-2)

Course Description
This Course is extended to equip the students with both specialized knowledge and practical skills in participatory project planning, monitoring and impact. Improving strategic thinking and decision making skills of students in planning, implementing and evaluating various programmes related to developmental sector is further envisaged.

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 planning
Elements, 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 field studies.

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 and Review Technique (PERT)
- Technical and monitory support from Government and non-governmental organizations
- availability and access
- Project management and evaluation and documentation
- Training personnel in PRA techniques

**Unit-IV. Extension Evaluation and Follow up**

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

**Unit-V. Documentation**

- Need for reporting and recording
- Types of records
- Analysis and document preparation
- Procedures for recording – records and registers to be maintained
- Training personnel in PRA techniques, project management, evaluation and documentation.

**Practical**

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**

8.2 DISCIPLINE SPECIFIC ELECTIVE COURSES
DISCIPLINE SPECIFIC ELECTIVE COURSE
Fashion Marketing and Merchandising
(Credits: Theory 4 & Practical 2)

Course Description

The course introduces students to the business aspects of fashion with a focus on fashion marketing and merchandising. It focuses on learning to capture the attention, of potential customers and promoting required products and services to them. It deals with how to understand, predict, and respond to consumer wants and behaviours to maximize business sales and revenue.

Learning Objectives:

- Determine how business of fashion identifies its target market and adapts to deliver the desired satisfactions to the ultimate customer.
- Learns the product / merchandise presentation to potential customers.
- Understand the buying and selling of goods for the purpose of making a profit.

Learning Outcomes:

A successful completion of this course will enable students to

- Explain how fashion marketing and merchandising can help the fashion industry.
- Define role and responsibilities of fashion marketers and fashion merchandisers.
- Identify target markets and build consumer profiles for fashion products
- Select promotional tool suitable for potential customers.
- Develop a promotional plan and promote a merchandise
- Make market visits and negotiate with vendors
- Develop and prepare merchandise plan as well as a merchandise assortment
- Establish and use inventory control systems

Course content

Unit-I. Understanding the Basic Concepts of Fashion Marketing

95
And Merchandising

Fashion business terminologies
Nature and scope of fashion marketing and merchandising
The marketing environment: macro and micro
Areas of fashion marketing and merchandising: public relations, brand management, event planning, customer relations, social media, advertising, retail buying, store management, fashion buying, visual merchandising, retail sales management
Profiles of occupations in fashion marketing and merchandising

Unit-II. Researching the Fashion Market and Consumer

The fashion consumer and organizational buyer
Segmentation and the marketing mix
Fashion marketing research: identifying the needs and wants of target customer.

Unit-III. Fashion Marketing Communication

Promotion tools for fashion marketing: advertising, sales promotion, packaging, public relations and publicity
Onsite Promotion: visual merchandising framework and approaches

Unit-IV. Merchandise Management

Types of Merchandise
Six rights of merchandising and their importance
Merchandise planning, acquisition, handling and monitoring
Supply chain management
Inventory Control systems
Financial accounting

Unit-V. Future Trends in Buying and Merchandising

The changing impact of IT on fashion retailing
The impact of new manufacturing techniques
The fashion buyers of the future
The fashion merchandiser of the future
Future technologies impacts on the consumer
Other types of fashion retail competition

**Practical**
1. Identify the marketplace and evaluate customers, as well as trends affecting future sales
2. Case studies to understand the buying procedures of various types of fashion retail businesses and also analyze the environment in which buying occurs.
3. Review trends, emerging and the growing retail formats where will consumers make purchases through literature and field visits
4. Describe your customers; identifying changes in consumer markets, understanding buying motives and learning about customers through data warehousing and data mining
5. Plotting customer profiles for various fashion businesses
6. Analyze promotional activities used by fashion businesses
7. Promoting a merchandise for fashion business – experiential project
8. Visual merchandising projects to be undertaken for different fashion businesses
9. Interact with Store managers to understand how they develop and prepare merchandise plan as well as a merchandise assortment for their business. What are their best practices?
10. Visit to various type of markets
11. Case study of fashion business to understand its supply chain management and inventory control systems

**Learning Experiences**
- Regular lectures, exercises on observation and follow up discussion, role play, case studies, films and documentaries, Digital files, weblinks, field visits, interviews, market visits and survey, hand on experiences.
Evaluation

- Quiz, field work, presentation, assignment, class tests, log book records.

Reference


https://www.slideshare.net/kotharivr/fashion-merchandising-ebook
DISCIPLINE SPECIFIC ELECTIVE COURSE
Apparel Construction
(Credits: Theory 4 & Practical 2)

Course Description
The course introduces the basic principles of apparel construction including pattern and fabric selection. The course aims at developing skills in using knowledge of apparel construction required to be employed in the field of apparel industry and entrepreneurship. It deals with the tools and techniques required for apparel construction. It covers the pattern making and grading techniques required for making apparels. It gives hands on experience for apparel construction which is the pre requisite of apparel industry.

Learning Objectives:
• Learns the requirement for apparel construction
• Understand the use, significance and selection of tools and equipment for apparel construction
• Understand the coordination of fabric, pattern and supportive material.
• Enhance the understanding of drafting and pattern making.
• Acquire skills of apparel construction
• Understand fit of the garment.

Learning Outcomes:
A successful completion of this course will enable students to
• Know the requirements for apparel construction
• Describe the use and significance of tools and equipment for apparel construction
• Explain drafting and pattern making method.
• Explore the skills of apparel construction
• Adapt basic block to different designs.
• Evaluate fit of the garment

Course Content
Unit-I. Introduction to Apparel Construction
Elements of apparel construction
Grain, Seams, Finish, Workmanship
Guides to sew fabrics
Threads, needles, seams and its co-relation to fabrics
Uses of essentials tools and supplies
Sewing Needles, hand sewing tools, marking tools, measuring tools, cutting tools, pressing tools, threads, special tools, trims & tapes, buttons & closures.

Unit-II. Basics of Apparel Construction

Body measurements (BM):
Principles of taking BM,
Taking accurate body measurements
Measuring from a garment.
Size charts
Standard size charts for Kids, Men and Women
Ease allowance for various fit.
Comparison of standard size charts from different countries and brands

Fabric Requirement:

Calculation fabric needed for various garments.

Optimising the fabric requirement

Principles and methods of grading and sizing

Unit-III. Pattern Making

Introduction to pattern making
Pattern making tools
Pattern making techniques: Drafting, Draping and Flat pattern technique
Darts and their manipulation, added fullness and contouring.
Principles of pattern making for: Upper garment, Lower garment, Sleeves, Collar, Dresses

Unit-IV. Fabric Layout, Cutting And Marking

Fabric preparation
Laying out checks, plaids & directional fabrics,
Marking with chalk, pencil or liquid markers
Cutting and sewing tips

Unit-V. Selection of Fabric and Accessories

Fabrics: Easy to stitch, special fabrics, textured and patterned fabrics
Selection of appropriate fabrics for apparels.
Accessories and trimmings: types and use
Appropriate combination of accessories, trims and materials

Practical

1. Development of basic block
   a. Upper and
   b. Lower
2. Drafting and construction of different types of
   a. Collars
   b. Plackets and
   c. Sleeves
3. Drafting and construction of
   a. Salwar
   b. Churidar
4. Adaptation of basic block for designing of
   a. Frock
   b. Kurta
   c. Blouse
   d. Shirt
5. Construction of above designed patterns.
   a. Maintaining of journal with the details of the practical work in writing and supported with samples.
Learning Experience

- Regular Lectures along with power point presentation/videos on construction process/demonstration of the skills/hands on experience for drafting, pattern making, sizing and construction/visit to Apparel Industry

Evaluation

- Class test/Assignment/practical evaluation/portfolio presentation

Reference:

DISCIPLINE SPECIFIC ELECTIVE COURSE
Textile Design and Illustration
(Credits: Theory 4 & Practical 2)

Course Description

Design and development of textiles is the key to the fashion world. This course aims to develop innovative approaches to design by understanding the fundamentals of design. It emphasizes on building a variety of skills, in combination with theoretical knowledge and practical application. It also focuses on knowledge and techniques needed to produce fashion drawings along with the vocabulary of clothing styles and accessories. It will lead to the development of students’ intellectual abilities, creativity, independence, critical self-awareness, imagination and skills that will enhance global employment opportunities on completion of the course.

Learning Objectives:

- Understand the principles and elements of design.
- Apply the principles and elements of design in textiles and fashion design.
- Explore and learn sketching and drawing techniques to represent styles and fabrics in fashion.
- Learns basic traditional media methods to develop creative and customized fashion illustrations.
- Design apparels and accessories for men, women and children.

Learning Outcomes:

A successful completion of this course will enable students to

- Define the principles and elements of design.
- Applies the principles and elements of design in textiles and fashion design.
- Design and create visual compositions in fashion illustration.
- Analyze fabrics and their tactile/visual qualities to render them appropriately.
- Explains fashion apparel construction when illustrating garments.
- Apply basic traditional media methods to develop creative and customized fashion illustrations.
Course Content

Unit-I. Understanding Design

- Design—its meaning and importance
- Importance of good taste in design
- Designer – Textile designer and Fashion designer
- Challenges and opportunities for design and designers

Unit-II. Elements of Design and Its Co-Relation

- Point
- Line
- Color
- Plane
- Volume
- Space
- Shape
- Form light
- Texture pattern

Unit-III. Principles of Design and Its Co-Relation

- Balance
- Proportion and scale
- Rhythm
- Emphasis
- Harmony
- Contrast
- Variety
- Law of area

Unit-IV. Line, Colour and Pattern in Design

- Line and its expressiveness
Types and composition
Effect of lines to create rhythm and optical illusions
Colour expression
Colour wheel and its dimension
Colour mixing and colour system
Colour harmony and colour scheme
Colour in different media
Colour in fabric, texture and light
Pattern
Surface pattern and pattern group
Repeat pattern

Unit-V. Human body proportions and illustrating fashion
Balance and proportion in human body: average and fashion figures
Postures of male, female and children croquies and its significance: Front view, Back view, Side view and 3/4th view
Stylizing the croquie and its importance
Understanding fabric textures and drapes

Practical

1. Introduction of flat sketches, garment features and accessories: types of silhouettes, skirts, trousers, necklines, collars, sleeves, coats and jackets, footwear, handbags.

2. Factors to be considered when designing for children, women and men- formal wear, casual wear, night wear, sportswear, ethnic wear, wedding wear

3. Drawing average and fashion figures: stick, block and flesh

4. Observation of people and live sketching in different postures

5. Converting photographic poses from magazines into fashion illustration

6. Exploring medias to create fabric textures

7. Rendering of fabric swatches and fabric drapes using different colour medias
8. Visit to fashion museum / virtual tour of a fashion museum.

9. Visiting designers’ boutique / designer’s website

10. Preparation of an album of garment features for designing of Apparels.

11. Preparation of an album of accessories suitable for different occasion.

12. Observation of people in different situations and live sketching of styles worn

13. Designing of apparel and accessories for men as per the given brief.

14. Designing of apparel and accessories for women as per the given brief.

15. Designing of apparel and accessories for children as per the given brief.

16. Portfolio development

**Learning Experiences**

- Regular lectures, exercises on observation and follow up discussion, case studies, films and documentaries, web links, Digital files.

**Evaluation**

- Class exercises, visit reports, class test, presentations and assignments

**Reference**


DISCIPLINE SPECIFIC ELECTIVE COURSE
DYEING, PRINTING AND FINISHING OF TEXTILES
(Credits: Theory 4 & Practical 2)

Course Description
After the manufacturing of textiles, value addition is required. Dyeing printing and finishing of the textiles are the prime methods of value addition to the textiles. This course deals with the basics of the Dyeing, printing and finishing along with the influence of chemicals and auxiliaries on the end products. It further describes different types of dyeing, printing and finishing and explains the procedure of doing it on different fabrics to obtain required results. This will help in using reasonably priced dyes and dyeing procedure and operating according to ecological requirements and carrying out in the shortest possible time.

Learning Objectives:
- Introduce basics of dyeing, printing and finishing
- Inculcate the knowledge of auxiliaries and chemicals used for dyeing and printing
- Enhance the understanding of the relation between the dyes, pigments and fabrics.
- Acquaint students with the importance of finishing of textiles
- Develop the skills in doing dyeing and printing of textiles
- Reproducing the required shade from batch to batch.

Learning Outcomes:
A successful completion of this course will enable students to
- Describe the basics of dyeing, printing and finishing.
- Examine the knowledge of auxiliaries and chemicals used for dyeing and printing
- Explain the relation between the dyes, pigments and fabrics.
- Recommend the finishing for textiles
- Dye and print textiles.
- Reproduce the required shade from batch to batch.
Course content

Unit-I. Introduction
- History of dyeing and printing
- Terms related to colour
  Dye, pigment, light, hue, value, intensity
- Colour wheel and schemes
- Digital colour models: CMYK, RGB
- Colour matching system
- Directional and non-directional printing
- Motifs types: Geometric, floral and novelty

Unit-II. Basics of Dyeing and Printing
- Classification of dyes
- Classification of Printing
- Difference between dyes and pigments
- Preparation of fabrics before dyeing and printing
  Desizing, scouring, bleaching, mercerization, carbonization
- Heat setting: processing method

Unit-III. Dyeing
- Classification of dyes
- Auxiliaries and machineries used for dyeing
- Methods for dyeing
- Factors affecting dyeing
- Dyeing of cotton, wool and silk
- Dyeing of viscose and polyester
- Natural dyeing methods and limitations
- After treatments
Unit-IV. Printing

- Preparation of print paste and printing table
- Pigments and dyes used
- Direct style of printing
- Resist style of printing
- Discharge style of printing
- Novel techniques of printing
- Fixation and after treatment processes
- Dyes for digital textile printing

Unit-V. Finishes

- Classification: Physical, Chemical and Functional
- Objectives of textile finishing
- Factors affecting the finishing of textiles: fibre, weave, physical properties, end use, susceptibility to chemical modification
- Finishes for achieving different texture
- Finishes for enhancing specific characteristics

Practical

1. Preparation of fabric for dyeing and printing
   a. Scouring, desizing, bleaching
2. Dyeing: Dyeing of yarn and fabric with different classes of dyes by varying the temperatures, %shade and M: L ratio.
   b. Dyeing of silk, wool and nylon yarn and fabrics with basic and acid dyes.
   c. Dyeing of polyester yarn and fabric with disperse dyes.
3. Making designs for
   a. Blocks, stencil and screen
4. Preparation of
   a. Blocks, stencil and screen
5. Printing of fabrics using:
   i. Direct style - block, stencil and screen
ii. Resist style - Tie & Dye, Batik

6. Application of starch by varying concentration and material
   a. Natural starch
   b. Synthetic starch

7. Printing on garments by different styles

8. Product development

Learning Experience

- Lectures along with power point presentation/ videos on industrial methods/hands on experience for dyeing and printing on textiles/visit to Dyeing and Printing unit

Evaluation

- Class test/Assignment/practical evaluation/product evaluation

Reference

DISCIPLINE SPECIFIC ELECTIVE COURSE
Childhood and Adolescence
(Credits: Theory - 4, Practical - 2)

Course Description
The course introduces students to child and adolescent development. It explains basic developmental principles and psychosocial factors which influence development from conception till 18 years. It further explores the influence of a range of issues from birth through age 18.

Learning Objectives
1. Develop an understanding about the need and importance of studying child and adolescent development.
2. Develop an understanding about the historical views and theories on childhood and adolescent development.
3. Learn about the characteristics, needs and developmental tasks of infancy, early middle and late childhood, and early, middle and late adolescence.
4. Learn about the biological and environmental factors that affect development during childhood and adolescence.
5. Learn key issues which influence childhood and adolescent development.

Learning Outcomes
1. Explain the need and importance of studying childhood and adolescence as a distinctive stage of the life-span.
2. Describe the historical views and theories on childhood and adolescent development.
3. Describe the characteristics, needs and developmental tasks of infancy, early childhood, middle childhood and early and late adolescence.
4. Identify the biological and environmental factors affecting development during childhood and adolescence.
5. Analyze key issues that influence child and adolescent development.
UNIT-I Childhood and Adolescent Development: Introduction

Concept, meaning and principles of ‘growth’ and ‘development’.

Concept of critical periods of development during infancy, childhood and adolescence.

Importance of early stimulation and intervention during early years - evidence from neuroscience research.

UNIT-II Historical Foundations and Theories of Childhood and Adolescent Development

Historical foundations and scientific beginnings

Brief overview of theories of child and adolescent development – maturational, behavioral, psychosocial, cognitive, social learning, ecological, sociocultural, ethological

Brief overview of theories of child and adolescent development including the maturational, psychodynamic, behavioral, psychosocial, cognitive, social learning, ecological, existential/phenomenological, sociocultural, ethological, sociobiological, and interactionist perspectives.

UNIT-III Development across Childhood and Adolescence

Major characteristics of different stages of childhood and adolescence (infancy, early, middle and late childhood, puberty, early and late adolescence)

What are developmental tasks and milestones, and their importance.

With reference to each domain of development (physical, cognitive, language, socio-emotional) characteristics, needs, developmental tasks and milestones of individuals from birth to 18 years are explained.

- Neonate (birth–1 month)
- Infancy (1 month–2 years)
- Early childhood (2-6 years)
- Middle childhood (6-11 years)
• Adolescence (12-18 years)

UNIT-IV Familial and Social Influences on Childhood and Adolescent Development

Family influences on child and adolescent development

Influence of various parenting styles on development, behavior and functioning during childhood and adolescence

Changes in self-esteem, self-concept and identity from early childhood through adolescence

Moral development from early childhood to late adolescence in relation to societal norms and social understanding

Development of gender roles and perceptions, changes in gender identity from early childhood through adolescence

UNIT-V Childhood and Adolescent Development: Key Issues

Influence of peer relationships on development

Impact of media and its influences on development and learning

Physical, psychological and social effects of substance abuse and risk behaviors

Role of nutrition in childhood and adolescent development.

Brief overview of aggression, gender roles and stereotypes, androgyny, friendship, popularity and rejection, sibling relations, juvenile delinquency, suicide, depression, elopement, puberty, early/late maturation, human sexuality, eating disorders during childhood and adolescence

Practical(s)

1. Preparation of an album on developmental milestones of children and adolescents.
2. Visit to a pediatric ward
3. Visit to an Anganwadi
4. Interaction with counselors/clinical psychologists
5. Carry out a case study of an adolescent boy and girl using multiple methods
6. Select a topic related to a significant developmental problem or issue faced by children and adolescents and describe ways to assist them, their teachers and parents to deal with the problem.

**Learning Experiences**
- Regular lectures, exercises on observation and follow up discussion, case studies, films and documentaries

**Evaluation**
- Class test, presentation and one essay/take home based on observations

**References**


https://doi.org/10.1017/CBO9780511613814.005
DISCIPLINE SPECIFIC ELECTIVE COURSE
Adulthood and Aging
(Credits: Theory - 4, Practical- 2)

Course Description

The course introduces students to the concept of adult development and aging. It explains basic developmental transitions in adulthood and late adulthood or old age. Various facets of adult development across domains and developmental needs of the elderly are discussed. Cultural and gender differences in the experiences of aging are included.

Learning Objectives

1. Understand the theoretical significance of adulthood in life span development with special reference to aging
2. Develop a culturally relevant understanding of issues and concerns of adulthood and aging
3. Sensitize students to transitions in adult life and preparation for old age from a gender perspective
4. Create awareness about policy provisions for adults and elderly across various contexts (work, family, retirement, health, welfare).
5. Prepare students for outreach activities with varied groups of adults and elderly.

Learning Outcomes

1. Explain variations in the experiences of adulthood and old age across cultures and genders
2. Discuss factors that affect physical, cognitive and socio-emotional development during adulthood and old age
3. Identify developmental needs of varied groups of adults and elderly across contexts
4. Evaluate policy recommendations for adults and elderly across contexts
5. Execute developmental programs of intervention for varied groups of adults and elders
UNIT-I Stages of Adult Development and the Process of Aging: A Theoretical Overview

- Historical perspectives on adulthood and aging
- Contemporary changes, increase in life expectancy and decrease in death rate
- Stages of Adulthood and Aging: Emerging adulthood (18-25), mature adulthood (25-45), middle age (45-55), late adulthood (55-65), old age (65 and above)
- Characteristics and needs in different stages of adulthood
- Theories of adult development and aging (Erikson’s theory, Wisdom theories, Disengagement, Activity, Continuity theory, Ashrama Dharma framework)

UNIT-II Development in Emerging and Early Adulthood

- Definition, characteristics, developmental tasks
- Physical changes - Cardiovascular and Respiratory systems, Motor performance, Immune system
- Cognitive development - Changes in mental abilities - Crystallized and fluid intelligence, Information processing - Speed, Attention, Memory, Problem solving and Creativity
- Life transitions and adjustments during early adulthood: Exploring sexual orientations, stable romantic relationships, alternative life choices, marriage, family life, parenting and caregiving, social mobility
- Cultural, gender and social class variations in the experience of adulthood and aging
- Interpersonal relationships and responsibility challenges in different spheres of life (balancing work and family, socio-cultural responsibilities, health challenges, emotional stresses, financial security)

UNIT-III Development in Middle and Late Adulthood

- Definition, characteristics, developmental tasks,
- Physical and cognitive changes, Changes in interests, Social, emotional, vocational changes,
- Relationships at midlife - marriage and divorce, changing parent-child relationships, grandparenthood, siblings, friendships, relationship across generations- Middle aged children and their aging parents
Preparation for old age (From work to retirement, emotional, financial, social and familial transitions, )
Contextual variations in the experience of late adulthood and aging (rural-urban, socio-economic, employed-unemployed, organized-unorganized sector etc.)

UNIT-IV Development in Old Age
The phenomenon of aging - biological, psychological, sociological and functional age; optimal aging, normal aging, primary and secondary aging and successful aging
Gerontology - Definition, concept, history, importance and scope
Types - Social gerontology, Bio gerontology, Medical gerontology (Geriatric)
Theories of aging process – Sociological, Psychological and Biological theories of aging.
Psychosocial development in old age, Erikson’s theory – ego integrity Vs. despair, Labouvie - Vief’s theory, Peck’s theory, Wisdom theories – Indian and Western
Changing relationships in old age – marriage and divorce, widowhood, never-married, childless older adults, siblings, friendships
Myths and realities of aging Adjustments - Physical and mental changes, Vocational adjustments- adjustment to retirement, different living arrangements, familial roles and relationships.
Dealing with stressful life events, divorce, terminal illness, death and bereavement
Overview of Alzheimer, Dementia, Parkinson’s disease
Common abuses among elderly- physical, emotional, psychological, verbal and financial, reporting abuse, Adult Protective Services.
Policy provisions for the elderly: Global and national

UNIT-V Aging and Well-Being in the 21st Century
Demographic profile of elderly in the world and India
Living arrangements (intergenerational families, old age homes, institutions etc.) and new models of care giving
Overcoming mental health challenges (loneliness, depression, anxiety, dementia, other age-related diseases etc.)
Life style changes and holistic health (physical well-being, food choices, yoga and restorative fitness, counseling and therapy, social and interpersonal support systems)

Technology and aging (use of internet, advances in health and medical treatment, gadgets supporting safety and security of elderly)

Leisure time activities and innovative models of developmental intervention

Practical(s)

1. Preparation of an album on developmental transitions, individual and family life transitions during adult life.
2. Visit to old age home or specialized living arrangements for elderly.
3. Visit to leisure facilities for elderly like laughing clubs, recreational clubs
4. Visiting your parents’ workplace to understand their roles and responsibilities.
5. Documenting your mother’s and grandmother’s life aspirations and experiences before and after marriage.
6. Preparing a list of specialized services for the elderly in the city and/or preparing an elderly support kit (support with amenities, important phone numbers, medicines, reminders etc.)
7. Planning a hands-on workshop session for teaching internet and smart phone use to elderly
8. Interviewing elderly couples about their relationship, life challenges and satisfactions
9. Planning a panel discussion or awareness session on welfare policies and policy recommendations for older persons in India
10. Discussing intergenerational relationships of emerging/young adults and parents as portrayed in cinema, advertisements and social media

Learning Experiences

- Regular lectures, group discussions, participant observation and follow up discussion, case studies, films and documentaries

Evaluation

- Class test, presentations and one essay/take home based on observations, concept papers

References


DISCIPLINE SPECIFIC ELECTIVE COURSE
Interpersonal Relationships and Family Dynamics
(Credits: Theory- 4, Practical- 2)

Course Description
The course prepares students for an understanding of contemporary interpersonal relationships in families and in society, from a psycho-social perspective. It includes a focus on concepts and theories of interpersonal communication, with an emphasis on types of relationships (family/peers/workplace), relationship development, communication strategies, stress and conflict management.

Learning Objectives
1. Understand interpersonal relationships and family dynamics in contemporary India.
2. Understand one’s own self and others with the aim of improving interpersonal relationships.
3. Understand theories and perspectives related to interpersonal relationships and family dynamics.
4. Develop an insight into interpersonal stress, conflict and its resolution.

Learning Outcomes
1. Explain basic components and processes involved in interpersonal relationship
2. Describe theoretical perspectives in understanding interpersonal relationships and family dynamics.
3. Use one’s self-awareness in understanding significant others. Illustrate the significance of self-awareness in our understanding of significant others.
4. Formulate strategies for developing positive dynamics in different relationships and managing conflict.

UNIT-I Understanding the Self
Self-Awareness—personality characteristics, cultural beliefs, values, expectations and ideas guiding behavior
Self-identity—Identifying one’s own philosophy and goals of life (influenced by personal history, socialization and context)
Personality—factors that shape one’s personality and its influence on behavior and
interpersonal communications
Self with family/parents/siblings, peers, social/professional organizations
The impact of media on the self

UNIT-II Perspectives and Theories
Perspectives: On friendships, love, family and other interpersonal relationships
- Ethological Perspective
- Neurobiological Perspective
- Psychological Perspective
- Sociological Perspective
- Cross-cultural perspectives
Theories:
- Social Exchange Theory
- Family Systems Theory
- Family Developmental Theory
- Ecological Systems Theory
- Attachment Theory
- Triangular theory of love - Robert Sternberg

UNIT-III Basics of Interpersonal Communication
Process and components of basic communication
Interpersonal communication: communication of ideas and feelings, self-disclosure, crediting and criticism
Nurturing positive interpersonal communication and dynamics: perspective taking, empathy, listening and feedback skills.
Resolving interpersonal conflicts: Types of conflicts and management skills (in relation with marital, parental, workplace, family, and friends)

UNIT-IV Life Choices (Education, Career, Romantic Relationships)
Engagement with life goals and conscious life choices- in view of personal philosophy, demands of the family, peers, societal norms.
Understanding intimate, love and romantic relationships within a cultural context

Career choices and professional relationships- developing trust, mutual respect, mindfulness, appreciation for diversity and open communication.

Understanding the role of adjustments in relationships- myths, misconceptions and factors influencing adjustment patterns.

UNIT-V Family Dynamics

Understanding Family Dynamics- Definition, function and scope

Factors that shape roles, relationships and family dynamics (family size, age composition, structure, social and financial status, gender and ordinal position, power, hierarchy and patriarchy, employment) and how these dynamics shape individual personality and behavior.

Change and evolution of the family - Family life cycle and stages

Changing roles and dynamics through significant life events: romantic relationships, partner selection, marriage, childbirth, parenting, career trajectories and economic status, health issues, loss of loved ones.

Gender norms and roles in family dynamics

Interpersonal communication within families: Managing expectations (family/self/society), self-goals, adjustments and negotiations.

Forms of family crisis: Marriage, divorce/separation, remarriage, financial instability, poor work-family balance, illness, death, childlessness, child abuse/neglect, family violence, peer pressure, addiction, rape, suicide, unemployment, natural disasters, epidemics and wars.

Family cohesion- the role of effective communication, compassion, perspective-taking, role distribution, positive conflict resolution, and teamwork.

Agencies offering support: Marriage and family therapists, Family courts, Child guidance clinics, counseling and rehabilitation centers.

Practical(s)

1. Group discussion/role play/simulations on interpersonal relationships
2. Conduct workshops on: cultural variations in interpersonal relationships, family dynamics, verbal vs non-verbal communication, and social networking.
3. Plan an interaction with a counselor or therapists working in the area of interpersonal conflicts (in the family family/peer group/parent-child dyad/workplace).

4. Conduct a workshop on enhancing family cohesion and conflict resolution

5. Select a form of family crisis or stress. Describe ways of preventing and managing the crisis.

6. Create posters about ways to improve interpersonal communication skills and patters of relating to enhance resiliency in relationships.

Learning Experiences

- Regular lectures, exercises, use of library for simple research projects, observations and follow up discussion, case studies, films, documentaries and debates.

Evaluations

- Class test, presentation and one essay/take home based on observations

References


DISCIPLINE SPECIFIC ELECTIVE
Gender, Society and Human Development
(Credits: Theory - 4, Practical- 2)

Course Description

The course introduces students to gender and related concepts, and enables an understanding of gender as a socially constructed concept. It explores critical questions about the meaning and implications of gender in society, and acquaints students with key issues, debates, and questions pertaining to gender.

Learning Objectives

- Critically understand the situation of women and men in Indian society from multiple perspectives.
- Learn about the concepts of gender, patriarchy, equality, equity, and feminism as well as the intersection of social class and caste to determine the status of women.
- Recognize how social institutions are patriarchal.
- Develop sensitivity regarding the socio-cultural, economic and political factors that shape life experiences in relation to gender.
- Learn about women’s human rights and laws related to women in India.
- Learn about different gender identities and sexual orientations- masculinities, LGBTQIA in the Indian context.

Learning Outcomes

- Describe basic concepts of gender and relevance of gender studies as an academic discipline.
- Describe theories and concepts of gender and development.
- Analyze human rights in terms of gender equality and gender equity.
- Critically analyze existing laws and the legal system through a gender lens.
• Analyze how gender is constructed in different types of media.

UNIT-I Gender: A Social Construction

- Differences between sex and gender – biological determinism
- Key gender concepts and definitions
- Gender socialization in family and society
- Patriarchal institutions and key areas of patriarchal control
- Caste, class and gender intersectionality in India
- Gender identities and sexual orientations (femininity, masculinity, LGBTQIA)
- Status of women – historical and contemporary perspectives
- Introduction to women’s studies/ gender studies as a discipline

UNIT-II Gender and Development: Approaches and Strategies

- Concept of gender and development – indicators of human and gender development – equality and equity
- Orientation to theories of women, gender and development (WID, WAD and GAD)
- Human Development Index (HDI), Gender Development Index (GDI), Gender Inequality Index (GII), and Gender Empowerment Measure
- Gender budgeting and gender auditing
- Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)

UNIT-III Gender, Rights and Laws

- Girls, women, and human rights
- UDHR, UN-CEDAW and UN-CRC
- Constitutional provisions accorded to women
- Legal aspects related to women: PCPNDT Act, PWDVA, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) act, Indecent Representation of Women (Prohibition) Act, The Dowry Prohibition Act.
- Overview of laws related to marriage, divorce and property inheritance.
- The Women’s Reservation Bill

UNIT-IV Role of Media in Social Construction of Gender
Social construction of gender reality by contemporary media
Media and perpetuation of gender stereotypes: rhetoric of the image, narrative
Mainstream media and gender
Representation of women in media in political, cultural and social landscape
Researching and analyzing media from a gender perspective: in broadcast, print, new media.
Gender and media ethics
Gender and ICTs

UNIT-V Gender, Health and Empowerment

Gender discrimination and under nutrition
Epidemiology of menstruation and menstrual disorder, health indicators and gender gap
Socioeconomic inequality and women's health
Biological and psychological determinants of women's health (all in brief)
Gender inequality in labor market: segmented labor market and occupational segregation
Gendered jobs and social inequality
Sex segregation at work place (in brief)

Practical (s)

1. Analysis of gender differentials using development indicators
2. Gender based analysis of media with special reference to portrayal of women
3. Case studies for programs and campaign for women’s development.
4. Analyze the achievements of MDGs
5. Analyze the progress of SDGs
6. Critically engage with Laws and Acts for Women in India
7. Observe the representation of masculinity in Indian movies
8. Submit report after visiting local Women’s organization and LGBTQAI organizations

Learning Experiences

- Regular Class Lectures, Reading and Discussion, Presentation, Films/Documentaries/Videos, Self-Study

Evaluation
Assignment, Term Paper, Presentation, Regular Class Room Discussions

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17. Websites of United Nations and UNDP, OHCHR to get the details of UDHR, UN CEDAW, UNCRC, MDGs and SDGs.
https://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx
https://www.undp.org/content/undp/en/home/sdgoverture/mdg_goals.html
DISCIPLINE SPECIFIC ELECTIVE
Nutrition for Health and Physical Fitness
(Credits: Theory; 4 & Practical: 2)

Course Description
Integration and application of principles of sound nutrition and physical activities to optimize the physiological, psychological, and social lifelong development of the individual and use of scientific principles and current technological advances, helps to assess and evaluate physical fitness, body composition, dietary patterns, energy expenditure, and their interrelationships.

Learning Objectives:

- Understand the Importance of Nutrition, Fitness and Health
- Gain Knowledge on Exercise Physiology and Nutrition for Physical Activity
- Comprehend the Technique and Gadgets for Physical Activity Training
- Understand the Risks of Hypokinetic Diseases
- Understand the principles of Exercise and Stress Management

Learning Outcomes:
Upon successful completion of the course students shall be able to:

- Explain the principles of physical fitness and nutrition (such as body composition, energy intake, energy expenditure, and the acute and chronic physical changes related to exercise and nutrition) complement each other in helping to develop physiological well-being and overall health.
- Explain the principles of fitness and nutrition (such as setting realistic short-term behavior change goals and the relationship of exercise and diet to stress reduction) complement each other in helping to develop psychological well-being and overall health.
- Identify some of the social and cultural influences on food habits and exercise/activity patterns.
- Evaluate current nutritional information with regard to its contribution to Health and physical fitness.

Course Content
Unit-I. Health and Fitness
Definition, Components and Relationship among Physical Fitness, Wellness and Health

Personalized approach

Benefits of fitness training

Unit-II. Exercise Physiology and Nutrition for Physical Activity

Pulmonary, Cardiovascular Regulation and integration,
Skeletal and neural control,
Endocrines and exercise
Nutrition & Physical performance
Physical fitness: cardio respiratory fitness, muscular strength, muscular endurance, body composition and flexibility
Energy systems, muscles and physical performance-ATP-CP energy systems, Lactic Acid energy systems, Oxygen energy systems, Glycogen depletion
Endurance Training-Muscle and Muscle fibers
Optimal Nutrition and Energy needs for optimum performance e.g. athletes
Exercise and fluid loss
Hydration
Nutrition supplements, Ergogenic Aids

Unit-III. Physical Activity Training

Aerobic and anaerobic training - To enhance Cardio Vascular Endurance,
Flexibility and Body Composition,
Measurement of PAL,
Benefits of Fitness training and Gadgets for measuring PA –
Motorized Treadmill, (aerobic Fitness),
Functional Trainer,
Fluid Rower (Upper body),
Elliptical Bicycle and
Bicycle Ergometer (Lower body),
3.10Stretch Trainer (Whole body),
3.11 Multi Gym (9, 12, 16 station) for different muscle groups

**Unit-IV. Diseases due to Faulty/Poor Food Habits and Physical Inactivity**
Life Style related diseases/disorders (Non communicable Disease conditions) - Meaning Causative Factors and Diet Modification/evidence based guidelines for
- Underweight,
- Obesity,
- Diabetes mellitus,
- Hypertension,
- Cancer
- Cardiovascular Disease,
- Anemia

**Unit-V. Exercise, Stress and Health Management**
- Stress Assessment and Management
- Techniques-Exercise at medium and high altitudes, Underweight, Overweight and Obesity,
- Relaxation Techniques,
- Yoga and Meditation for Health,
- Clinical Exercise
- Physiology for Cancer,
- CV and Pulmonary rehabilitation

**Practical**
1. Aerobic and Anaerobic Exercises
2. Relaxation Techniques,
3. Stress Assessment and Management
4. Yoga and Meditation
5. Visit to Fitness Centre: Observational report and 2 Case studies
6. Desk review of ergogenic aids available in the market
7. Use of non-invasive equipment’s like Pedometer, pulse oximeter, step test, Omrans body composition analyser, home monitoring BP equipment to assess the nutritional status
Learning Experiences

Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICTenabled teaching and learning experiences in terms of video lessons and documentary film shows.

Evaluation

Announced and unannounced class tests, seminars and assignments and Record works related to their Practical works.

Reference

DISCIPLINE SPECIFIC ELECTIVE COURSE

FOOD SERVICE MANAGEMENT
(Credits: Theory-4, Practical-2)

The course “Food Service Management” aims at creating a basic understanding of various aspects of managing a food service operation particularly in the hospital dietary food service. This creates an awareness on the fundamental principles and functions of management, and the tools which can be used for simplifying work for efficient use of manpower and time and managing material and other resources. The practical experience will give students hands on experience from food procurement to service which will enable them to acquire managerial skills and also opens avenues to build confidence in them to become entrepreneurs in the food service industry.

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 hospital dietary.
- Plan and organize food production and service in a hospital dietary by effective utilization of resources.
- Implement attributes of financial and personnel management.
- Acquire good managerial skills.

Course content
Unit I: Scope and objectives of food service
Types - Commercial – Hotels, Restaurants, fast food outlets, cafeterias, snack bars, kiosks, vending machines.
Non commercial – Hospitals, Nursing homes, Industrial canteens and child care centres.
Transport – Air, rail, road and ship catering. Miscellaneous – outdoor, contract and function catering.
Evolution, Growth, Scope and Recent Trends in food service Industry.

Unit II: Organization
Organization – Definition, types of organizational hierarchy suitable for a hospital dietary department.
Physical plant – Planning space requirements in Receiving area, storage area, Preparation area and service area.
Unit III: Management
Management – Principles of management; Functions of management – Planning, organizing, staffing, directing, coordinating, reporting and budgeting

Resources of management – Man, Money, Material, Machine, Method, Minute, Market

Tools of management – Organisation Chart, Job Description, Job Specification, Job Analysis, Work Simplification methods

Unit IV: Types of Food Service
Food Service Systems – Conventional, Commissary, Ready prepare, Assembly Serve Systems
Food service - Types – centralized and decentralized service, Satellite service; Styles – Table service, Buffet, Banquet, Tray service and self service

Unit V: Financial and Personnel Management
Financial management – Food cost, Labour cost, Overhead cost, Recipe costing, Menu Costing, Selling price, Break-even Analysis

Personnel management – Man power planning, recruitment, selection, induction, training, performance appraisal, promotion and transfer.

Training Methods, Leadership, Communication in Food Service Operations
Computer application in the management of hotel and hospital dietary department.

Practical experience
- Visit to a commercial and a non commercial food service institution.
- Practice work simplification techniques in the laboratory.
- Prepare costing sheet for recipes and menus.
- Organize a food sale - Plan the menu, resources and execute production and sale and estimate profit or loss.

Learning experience
Regular Lectures, demonstrations, ICT enabled teaching and learning experiences, field visits, team work, planning and organizing work force.

Evaluation
Assignments, written tests, assessment of performance in exhibiting organization and planning skills, participation in team activities, evaluating leadership, decision making and communication skills.
References:
DISCIPLINE SPECIFIC ELECTIVE
Food Safety, Sanitation and Hygiene
(Credits: Theory-4, Practical-2)

Course description
A study of food safety, hygiene and sanitary practices in food industries causes investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards in Food Service Industries.

Learning objectives
• Learn the various aspects of food safety
• Understand about food laws and labeling
• Understand the need for consumer education

Learning outcomes
• Upon completion of this course, the student will be able to: 1. Identify causes of and prevention procedures for food-borne illness, intoxication, and infection.
• Demonstrate good personal hygiene and safe food handling procedures; describe food storage and refrigeration techniques; explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse
• Discuss Occupational Safety and Health Administration (OSHA) requirements and effective workplace safety programs in Food Service Industries.

Course Content
Unit-I. Introduction to Food Safety and adulteration Basic Principles of Food Safety

    Food contamination: definition
    Sources of contamination
    Difference between food poisoning and food infection
    Safety in food processing-a. Food procurement; b. Storage; c. Handling; d. Preparation e. Safety of leftover foods
    Framework for creating enabling environment for serving safe & nutritious food at the
workplace.
Regulatory compliance requirements for the canteen establishments, Food Service Industries
Safe & nutritious food tips for the employee
Factors affecting food safety and food spoilage:
Food adulteration - definition, types of adulteration in various foods- intentional, incidental and metallic contaminants

Unit-II. Food Laws and Regulations
National Legislation – Essential Commodities Act,
Standard of Weight and Measures Act, ISI, Mark of BIS, Agmark and PFA, FPO,
Food Safety and Standards Bill 2005,
International Laws and Agreements - FAO, WHO, Codex Alimentarious, WTO, JEFA, APEDA, ISO 22000 series,
Hazard Analysis Critical Control Point (HACCP): principles of HAACCP, applications of HACCP

Unit-III. Current Food Safety Standards in India
Current Food Safety regulations 2001,
Food Safety and Standards Authority of India,
objectives of developing food safety standards,
enforcement of structure and procedure,
role of food analyst, safety analysis, action by designated officer and report of food analyst
Food Safety Management System (FSMS)
Good Practices/ PRPs - HACCP, GMP, GHP
Management Element / System
Statutory and regulatory requirements
Certification - HACCP, ISO 22000, FSSC 22000
Unit-IV. Sanitation Procedures

- Basic Principles of Hygiene and Sanitation
- Personal hygiene and Environmental hygiene
- Methods of Sanitation and Hygiene
- Sterilization and disinfection using heat and chemicals
- Waste product handling and control- Solid and liquid waste disposal
- Control of infestation- Pest control
- Cleaning and sanitizing- need for efficient cleaning program, cleaning agents, equipment’s,
- Methods to wash, rinse and sanitizing food contact surfaces.
- Importance and methods of pest control;
- Outlining methods of disposal of liquid, solid and gaseous waste

Unit-V. Importance of Personal hygiene of food handlers

- General principles of hygiene – personal and environmental hygiene,
- hygienic practices in handling and serving foods,
- planning and implementation of training programme for health person

Practical

1. Microbiological Examination of different food samples
2. Bacteriological Analysis of Water
3. Assessment of surface sanitation by swab/rinse method
4. Assessment of personal hygiene
5. Biochemical tests for identification of bacteria
6. Scheme for the detection of food borne pathogens
7. Detection of common adulterant in food: i) Khesari flour in besan ii) Vanaspati in Ghee/Butter. Dried papaya seeds in black pepper, metanil yellow in turmeric or colored sweet products and artificially foreign matter in tea (dust/leaves).
Learning Experiences

- Regular lectures, demonstrations, Exercises on observation and follow up with
- Group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows.

Evaluation

- Announced and unannounced class tests, seminars and assignments and Record works related to their Practical’s.

Reference


- Srilakshmi, B., Dietetics, New Age International (P) Ltd., New Delhi, 2013.


DISCIPLINE SPECIFIC ELECTIVE COURSE
Public Health Nutrition
(Credits: Theory 4 & Practical 2)

Course description
The focus of this course is to examine the role of the dietician/nutritionist in identifying health and nutrition problems and integrating nutritional services with medical and social services within the community. This course will also provide basic knowledge and skills relevant to the practice of community nutrition, the concept of community, the role of nutrition in health promotion and perspectives for resolving community nutrition problems, Needs for assessment issues and national and state community nutrition programs, determinants of health outcomes, measurement of nutrition and health status, food and nutrition policy, legislative issues and management of community programs.

Learning objectives:
- To know the basics of public health nutrition
- To understand the need of prioritizing nutrition issues
- To assess the nutritional and Health Status of an individual and the community.
- To learn nutritional programmes and policies to overcome malnutrition
- To understand various national and International nutritional organizations for combating malnutrition
- To apply ICT in the formulation of community nutrition education programme

Learning outcomes:
- Finally, the concepts and knowledge required for the delivery of community nutrition services will be applied to program planning, intervention and program evaluation
- Gaining knowledge on nutritional programmes and policies overcoming malnutrition
- Understanding the national, international and voluntary nutritional organizations to combat malnutrition
- Able to organize community nutrition education programme with the application of computers.
- Apply immunological intervention programmes to overcome epidemic of communicable diseases.

Course Content
Unit-I. Introduction to public health nutrition a National development
Meaning and Scope of Public Health Nutrition
Roles and responsibilities of public health nutritionists
Definitions of optimum health, malnutrition (under nutrition, overweight, obesity, micronutrient deficiency), nutritional status, nutrition intervention, food and nutrient supplements, nutrition education, morbidity, mortality rates
Nutrition – A Global Developmental Priority
Importance of nutrition throughout the life cycle
dual burden of malnutrition
Sustainable Development Goals (SDGs), 12 of the 17 Goals require good nutrition to be met
Ecology Consequences and of Malnutrition,
Strategies To Overcome Malnutrition
Relation of nutrition to national development
Nutrition and food security

Unit-II. Nutritional assessment
Introduction, Definition of Nutritional Status, Instruments, Standard of Reference, Age Assessment, Measurement Techniques, Weight, Linear Measurement/Height, Circumferences, Soft Tissue Subcutaneous Fat, Objective and Classification of nutritional assessment Methods
Overview of nutritional status assessment methods:
**Direct Nutritional Assessment parameters** - (anthropometry, clinical signs and symptoms, dietary assessment and biochemical parameters); ecological parameters – environment, Food prices, and indirect parameters – SES, Mortality and Morbidity rates

- **Anthropometry measurements**
- Techniques commonly used in public health (weight for age, weight for height, height for age & BMI for age), Comparison of indices with references
- The new WHO growth standards, its use and implications and classification to define mild, moderate & severe forms of malnutrition
- New WHO growth standards for Adolescents, implications of introducing new standards in school health program
• **Biochemical Estimation**
  Name of assessment of parameters, Reference value/Desirable Level of nutrients and their metabolites in body tissues
  - Lipids & Lipoproteins (TG, LDL and HDL cholesterol and their ratios)
  - Carbohydrates (blood and urinary glucose)
  - Protein (serum protein, albumin, NEAA/EAA ratio, hydroxyproline index, urea/creatinine ratio, etc.)
  - Iron (Hb, HcT, serum iron, transferrin, ferritin)
  - Vitamin A (serum retinol, carotene)
  - Vitamin D (serum alkaline phosphatase, calcium and phosphorous)
  - B-complex vitamins, including Folic acid & Vitamin B12 (urinary excretion)
  - Vitamin C (serum ascorbic acid, whole blood ascorbic acid)
  - Iodine (T3, T4, urinary excretion)
  - Sodium, potassium and chloride
  - Fluoride
  - TB Test, HIV Test CD4 counts
  - **Clinical Examination** of common nutritional deficiencies
  - Specific nutrient Deficiency signs & symptoms (Vitamin A, Iron, Iodine, Zinc U, B complex vitamins etc.)
  - Grouping of Signs
  - **Dietary Survey and Types of Nutritional Survey**
  - Dietary intakes methods and understanding their usage and limitations in different field situations: 24-hour diet recall methods; Food frequency method; Weighed food inventory; food diaries and food composition methods
  - Rapid assessment methods for dietary intake
  - Dietary Diversity Score for Household, Individual, women and children

**Indirect Nutritional Assessment parameters**
- Vital Statistics, Age Specific Mortality Rate, Morbidity and Cause of Specific Mortality.

**Unit-III. Social & behavior change communication**
- Concepts, components and process of communication for nutrition health promotion
Definitions of Formal – non-formal communication, Participatory communication

Components of BCC (Sender, Message, Channel, Receiver)

Various types of communication – interpersonal, mass media, visual, verbal/ non-verbal.

need of SBCC in India

Social ecological model and communication for development (C4D) approach

Consequences and Theories of Social and Behavior change Communication

Definitions, Three characteristics, Ten overarching principles for developing SBCC program or campaign

Steps for developing a successful Social and Behavior change communication program

Evaluating and replanning

Training workers in nutrition education programmes

Methods of education when to teach, whom to teach

Use of computers to impart nutrition education

Organization of Nutrition education programmes

Unit –IV. National, international and voluntary organizations to combat malnutrition

Role of Nutrition in Achieving Global Targets

Optimal Infant and Young Child Feeding: Significance of the first 1000 days of life

Improving maternal, infant and young child nutrition – WHO Global Targets 2025

Nutrition Intervention programmes in India –

Integrated Child Development Services (ICDS): ICDS Mission Mode, ICDS mission in various states

Role of AWW; Supplementary Nutrition, Bal bhog, Sakhibhog, Shishubhog

Mid-Day Meal (MDM) program

Fortification program

National Programs to Combat Micronutrient Malnutrition

• Vitamin A: Vitamin A Prophylaxis Program (VAPP)
• Iodine: National Iodine Deficiency Disorders Control Program (NIDDCP), Universal Salt Iodization (USI), Double Fortified Salt (DFS)
• Diarrhea Control Program: Role of Zinc, ORS and National Deworming Campaign
• Fluorosis Control Program

Organizations Working towards Meeting Global Nutrition Targets

• National organization – ICAR, ICMR, CSWB, SSWB, NNMB, NIN, CFTRI, DFRL, NIPCCD and NFI, Save the Children, Tata Trusts
• International Organizations - World Bank, World Health Organization (WHO), United Nations International Children’s Emergency Fund (UNICEF), World Food Programme (WFP), Bill and Melinda Gates Foundation
• Voluntary organizations – Global Alliance for Improved Nutrition (GAIN) Micronutrient Initiatives, CARE, CRS, AFPRO, IDA; World Alliance for Breastfeeding Action (WABA)

Unit-V. Epidemiology of communicable diseases

• Definition, causes, signs and symptoms, treatment and prevention of communicable diseases, Respiratory infections and intestinal infections,
• Other infections- dengue, Flu
• Types of immunity- active, passive and herd-group protection
• Immunization agents- vaccines, immunoglobulin
• Immunization schedules - National and WHO Expanded Programme on Immunization- Universal Passive, Combined, Chemoprophylaxis, non-specific measures

Related experience (Practical)

• Assessing the nutritional status of an individual, group and community in different settings
• Conducting 3 Day Weighment Survey for an Individual
• Planning and conducting nutrition education programmes in a selected village for 3 days
• Spot observations based on the observations through field visits in ICDS centres, MDM school programme
Learning experience

Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICTenabled teaching and learning experiences in terms of video lessons and documentary film shows.

Evaluation

Announced and unannounced class tests, seminars and assignments and Record works related to their Field /community stay Camp/Practical works.

References

- UNICEF. https://www.unicef.org/
- WHO. http://www.who.int/
- National Guidelines on Infant and Young Child Feeding. wcd.nic.in
- National Nutrition Mission – ICDS. icds-wcd.nic.in
- Ministry of Health & Family Welfare, www.mohfw.nic.in
- Field guide to designing communication strategy, WHO publication-2007
DISCIPLINE SPECIFIC ELECTIVE COURSE
Principles of Interior Design
(Credits: Theory: 4; Practical: 2)

Course Description
Designing in modern day’s gains significance both in terms of planning an interior space functionally as well as aesthetically. The Course exposes the students to the concept of interior design and the trends emerging periodically in terms of purpose, materials and methods. Furthermore they get an opportunity to have hands-on experience in using the basic elements and principles of design in day to day living.

Learning Objectives
- Gain knowledge and interpret the elements and principles of art in interior design
- Use the elements and principles to create beautiful designs and interiors
- Apply theoretical knowledge for practical situations
- Decipher the nuances of Indian interior design

Learning Outcomes
- Appreciate growth and development of interior design and decoration in India
- Enabling students distinguish between Interior decoration and Interior design
- Analyze place of elements and principles in interior designing
- Gain knowledge on Institutes offering Interior design as professional Courses

Course Content

**Unit I. Interior Design vs. Interior Decoration**
- Interior Design and Interior Decoration: concept and basic differences
- Aims of Interior Design: Beauty, Expressiveness and Functionalism
- Interior decoration in India: History, growth and development
- Characteristics - cultural and ethnic influences
- Popular interior designers in India Interior designer – definition and functions,
- Characteristics of an Interior designer
- Interior Design Institutes in India
- IIDA – International Interior Design Association; IIID- Institute of Indian Interior Designers – vision and functions
Unit II. Fundamentals in Designing

Design: Definition and classification
Structural design – importance and requirements of good structural design
Decorative design – importance and requirements of good decorative design
Classification of decorative design - naturalistic, conventional, geometric, abstract, historic and biomorphic
Relation of good taste and perception of Interior Design

Unit III. Design Elements

Elements of design: Meaning, importance, characteristics of each element and their use in designing

Line- meaning and definition, types-actual, implied, psychic and purpose
Line and direction-vertical, horizontal, diagonal, curved, zigzag;
Shape and form: meaning and basic difference between the two
Elements of shapes and forms- types- 2D - square, triangle, circle and polygons and their
3D forms – cube, pyramid/cone, sphere etc
Rectilinear Vs angular forms
Space – meaning and perception, negative and positive space, significance in designing
Size – small to large
Texture – meaning and classification- tactile and visual textures, structural and applied
Texture; Use of Textures in Interiors –Texture and Scale , Texture and Light, Texture and Light, texture and Colour
Colour –spectrum, Theories, qualities, The Prang Colour System, Effects of colourColiur (Physi Physical, Emotional)Principles of design in use of colour,Colour schemes(related, contrasting), consider the choice of colour in different rooms

Pattern and ornamentation – conceptual meaning, significance in designing;
Guidelines to use pattern in design
Motifs types and arrangement; Motif development- fundamental step in designing process
Light- significance, emotional effect, types and use
Unit IV  Design Principles

Principles of design - Meaning, nature, types and significance in designing
- Balance: meaning and definition, classification
- Rhythm: meaning and definition, types
- Emphasis – meaning and definition, types and methods of achieving
- Proportion: meaning and definition, Greek/Golden oblongin space division, concept of scale and law of space relationship in designing
- Harmony: meaning and definition, methods of achieving

Evaluation of design-criteria for evaluation

Unit V  Accessories in Interiors

Accessories: Definition and importance Classification –
functional, decorative and both
- Selection and placement of accessories
- Pictures as accessories - types of picture, selection of pictures, mounting, framing and hanging
- Art objects as accessories – wall hangers and paintings
- Crafts as accessories - pottery, wood craft, basket making;
- Sculpture, Antiques, indoor plants and flowers as accessories

Practical

1. Interview with an Interior designer – submission of report as a case study
2. Create an album with professional details on any five popular interior designers in India
3. Developing design using basic motif for various application in interiors – minimum five applications.
4. Evaluation of art objects for design, elements, principles, colour, material and purpose - minimum five objects.
5. Designing greeting cards for different occasions - any five occasions.
6. Developing design suitable for application on textiles – Saree border, curtain, cushion/slip covers, and hand kerchiefs and tapestry
7. Developing design for floor decoration - Flower carpet, Rangoli, Alpana
8. Area arrangement using principles of design and colour – living, dining, bed, pooja and children’s room.
9. Creating commercial displays using principles and colours – textiles display, handicrafts, reception area in star hotels and corporate offices
10. Developing designs suitable for accessories – structural and decorative
11. Exercise on mounting of pictures using ‘Law of margins’ – vertical, horizontal, square
12. Preparing wall hangings using art principles – any two wall hangings
13. Preparing a portfolio on all art work/ objects done and antiques
14. Display of all exercises done for evaluation by the teacher
15. Submission of complete, bound record work

Learning Experiences

- Flipped classrooms, blended learning, workshops, portfolio making, lectures, demonstrations

Evaluation

- Class tests, survey reports, interview reports, assignments, display of exercises done, submission of complete record of practical done, submission of portfolio on a specific topic, area arrangement, model making

References


DISCIPLINE SPECIFIC ELECTIVE COURSE
Designing and Furnishing Life Space
(Credits: Theory - 4, Practical - 2)

Course Description

The Course introduces the concepts of life space, it’s designing and furnishing as a unified/complete entity. Further the Course while disseminating knowledge on various styles, types and construction of furniture highlights their significance in furnishing the life space-the abode of rest, peace and comfort - for the inmates. Students get exposed to the triad contributing to one’s life space-design and décor, furniture and furnishing.

Learning Objectives

- Comprehend the concept of life space
- Learn skills of designing life space
- Gain knowledge on different styles in furniture
- Understand the role of furnishings in designing and decorating interiors

Learning Outcomes

- Understand the various features in period style furniture
- Select and arrange furniture and furnishings in different rooms in residential spaces
- Knowledge on factors influencing planning of life space
- Develop confidence in decorating interiors using furniture and furnishings

Course Content

UNIT I: Concept of Life Space

Objectives and process of planning life space-biological needs, ecological concerns, cultural influences, psychological effects, utility, economy, beauty and character

Factors determining life space in interiors- people, location and orientation, resource available, activity zones in life space, schematic diagram

Trend setting from spacious to compact interiors and multi-storeyed buildings
UNIT II Furniture in the Life Space
Importance of furniture in relation to interiors, salient features of traditional, contemporary and modern styles in furniture
Furniture types-Modular furniture and mobile furniture; Case goods and upholstered furniture; multi-purpose furniture
Materials used and construction of furniture-joints, finishes; Construction of upholstered furniture

UNIT III Furniture Selection and Arrangement
Factors considered in selection of furniture to suit different spaces and purposes
General guiding concepts in arrangement of furniture
Arrangement of furniture in different rooms
Trends in furniture – impact of materials and methods, Ergonomics, space saving, innovation
Care and maintenance of furniture

UNIT IV Furnishings for Designing Life Space
Conceptual meaning and definition of design, elements and principles of design
Supportive elements as functional and aesthetic aspects – role of colour and light in designing life space – Prang colour system and colour harmonies; sources and effect of lighting
Conceptual meaning of furnishings – definition and classification – soft, hard, resilient; selection and basic use in life space
Home furnishings as accessories, floor, wall and ceiling decorations, selection and use
Types of windows, window treatments –Hard (shutters, rollers, blinds, shades), Soft (curtains, draperies, swags, valances).
Window accessories: chords, rings, rods, trims, and decorative products.
Developing innovative designs for window treatments

UNIT V Home Furnishings and Accessories
Goals involved in furnishing interiors
Factors influencing furnishing decisions: climatic conditions, needs and preferences, principles of design, availability etc
Selection of furnishings based on background – walls, floors and ceilings
Selection, care and maintenance of different home furnishings-slip covers, cushion covers, bed linen, bath linens, and kitchen linens.
Role of accessories as furnishing components - Functional and decorative – fabric based lamps, painting, wall hangings and soft toys
Alternate means of improving home furnishing conditions: elimination, concealment, rearrangement and supplementation.

Practical

1. Identifying different styles in furniture
2. Visit to a manufacturing unit of a furniture shop and observing the construction of case goods and upholstered furniture
3. Survey of consumers to find out the factors considered while selecting furniture
4. Listing furniture requirements for various activities carried out in a household
5. Arranging furniture for different rooms in a living space using cut outs
6. Collecting pictures of rugs and carpets used in interiors
7. Drawing different methods of treating windows and developing an innovative design for treating windows
8. Observing the advantages and disadvantages of living in multi-storied buildings and individual houses for life space satisfaction
9. Drawing Prang Colour chart
10. Applying different colour harmonies to an outline of three dimensional interior and identifying its effects
11. Visits to few modern interiors (residential and commercial) to observe the selection and fixing of various lighting fixtures
12. Collecting pictures of various rooms interiors in residences and identifying the accessories and soft furnishings used in it
13. Demonstrations on different types and styles of flower arrangement
14. Workshop on construction of soft window treatments
Learning Experiences

- Lectures, power point presentations, conduct of market surveys, demonstrations, workshops, record work, field visits and arranging mock spaces.

Evaluation

- Class test, record submission and assignments, survey reports, case studies, model making, area arrangement,

References


DISCIPLINE SPECIFIC ELECTIVE COURSE
Creative Applied Arts
(Credits: Theory: 4; Practical:2)

Course Description
Introducing students to the discipline of Applied Arts is a dire need to divert young minds from too much of academics to lighter enjoyable exercises. It would prove an attempt to initiate in them an opportunity to develop and kindle their senses in fine and applied arts, a viable avenue for lifelong learning.

Learning Objectives
- Appreciate aesthetics of arts and crafts
- Develop and practice nuances of creative arts
- Inculcate skills through hands – on experience in applied arts
- Understand and appreciate major work of artists.

Learning Outcomes
- Comprehend significance of art concepts as an integral component of man’s living styles from bygone days
- Customize/ optimize use of visual and applied arts, accessories and antiques for designing interiors and other aspects
- Realize learning as an enjoyable stress free experience resulting in lifelong learning
- Expand knowledge and equip skills and emerge as self employed freelancers

Course Content
Unit I Introduction to Visual Art
Meaning and philosophy of art; categories of art related to interior design and architecture: visual, plastic, decorative, applied arts
Type of arts and designs - Visual art and graphic art; visual design and graphic design
Drawing using different methods and techniques
Unit II Materials Used in Works of Art

Materials and their use in applied arts – wood, earthenware, ceramics, glass, plastics and metals
Availability, processing and use
Ornamentation and fine tuning techniques

Unit III Introduction to Art Forms

Concept of design; ABC of basics of design – Aesthetics, Basic design and Creativity: their significance in design development
Varieties of art: Art, abstract and surreal
Two dimensional art forms: Graphics: Meaning, types – hand process and mechanical process- relief, intaglio, planography
Three dimensional art forms: Sculpture: meaning, types – relief, free standing, Process in sculpture – subtractive, additive and replacement

Unit IV Applied Arts for Functional/ Aesthetic Use

Painting – water, oil, pot, Madhubani, Worli, Fresco
Pottery
Puppetry
Table setting
Jewelry making
3D printing
Floor and wall decorations – kolam, alpana, flower carpets, rangoli

Unit V Study of Major Work of Artists

Foreign artists – Michelangelo, Leonardo da Vinci, Raphael Sanzio, Pablo Picasso, Vincent van Gogh
Indian artists – Raja Ravi Varma, R.K. Laxman, M.F. Husain
Practical

1. Template and model making
2. Developing designs for greeting cards, wall hangers, jewelry and dress making
3. Making paper bags, lamp shades and other accessories
4. Wealth from waste product making
5. 2D design drawing - techniques of drawing, rendering and painting (water, oil)
6. 2D art forms – Collage, decoupage, stencil, puppetry
7. Painting - Worli and Madhubani
8. Floor decorations – Kolam, Alpana, Rangoli, flower carpet, floating rangoli
9. Accessories – Macreme, pottery, soft toys, terrarium, Paper Mache and real time (working) fountains
10. Mock up spaces and area arrangement
11. Table setting; fruit and vegetable carving
12. Collection and display of antiques and posters
13. Collection and analysis of paintings/ work of art of famous artists
14. Evaluation of art forms
15. Interviews with contemporary artists
16. Field visits to museums, art gallery
17. Lecture cum demonstration of graphic and visual art by experts
18. Visit to commercial units making pottery, jewelry, furniture etc
19. Display of art objects
20. Prospects for Self employment by selling the Art pieces in bulk
21. Submission of a complete record on practical work and portfolio on specified topics

Learning Experiences

- Flipped classrooms, blended learning, workshops, portfolio making, lectures, demonstrations, workshops, field visits, face to face interview with experts, ICT based exposures
Evaluation

- Class tests, survey reports, interview reports, assignments, display of exercises done, submission of complete record of practical done, submission of portfolio on a specific topic, area arrangement, model making, mock up spaces, practical tests, Viva Voce

References

DISCIPLINE SPECIFIC ELECTIVE COURSE
Garden and Landscape Designing
(Credits: Theory - 4, Practical - 2)

Course Description
The Course develops among the students the core principles, types and components of landscape gardens. It provides experiential learning by upgrading their skills in designing various residential and commercial landscape plans. It can further motivate them to develop and maintain indoor garden.

Learning Objectives
- Gain knowledge to identify different types of garden by adopting the principles and design elements
- Understand the importance of cultivating ornamental plants and their scope in entrepreneurship
- Learn about raising of indoor plants and their maintenance
- Draft landscape plans for commercial and residential sectors

Learning Outcomes
- Distinguish different ornamental plants and their commercial/aesthetic significance
- Comprehend methods of propagation and commercialization of ornamental plants
- Analyse value addition of ornamental plants and flowers for aesthetics and entrepreneurship
- Draft sketches/drawings/layouts of various gardens

Unit 1 Concept and Classification of Landscape Garden
Definition, Importance and Scope of landscape garden
Types of Gardens - English garden, French garden, Mughal garden, Japanese garden, Italian garden and Persian garden
Gardens based on styles – Formal, Informal and Free style
Gardens based on design - Terrace, Roof, Vertical, Window, Balcony, Container, Kitchen gardening
Gardens based on water requirement – Xeriscape (water efficient) gardens

Unit II Layout and Design Principles in Landscape
Layout - The foreground area, The private living area and The service area
Design Elements-Line, Form, Color, Texture, Space and Pattern in garden layouts
Beauty Principles-Balance, Proportion, Scale, Rhythm and Harmony – adoption in garden and landscape layouts

Unit III Components of Landscape Designing
Classification of ornamental plants: Annual, Biennial and Perennial
Softscape: Trees, plants, mulches, climbers and creepers, edges and hedges, flowers beds, shrubs., lawns, topiary and trophy
Lawn: meaning and importance of lawn, preparation of land for laying lawn, methods of raising lawn, types of lawn grass, plants suitable for lawn and ready to use lawn as saleable products
Hardscape: Sidewalks, walls and fences, pavers, rocks, decks and patios, ponds and pools, garden benches or other seating, gazebos, walkways and driveways

Unit IV Indoor Gardening, Garden Décor and Adornment
Factors considered for growing indoor plants, selection and placement, types of indoor plants, care and maintenance
Basic requirements for maintenance of garden plants-temperature, light, water, air, nutrients and space. garden tools and equipments, insecticides and pesticides, pruning methods
Bonsai-plants suitable for bonsai culture, techniques and styles
Terrarium – conceptual meaning, creating terrarium
Décor and Adornment- Water features, sculpture, tree hangers, pottery lighting, swings, hammocks.
Supportive- Bird houses, kennel house, beehives, feeders, tree houses, trellises.
Eco friendly materials role in raising garden

Unit V Commercial Landscape Gardening
Drafting landscape plans incorporating all components
Landscape gardening in educational institutions, corporate and residential areas
Prospects for entrepreneurship –Running nursery, making eco friendly bags/baskets,
Other saleable products - plants (saplings, seedlings), cut flowers, value added products like flower arrangement, bouquet, readymade lawns, terrarium, real time (working model) indoor fountains etc
Practical

1. Visit to landscape garden to identify different types of gardens
2. Visit nursery to familiarise with various ornamental plants
3. Make an album to depict the beauty principles, elements and components of garden layouts
4. Draw plans for various types of garden
5. Demonstration on creating terrarium and bonsai
6. Hands-on experience on xeriscape garden
7. Workshops on flower arrangement – types and styles
8. Workshops on bouquet making, flower tying and garland making
9. Survey of florists, nursery owners and landscape garden professionals
10. Interview of Hotel/ Hospital/ Corporate people about gardens in their premises
11. Training by Landscape / horticulture/ floriculture professionals on significance, scope and methods of initiating ornamental gardens
12. Demonstration on the plant propagation methods by experts
13. Ready to use lawns as saleable products
14. Initiating a model nursery in the department and start a project enterprise
15. Making eco friendly grow bags and baskets and initiate micro level sales.

Learning Experiences

- Experiential learning, Site visits, Field visits, Market survey, lecture cum demonstrations, workshops on making saleable products, model nursery

Evaluation

- Class tests, examination, assignments and seminar presentation, interactions, conducting quizzes and debates, interviews, research projects and case study analysis, submission of reports, records and portfolio.
References

- Carols, S. (2017). Eco Landscape Design. UK: Scitus Publisher
DISCIPLINE SPECIFIC ELECTIVE COURSE
NON GOVERNMENT ORGANISATION MANAGEMENT
(CREDITS: THEORY – 4, PRACTICAL – 2)

Course Description

NGO Management is a course to train the aspirants for their career, working for the upliftment of the underprivileged and for those who spend most of their career, working in the areas like environment, health, education, social service and community development.

Course Objectives

- Develop and understanding of evolution, growth and development of Non-Government Organisations
- Learn the legal framework for establishing NGO’s
- Enhance skills and techniques of project evaluation / Resource Mobilization
- Acquire specific knowledge on project Management
- Learn the concept of team building, people’s participation and self-understanding

Learning Outcomes

- Explain the needs and importance of NGO’s and Management
- Learn the legal framework for establishing NGO’s
- Describe the concepts, principles of Project Management and Formulation of Detail Project Report
- Analyze the key issues in Government policies and programmes

Course Content

Unit-I. Concept of NGO
Meaning of NGO and GO
Difference between government organization (GO) and Non-government Organization (NGO)
Principles of NGO
Characteristics of good NGO
Structure and functions of NGO
Classification of NGO
Origin and development of NGO

Unit-II. Legal Frame Work for Establishing NGO
Legal – rational structure of Non profits
Trust and Societies with special reference to Trust and Registration Acts
Foreign contributions and Regulation Act (FCRA)
Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)
Rules and Regulations – Resource Mobilization
Methods and Techniques of fund raising
International, national and local levels
Schemes for NGO’s under various Ministries of Government of India
NABARD and Human Rights Commission

Unit-III. Project and Management in NGO
Concept, objectives, principles and Types of projects
Project implementation and management
Project planning matrix, project cycle management, identification and formulation of Detail project Report (DPR) with reference to action AID

Unit-IV. NGO Management
Organizational types and structures
Ngo management competencies
Team Building – concept and significance, Role of effective team building in management of NGO’s
People’s participation – concept, meaning and objectives, role of people’s participation in community development.
Understanding Self – Formulation of Self-concept, Dimensions, Components
Self-Assessment : Analysis & Action plan

Unit-V. Policies and Programmes
Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid
New regulations for NGO and government control
National policy on voluntary sector under five year plans.

**Practical**
- Visit an NGO and learn the aspect of formation, management and administration
- Carryout a case study on NGO’s and understand the techniques of NGO’s
- Preparation of model project report with reference to action AID
- Apply Network analysis and PRA techniques to find out the available resources in the target area of NGO
- Interaction with NGO’s officials and find out their problems and prospects
- Interact with NOGs officials and how the Government policies and programmes (NGO’s)

**Learning Experiences**
- Regular lectures, debates, field visits, ICT enabled learning experiences

**Evaluation**
- Class tests, assignments records, reports and seminars

**References**
• Julie Fisher.(2003). Non Governments – NGO’s and the Political Development of the Third World. New Delhi: Rawat
• Kalyan Sengupta. (2013). an Easy Guide to NGO. Kolkata: Book Corporation
DISCIPLINE SPECIFIC ELECTIVE COURSE
EXTENSION MANAGEMENT
(CREDITS: THEORY-4, PRACTICAL-2)

Course Description

Extension Management creates awareness amongst the students to make them participate in various programmes and attainment of organizational goals and objectives with and through other people. It further explores the influence of various issues for the success of its programmes.

Learning Objectives

- Develop an understanding about the meaning, functions and characteristics of Extension Management
- Learn the requirements and Levels of planning
- Learn the key issues in controlling
- Understand the functions of organizational Management

Learning Outcomes

- Understand the concept related to Extension Management
- Comprehend the purpose of planning and organizing
- Focus on requirement of effective staffing for successful Management
- Analyse the significance of effective controlling

Course Content

Unit-I. Extension Management

- Meaning, function, basic elements , characteristics of extension management
- Concept, need, nature, objectives and functions of extension
- Informal, formal and non-formal education and differences between formal and extension education

Unit-II. Planning
- Definition, requirement of effective planning, levels of planning, elements of planning, contingency planning

**Unit-III. Organizing**
- Definition, requirements of effective organizing, line and staff function
- Span of management, scalar principle, delegation of authority, use of committee, coordination, involvement of organizations at the local level input management, common mistakes in organization

**Unit-IV. Staffing**
- Definition, requirements of effective staffing, training for professional development, training strategy
- Training Methods – lecture, group discussion, seminar, panel discussion, colloquium, symposium, workshop, syndicate method, case study role playing, brain storming, buzzy session, sensitivity training, interactive video, video conferencing, performance appraisal, stress in managing, organizational conflict, grievances in organizations.

**Unit-V. Controlling**
- Definition, requirements of effective controlling, monitoring and evaluation, supervision, budgeting and auditing, reporting
- Change agent success, change agent problems a study in organizational management, reaching the weaker sections, administration of rural credit

**Practical**
1. Visit to an organization and understand the requirements of effective staffing.
2. Interact with the staff organization and understand their functions.
3. Carryout a case study on successful management of panchayat.
4. Select a topic related to women and issue faced by them and describe ways to assess them.
5. Identify the change agent problems and suggest ways to solve the same.
6. Identify the ways to handle the grievances.

**Learning Experience**
- Lectures, demonstration, group discussion, case study, role plays, ICT enabled learning experiences.

**Evaluation**
• Class tests, assignments, seminar, records, reports.

References

DISCIPLINE SPECIFIC ELECTIVE COURSE
COMMUNICATION FOR DEVELOPMENT
(CREDITS: THEORY-4, PRACTICAL-2)

Course Discipline

Course in Communication for Development orients the students to learn about the various dimensions of development and communication for social change. The course focuses contemporary development concerns, advocacy and communication for sustainable social change. It enhances the capacity of the students in participatory methodologies and innovative communication techniques.

Learning Objectives

- Understand the concept and process of development
- Gain knowledge on development communication
- Learn the importance media in development communication
- Acquire skills on Information Education and Communication (IEC) technologies and media

Learning Outcomes

- Understand the concept related to communication for development
- Comprehend the significant development communication
- Focus on different types of media and its uses in the implementation of programme
- Analyze the ICT in development communication
- Understand the steps in message design

Course Content

Unit-I. Development Communication

Definition, basic concept, nature, significance and functions and dysfunctions, dynamics of development.
Models of Development- Dominant paradigm, Basic Needs model, new paradigm of development.
Philosophy of and principles of development communication.
Methods of Communication.
Unit-II. Approaches to Development Communication

- Meaning, nature, role and characteristics of development communication
- Interrelationship between development and development communication
- Diffusion / extension approach, Mass media approach, development support communication approach, institution approach, integrated approach and localized approach
- Paradigm of development communication

Unit-III. Media and Development Communication

- Traditional media – types, characteristic role in development communication
- Development reporting – roles and responsibilities of development reporter, ethics in reporting, required skills and issues in development reporting
- News reporting – definition of news, ingredients and qualities of news, news value, types of news reports, structure of news reports
- Radio news, features and commentaries, radio and development communication
- Television and cinema – role in development communication
- ICTS – scope in development communication

Unit-IV. Skills for Development Communication

- Photography - basic principles, preplanning, scripting, shooting, developing, mounting, recording of commentary or dialogue, synchronization of frame with recording
- Video films – essential preliminaries, preplanning – procedure, classification of video programmes, shooting script
- Editing procedure – optical effects, music titles and other accessories to be added
- Recording process, Home videos, radio recording

Unit-V. Social marketing and advertising

- Social marketing – concept of social marketing
- Innovative strategies in Social marketing
- Advertising – definition, types, origin and role
- Types of advertisement and their impacts
Media for advertising
Media planning and advertising

**Practical**

1. Analyse the models and its application in the implementation of programmes
2. Apply the traditional media and understand the effectiveness of the same in women’s issues
3. Identify various issues in development communication through radio scripts, newspaper stories and reports
4. Carryout cases studies on successful implementation of communication programmes by using communication skill
5. Interact with media in organizing programmes on current issues
6. Apply the approaches of social advertising to create awareness on important issues related to women

**Learning Experience**

- Lectures, demonstration, Group discussion, Case study, role play, Application of ICT in teaching learning process.

**Evaluation**

- Class tests, assignments, project work, records and reports.

**Reference**

DISCIPLINE SPECIFIC ELECTIVE COURSE
COMMUNITY DEVELOPMENT
(CREDITS: THEORY-4, PRACTICAL-2)

Course Description
Community development refers to the broad set of skills and institutions that local communities utilize in an effort to improve the quality of life for all residents. This Course examines the history of housing, economic trends and social policies that have affected the marginalized communities across the country and project the organizing and capacity building measures that community development professionals and activists have sought to improve these conditions.

Learning Objectives
- Understand the conceptual meaning of community development and community organization
- 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

Course Content
Unit-I. Concept of Community Development
Meaning and Definition of community development
Principles, Philosophy and objectives
Elements of community development - Community development as a process, community development as a method, community development as a programme, community development as a movement
Rural development initiatives prior to independence and post-independence

Unit-II. Role of Community Based Organizations
- Conceptual meaning and definition of community based organizations
- Role, structure and functions of community organizations
- Models of community based organizations
- Approaches of community based organizations

Unit-III. Phases of Community Development
- Phases of community development – definition and needs
- Seven Phases of community development: sequence and exclusive roles
  - Relationship
  - Assessment
  - Discussion
  - Organization
  - Reflection
  - Modification
  - Continuation
- Personnel involved in community development activities – qualities and role
- National Extension Service – Role of student volunteers in community development

Unit-IV. Evaluation of community development programmes
- Review of community development programmes
- Evaluation methods
- Analysis /merits and demerits
- Community involvement and assay of Benefits
- Incentives and Prizes/ Awards

Unit-V. Sustainability and Community Development
- Concept of sustainable community development
- SDGs – Sustainable Development Goals – concept
- Significance of SDGs to community development
- Need for sustainable community development
Sustainability in community development- aims, objectives and principles

Practical

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. New Delhi: Janadaprabkasan
- Indra Godara (2013). Committee and community organization. New Delhi : Black prints publishing
8.3 SKILL ENHANCEMENT COURSES
SKILL ENHANCEMENT COURSE
Surface Ornamentation
(Credits: Theory - 0, Practical - 4)

Course Description

Surface ornamentation lends the much needed embellishment into the garments making a drab and dull garment into something interesting. India has a rich tradition of surface ornamentation works that are applied on textiles. This course deals with different methods and materials used for surface ornamentation. Further it induces exploration for different combinations to produce creative surface on textiles. This course will enhance students’ creativity by training them to use various materials and stitches. It offers ample opportunity to students to create, experiment and innovate with materials.

Learning Objectives:

- Impart knowledge to the students about different techniques of surface ornamentation
- Enable the students to make diversified products by using these techniques.
- Introduce students to varied embroideries of India, painting and printing on textiles.
- Develop skills to express their creativity through various methods of surface ornamentation.
- Understand, develop and communicate ideas and information.

Learning Outcomes:

A successful completion of this course will enable students to

- Identify and use embroidery tools following safety precautions.
- Meticulous use stitches and trimmings
- Translate design ideas onto fabric.
- Use the Indian Embroidery, painting and printing for developing products
- Access, analyse, evaluate and use information from a variety of sources, work collaboratively with others to achieve individual and collective goals.
- Confidence in developing their own designs.

Unit I Introduction

Value addition to Textiles

a. Embroidery, Trimmings and decorations, Painting and Printing, Applique, Patch & Quilting.
Essentials of Surface ornamentation

a. Materials, tools, design enlargement and reduction, design placement and transfer Care of Surface embellished articles.

Unit II Embroidery

Understanding embroidery techniques and preparation of samples:

a. Hand Embroidery
b. Machine embroidery

Raised embroidery with

a. Net

Product development

a. Home decor Items with Machine Embroidery (minimum two)
b. Accessories with Hand Embroidery (minimum two)

Unit III Ornamentation with colours

Garment restyling with Fabric Painting
Printing on Table Cloth/Stole
Creating textures with paint, block and stencil printing on fabric

Unit IV Decorative trimmings

Ari work with bead, sequin, mirror.
Zardosi border
Trims and other decorative items : shells, beads, stones, buttons, cords
Other techniques: Layering. Patch work, cording, weaving, draw thread

Unit V Ornamentation with fabric discards

Patch worked Mask
Quilted Pouch /Bag
Smocked Yoke/ Sleeve
Any novelty item

Project: Product development based on the techniques explored in the class.

1. Selection of theme
2. Development of mood board
3. Conceptualization

Creation of fabric styling samples as per the selected theme and execution of the final selected design for the selected apparel style

Learning Experiences

- Regular lectures, Videos, Presentations, Hands on experience for embroidery, printing, paintings, creating surfaces using variety of materials, Demonstrations

Evaluation

- Class test, presentations, practical evaluations and project

Reference

- Skull J., (1988), Key terms in art craft and design, Elbrook press, Australia.
SKILL ENHANCEMENT COURSE
CAD in Textiles and Apparel
(Credits: Theory - 0, Practical - 4)

Course Description
CAD knowledge helps in imaging and perceiving imaginative designs in final form without producing any prototype. This course will introduce computer aided design (CAD) software and computer aided manufacturing (CAM) systems to the students. The technologies to assist in the creation, modification, analysis and optimization of a design has been covered. This can increase the productivity of the designers and improve the quality of their visualized designs and provide them with essential skills for integrating technology with creativity.

Learning Objectives:
- Introduce Adobe Photoshop and Adobe illustrator software.
- Develops insights into the benefits of incorporating technology with creativity, by using advanced designing software.
- Acquaint with basics of computer aided pattern making and creating grading and markup plans.
- Develop specific skills sets that provide a strong foundation of fashion designing while understanding and incorporating all the aspects of digital production workflow.

Learning Outcomes:
A successful completion of this course will enable students to
- Apply Adobe Photoshop and Adobe illustrator software.
- Describes the basics of computer
- Explains and relates the benefits of incorporating technology with creativity.
- Compose design using different aspects of digital production workflow

Course content
Unit I Basics of Computer
Introduction to Vector and Raster graphics
Understanding the colour models
Understanding the interface and various tools of selected software
Unit II Introduction to CAD software

- Drawing tools and functions
- Corel draw
- Photoshop
- Illustrator

Creating motifs for print and embroidery designs for fabrics.
Creating a label and logo for design house.

Unit III CAM technologies (integration of CAD)

- Creating designs for embroidery, dyeing and printing
- Plain weave, Twill weave and satin weave simulations using weave design software
- Dobby and Jacquard pattern using pixloom/weavelt Pro

Unit IV Using CAD technology for Patternmaking

- Basic Bodice Block
- Princess Bodice
- Yoke Bodice
- Basic Sleeves
- Basic Skirt Block
- Basic Pant Block
- Grading of Patterns

Unit V Project

5.1 Design a female garment, male garment and kids wear from the categories given below and also evaluate the cost.

a. Female garment categories Formal Wear/ Ethnic Wear/Casual Wear
b. Male garment categories Formal Wear/ Ethnic Wear/Casual

c. Kids wear categories Formal Wear/ Ethnic Wear/Casual Wear

Learning Experiences

- Working with software, lecture cum demonstration, and comparison between real and virtual samples.
Evaluation

- Project portfolio of a complete collection with costing and accounting/assignment/practical test

Reference

- Grazia, (2018), CAD High computer technology for apparel manufacture. URL: http://www.sapgrazia.com
- Stewart-Smith, 2013, CAD for Fashion Design and Merchandising, Bloomsbury Publishing India Private Limited
The course introduces students to the concepts of life skills as well as life skills education. It explains the vital life skills and its importance for promoting wellbeing and competence, especially among emerging adults and youth. It prepares students to develop and implement effective life skills education curriculum keeping developmental and cultural needs of the learners at the core. It focuses on communication and other strategies crucial for successful implementation of life skills education.

**Learning Objectives**

- Develop insight into life skills and its crucial role in coping with challenges and improving quality of life.
- Comprehend the core life skills and learn strategies to develop these skills in self as well as others through life skills education.
- Learn the components, principles and skills to design and implement effective life skills education programme.

**Learning Outcomes**

- Define life skills and describe different life skills as well as its relevance for emerging adults and youth in contemporary context.
- Explain importance of life skills education from individual, interpersonal, familial and societal perspectives.
- Demonstrate abilities to use participatory approach and effective communication strategies in implementing life skills education programme.
- Critically evaluate the content and implementation of life skills education programmes.
- Design age appropriate and culturally relevant life skills education curriculum and implementation modules.

**Unit- 1 Concept and Meaning of Life Skills**

Definitions and concept of life skills and life skills education.
Importance of life skills for overall wellbeing and value of life skills education. 
Core life skills: classification, concepts and strategies to enhance these skills.

Unit-II Principles and Components for Planning and Organizing Life Skills Programs

Understanding life skills in relation to:
   a. group characteristics and needs,
   b. contextual specificities and cultural ideologies, including cultural practice that govern everyday life
   c. gender nuances that exist within the group.

Incorporating 10 important life skills recommended by WHO (self-awareness, empathy, critical thinking, creative thinking, decision making, problem solving, effective communication, interpersonal skills, coping with stress and coping with emotions) while preparing the Life Skills Education programmes/curriculum/modules while ensuring their age appropriateness and cultural and contextual relevance. Skills for self: critical thinking skills, decision making skills, interpersonal communication skills, coping with stress and emotions; self-management skills, ability for empathy and compassion.

Unit-III Challenges and Responses in Implementation of Life Skills Education

Factors responsible for resistance and non-implementation of life skills education from families, schools and society at large

Strategies to successfully deal with challenges and advocating for need for life skills education
   a. (Successful models of life skills education in India as well as globally)

Unit-IV Importance of Communication in Imparting Life Skills Education

Concept and importance of communication

Effective communication strategies for impactful life skills education programme(effective listening, speaking, building and maintaining relationships, understanding group dynamics and functioning in groups, delegating responsibilities)

Communicating with the audience: receiving feedback, handling questions, etc.
Unit - V Core Approaches and Strategies to Implement Life Skills Programs

Understanding and developing self-skills/potential: self-awareness, self-esteem, self-confidence, creative thinking, interpersonal skills, etc.

Use of participatory techniques and methods: individual exercises, group activities, games etc.

Important aspects of developing skill specific or issue specific modules to be used by teachers and trainers.

Projects

1. Design and development of a life skills module on a select topic.

2. Write a positive case study about a youth awardees/ youth achiever applying positive youth development model OR Design a community development program utilizing a Positive Youth Development Model.

3. Visit to schools or NGOs implementing life skills programmes.

4. Interview counselors, schoolteachers and other professionals working with emerging adults and youth to learn from their experiences about felt needs young people and their experiences of implementing life skills education.

5. Prepare a communication module for adolescents in a low-income context.

Learning Experiences

- Regular lectures, class discussions, debates, exercises on observation and follow up discussion, case studies, films and documentaries

Evaluation

- Presentations and one take home practical assignment.

References


SKILL ENHANCEMENT COURSE
Skills for Working with Children
(Credits: Theory - 0, Practical - 4)

Course Description

The course is designed to provide students with a comprehensive understanding about child development and how the process of development can be enriched by designing developmentally and contextually appropriate programs. It will provide an understanding of the basic principles and skills for working with children. Students will be trained to demonstrate effective approaches for guiding children’s growth and development. The course will enhance students’ skills to employ a variety of teaching-learning approaches, methods and materials.

Learning Objectives

- Learn professional and personal skills for working with children.
- Promote a holistic approach to child development by understanding the value of various activities designed for the children.
- Become aware about the developmentally and culturally appropriate practices for working with children and understand the importance of stimulating environment and role of teacher in promoting learning in young children.
- Learn the alternative use of locally available indigenous material/resources.
- Develop sensitivity to the socio-cultural contexts, including gender, while working with children.
- Learn effective ways to communicate and guide children.

Learning Outcomes

- Apply theories and concepts of child development in working with children.
- Plan developmentally and culturally appropriate programs for children.
- Demonstrate skills to effectively work with children.
- Implement effective methods and techniques to communicate with and guide children.
- Use locally available indigenous materials for developing teaching aids.

UNIT-I Conceptual Understanding of Child Development and
Developmentally Appropriate Practices

The child as a whole person: Highlights of key theories and concepts of child development

Overview of Developmentally Appropriate Practice:

- Definition, meaning, and principles
- Difference between developmentally appropriate vs. inappropriate practices

Interface between theoretical approaches and developmentally appropriate practices with reference to behavioural, psychoanalytical, learning, and ecological perspectives

Need and importance of building appropriate skills as adults and professionals to nurture overall development of a child

UNIT- II Creating Stimulating Environment for Holistic Development and Learning

Principles of child development and learning - NAEYC

Developmentally Appropriate Environments – Physical Environment, Social/Emotional Environment, and Cognitive/Language Environment

Need and importance of Creativity, Music, Drama and Artistic experiences, Language and Literacy, Science, Mathematics and Social Studies for holistic child development.

Role of teacher in enriching children’s learning experiences across developmental domains.

Planning a developmentally and culturally appropriate program – components, strategies, use of material, knowledge of setting – urban, rural, homes, day care centers etc.

Developing various learning material for enhancing development of a child.

UNIT- III Skills for Working with Children and Young People
Confidence, acceptance, risk taking, trust building

Personal Skills: passionate attitude, authentic, creative, energetic, innovative and organized

Professional Skills - Knowledge base, theme teaching and integrated curriculum, respect children, families and the context, collaboration with other adults, time management, etc.

Communication Skills - Effective listening, perspective taking, encompassing observation and communication - Verbal and non-verbal communication
  - Effective ways of communicating - Positive and non-violent communication
  - Helping young children talk about their experiences and express their feelings, promoting participation and eliciting their wishes and views
  - How to deal with questions, conflict and criticism, and communicating in groups

UNIT–IV Building Theoretical Foundations for Guiding Children’s Behavior and Development

Need/scope and goals of guidance in contemporary context

Principles of guidance

Essentials of guidance - The physical environment and schedules, nurturing environment and becoming a nurturing adult

Various approaches in guiding children
  - Importance of positive guidance
  - Affirmations, Negotiations, Setting limits, Modelling, Reinforcement
  - Culturally sensitive guidance

UNIT - V Skills for Guiding and Managing Problem Behavior

Understanding and managing inappropriate and problem behaviors of a child
  - Types and causes of problem behavior
  - Managing problem behavior – a stepwise process
  - Intervention with parents and care providers, referral and support services
Projects

1. Workshop on creative expression on theme of creating “best out of waste” and display in the students’ corner

2. Critically review child’s activities and participation.

3. Develop a detailed activity plan of developmentally appropriate program

4. Preparation of various teaching aids – Art resources, storytelling material, worksheets, Music related resources etc.

5. Sharing of documentaries and videos on Indian folk music and Traditional Indian puppetry

6. Interviews with teachers and parents

7. Design a teaching module for teachers working with young children

Learning Experiences

- Regular lectures, exercises on observation and follow up discussion, case studies, films and documentaries, Module and resource designing

Evaluation

- Class test, presentation, and assignment

References


SKILL ENHANCEMENT COURSE
Techniques of Food Preservation
(Credit: Theory 0 & Practical 4)

Course Description

This course helps us to understand what is possible in the world of food preservation; then understanding the factors that cause food to deteriorate. Once you understand that, you proceed to study the different ways foods can be preserved from chemical treatments, to changing the environmental conditions (temperature, moisture content, etc.) Food preservation is something that should be understood by anyone who handles food; whether for their own use, or on a commercial basis.

Learning Objectives:

- To learn the principles behind the methods of preservation
- To understand the stages of cookery and chemical characteristics in the preservation of fruits and vegetables
- Able to formulate preserved food products
- Acquire skills to preserve different types of food items based on their perishability.

Learning outcomes:

- Know the principles of preservation behind the methods of preservation
- Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved food products
- Acquire skills to formulate food based products
- Explore the principles of preservation in fruits and vegetables based products
- Skills to prepare cereals and pulse based preserved products and develop new products with retention of quality.
Course Content

Unit-I. Concept of Food Preservation

Importance of Food Preservation,
Types of Food spoilage by Micro organisms and by Enzymes
Basic Principles of Food Preservation
Food preservatives- Use of Salt, Acid, Sugar, natural food preservatives and artificial preservatives
Starting a food preserving unit
Product Promotion strategies and marketing skills

Unit-II. Preparation of dehydrated products

Methods of drying &dehydration , different types of driers , freeze drying- lyophilisation , packing & storage

Drying methods for theselected products -Rice, Sago, Wheat, Maida, Rice flakes, black gram dhal, green gram dhal, Horse gram dhal Roots and Tubers
General tips with drying foods
Preparation of salted, dehydrated, preserves (Traditional Indian varieties of chips, Papads, Khakharasetc and Masala Powders, onion, garlic, ginger powder etc )
Hands on experience :Dryingof vegetables- peas, potato, carrot, French beans, Reconstitution ofdried vegetables, Drying & preparation of powders- garlic, ginger, spices mix etc

Unit-III. Preservation by Using Sugar

Role of Pectin in Preserved foods
Stages in Sugar Cookery
Sugar Concentrates – Principles of Gel Formation
Hands on Experience:Preparation of Jam, Jelly, Marmalades, Sauce and Squash Preserves, Candied, Glazed, Crystallized Fruits, Toffee
Evaluation of pH, Acidity and pectin quality
Visit to Fruits and Vegetable processing industry
Unit-IV. Preservation by Using Chemicals and Salts and Fermentation

- Preparation and Preservation of Fruit Juices, RTS
- Pickling – Principles Involved and Types of Pickles
- Chemical Preservatives – Definition, Role of Preservation
- Permitted Preservatives, FSSAI guidelines
- Foods fermented by Yeasts
- Foods fermented by Bacteria
- Common Fermented Foods, Wine and Cheese Making
- Hands on experience: Pickle making
- Visit to Commercial Pickle Manufacturing Food Industry and Wine industry

Unit-V. Preservation by Advanced Preservation Technology

- Meaning and needs of freezing foods
- Types of Freezing and managing freezers
- Guidelines for types of frozen foods-Fruits, Vegetables, fish, meat and poultry
- Smoking foods
- Pasteurization and Sterilization
- Food Irradiation
- Vacuum Packing
- Canning and Bottling

Food Packaging Materials for preserved food products
Hands on experience: Blanching of fruits & Vegetables
Visits to Food Industries

Learning Experiences

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows. Hands on experience in laboratory and in food industries

Evaluation
• Announced and unannounced class tests, seminars and assignments and Record works related to their Practical works.

Reference


SKILL ENHANCEMENT COURSE

Bakery and Quantity Cookery
(Credits: Theory - 0, Practical - 4)

Course Description

The students are imparted practical knowledge of preparing bakery related products; knowledge of the ingredients used and undertakes the costing part of it. Students also gain skills and knowledge in hygiene and faults and remedial measures, major and minor equipments used, setting up of a bakery unit. Maintenance making these programs a lucrative field of study.

Learning Objectives:

Knowledge Based:
- Identify and explain baking terms, ingredients, equipment and tools.
- Employ safe food handling practices using contemporary guidelines.
- Learn menu planning and techniques of food production.
- Competent to calculate the cost of food items.

Skill Based:
- Scale and measure ingredients.
- Prepare yeast dough, quick breads, pies, cookies, cakes, icing, pate choux, and savory baking.
- Produce baked products using commercial ingredients and equipment.
- Develop skills in handling food service equipment.
- Gain skills to plan, prepare and present recipes.

Learning Outcomes:
- Resize recipes to meet production needs and equipment capacities.
- Scale, mix, mold, proof and bake yeast raised goods.
- Prepare cookies using various common dividing and panning techniques.
- Prepare home style crumb topped and two crust pies.
- Prepare product finishes such as washes, glazes, icings, frostings and fillings.
Course Content

Unit-I. An overview of Bakery Industry

Current status and growth rate of bakery industry
Economic importance in India.

Classification of Baked Foods, Product Types, Nutritional Quality and Safety of Products, Storage and Packaging Materials,

Basic baking principles
Ingredients uses- liquid and flours (cereals types and flour quality)
Guidelines to follow the standards & regulations.
Forming the dough.
Mixing and Gluten Development: Blending the ingredients, adding liquid to hydrate flour proteins , developing gluten
Processes that occur during Mixing-Air cell formation, Hydration, Gluten development
Controlling Gluten Development
Methods for Adjusting Gluten Development- Other Ingredients and Additives, Salt, milk
The Baking Process- Melting of fats, leavening, Formation and expansion of gases, Killing of yeast and microorganisms,
Bread formulation: quality of materials like flour, shortening, yeast, chemical leaveners, flour improvers, preparing bread formula on the basis of the role of ingredients
Bread processing: Flying ferment, calculating desired water temperature, mixing/ kneading, bulk fermentation (physical and chemical changes in proofing), knock back, dough make up (Scaling, rounding, intermediate proofing, molding, panning), Proofing and factors affecting proofing, Baking time and temperature, depanning, cooling, slicing
Unit-II. Preparation and Quality evaluation of Bread, Bun, Pastries cakes, Cake Decoration and Modified Bakery Products

Role of ingredients and equipments used
Bread making process –Household Vs. Commercial
Variety of breads, bun, and Pastries
Product quality characteristics of Bread, Bun and pastries
  Sensory evaluation of Bread, Bun and pastries
  Hands on experience: Sensory evaluation of prepared bread & Bun
Cake mixing methods,
Types of cakes-Butter Cake, Sponge Cake and Eggless Cake
Hands on experience: Preparation and evaluation of cakes
Cake judging, Faults and remedies
Different types and techniques of Cake Decoration -icings and fillings.
Hands on experience:Modified baked products - high fiber, low / alternate sugar, low fat, gluten free, and millet based bakery products for special nutritional requirements.

Unit - III Preparation and quality evaluation of Biscuits, Cookies <Macaroons, Muffins, Home Made Chocolates and Pies

Methods, types and techniques, equipments used for the preparation of Biscuits, Cookies macaroons and muffins
Product quality, characteristics, faults and corrective measures of Cookies, biscuits, macaroons and muffins
Hands on experience: Preparation & evaluation of Biscuits/Cookies/Muffins

-Principles of sugar cookery
Processing of Cocoa and Chocolate
Role of ingredients and Processing methods

Equipments Used, Product Development – Quality Characteristics, Sensory Evaluation of Products;

Types – Hard – Boiled Candies, Crystalline and Non-Crystalline Candies, Toffees, Fruit Drops, Chocolates, Chocolate Chips, Fruit Pie, Apple Pie, Fudge, Fondant, Marsh Mellow, Chewing Gum, Jellies and Confectionaries

Hands on experience: Preparation of Homemade chocolates

Unit-IV. Menu planning and Food Facilities

Definition of menu, Menu pattern, importance of menu planning, factors influencing menu planning, Types of menu, framing of menu, writing a menu, menu presentation and display, purchasing procedures, storage techniques.


Unit V Production Planning and Quantity Food production

Equipments at Functional Areas for quantity Cookery – Receiving,

Purchasing, Storage, Preparation, Production, Service, Waste Disposal Areas.

Production forecasting, Production scheduling, Duties and responsibilities of Production staff, standardization of recipes, portion control,

Stepping up of recipes of different cuisines. Product standards,

Table Setting Procedures, effective utilization of leftovers,
Learning Experiences

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons and documentary film shows.

Evaluation

- Announced and unannounced class tests, seminars and assignments and Record works related to their Practical and hands on training in the bakery units.

Reference

- ParvinderS.Bali, Quantity Food Production Operations and Indian Cuisine (2011), published by Oxford University Press.
SKILL ENHANCEMENT COURSE
Computer Aided Interior Designing
(Credits: Theory - 0, Practical - 4)

Course Description

The course disseminate knowledge about the drawing tools in the use of 2 D drawings and the Isometric drawings by using Auto Cad software for designing Interiors. It also introduces the basics and the key elements of 3 D drawings for Interiors. The course also focuses on developing skills to prepare computerized drawings as a professional Interior designer.

Learning Objectives

- Gain knowledge about the fundamental concepts in designing Interiors by using Auto Cad software.
- Learn the use of drawing commands and tools needed in computerized designing.
- Develop skills to use AutoCAD as a 2-Dimensional Drafting Tool and Isometric drawings for Interiors designing.
- Get practically oriented with the 3 D drawing in designing Interior.

Learning Outcomes

- Understand the functioning of the drawing commands and tools in Auto Cad Software for the computerized drawing in designing Interiors.
- Acquire skills in drafting 2 D and Isometric Interior drawings to pursue vocation in the field.
- Become familiar with the 3 D drawings.
- Develop confidence in drafting computerized drawings related to Interior objects, furniture and Interior plans.

Course Content

UNITI: Fundamentals Concepts in Designing Interiors on Computer
Understanding Computers
Introduction to Auto CAD
Auto CAD graphic WINDOW
  i. Using commands
ii. Use of Shortcut Methods in Drawing

a) Short cut keys (F1 to F9)  
b) Short cut drawing commands

UNIT II: SETTING UP A DRAWING

Tools in AutoCAD

- **Drawing Units:** Linear and Angular units: Line, Ray, Construction line, Multiline, Revision Cloud, Polyline, 3D Polyline, Rectangular Arc, Polygon, Circle, Donut, Spline, Ellipse, Point, Region and Wipeout.

- **Edit Toolbar (Modify):** Erase copy, Mirror, Offset, Array, Move, Rotate, Scale, Starch, Lengthen, Trim, Extend, Break, Join, Chamfer, Fillet and Explode.

- **Drawing Size:** The Grid, drawing Limits, drawing with Grid and Snap.

- **Layers:** Setting up a new layer, assigning a colour to a layer, making a layer current, making layers visible or invisible, line types, loading a line type, line types by layer and object, moving object to different layers.

- **Blocks:** Meaning, Blocks and Layers, making of a Block, inserting a Block, using Block in drawing.

- **Hatching:** a) Opening of a boundary hatch and fill dialogue box: selecting a hatch pattern, hatch pattern palette, hatching and drawing, modify the hatch pattern, final application of hatch. 
  b) Use of advanced command: selecting the advanced option, application of the advanced option 
  c) Use of Gradient: Choosing single color option and double color option, application of the selected option.

- **Text:** Using Single and Multi line Text and Editing Text

- **Dimension:** Styles, Tool bars, Linear, Aligned, Radius and diameter, Continue, Baseline, Angular dimensioning and Editing dimensioning.

UNIT III: Isometric Drawings

Setting Up the Isometric mode
An Isometric Plan
Drawing an Iso-Circle Isometric Drawing
Text on Isometric Drawing

UNIT IV: Designing using AutoCAD
Furniture
Interior related objects
Floorplan/Layouts and Elevations

UNIT V: 3-D Drawing in AutoCAD
Introduction to 3-D Drawings in AutoCAD
Creating 3-D Drawings:
3-D Surfaces
Rendering

Learning Experiences

- By way of Demonstrations, Workshop, Expert Lectures, Practical guidance, Power point presentations, Videos.

Evaluation

- Weekly and Monthly regular Practical class test, record submission, assignments, project work, daily practical work

References

SKILL ENHANCEMENT COURSE
Art of Enterprising
(Credits: Theory 0 & Practical 4)

Course Description
The Course lays a platform for students to get to know the commercial activities happening around them and their impacts on consumer behavior. It offers prospects for gaining knowledge on how they can contribute to the field of commercial art and enterprising provisions.

Learning Objectives
- Understand the concepts of commercial art and enterprises
- Drafting plans for commercial and corporate spaces
- Learn rudiments of visual merchandising
- Appreciate role of function and aesthetics in arranging commercial spaces

Learning Outcomes
- Comprehension on the differences between merchandise display and window display
- Internalize art of selling and gain stimulus to start enterprises in Commercial art and display
- Learn interior / exterior display techniques and
- Practical exposure to non-store merchandising methods

Course Content

Unit I Art of Selling and Retailing

Introduction to selling and retailing
Art of selling methods- displays, products and marketing
Types of store Layouts- Grid layout, Forced-path layout, Free-form layout, Boutique layout, Combined layout, Store layout-- general arrangement, principles and factors
Design of display units – visits to furniture designers
Design of boutiques and showrooms – field visits
Reports and feedback on visits
Drafting plans for different store layouts
Unit II Visual Merchandising

Meaning and definition, significance of display
Initiation to store exterior concepts - store signs, facade; banners planters and awnings, elements of display
Introduction to store interiors - windows, highpoints, focal points, nesting tables, staircase landings, step raisers, lift area, pennants/danglers, cash counters, space on hire like pillars and entrances
Exposure to Product display - Exhibition spaces – display for exhibition; Lighting design for commercial spaces task/display/atmospheric/focal lighting
Model making workshops –making store interior and exterior display materials

Unit III Window Display

Meaning and definition, concept and objectives
Display techniques - windows, highpoints, focal points, nesting tables, staircase landings, step raisers, lift area, pennants/danglers, cash counters
Awareness on spaces on hire like pillars and entrances
Purpose and importance of display, Rules of display planning
Area arrangement on display of art objects, exhibitions and window display of consumer goods
Model making on display tools

Unit IV Merchandise display

Comprehension on types of merchandise
Merchandise display - exterior and interior, Merchandise presentation strategies,
Exposure to Seasonal displays and other techniques of merchandise placement in commercial enterprises
Useful display fixtures - Shelves, Gondolas, Round racks, Four ways, Saccades and fixation, Replenishes, Plan, Programming - Introduction and hands-on experience in creating display fixtures
Unit V Non-store Merchandising

Introduction, objectives
Non-store retail merchandising methods
- Television retailing/home shopping
- Internet retailing/online shopping
- Catalogue management
- Product presentation in Non-store retail merchandising

Field visits to understand rudiments of sales promotion techniques
Graphic representations and Photography Exercises on creating Posters, Pamphlets, Booklets, catalogue, Portfolio, Montages
Exercises involving Logo design, collage, calligraphy and printing

Learning Experiences
- Flipped classroom, ICT enabled teaching learning, field visits, industrial visits, visits to Exhibitions, museums, art galleries, malls and Showrooms, Invited lectures, demonstrations, workshops and hands-on experiences, internship and training

Evaluation
- Class tests and assignments, submission of reports of visits, records, Albums, case studies, models, Area arrangements, mock displays, role play, preparing posters, pamphlets for Advertisements, mini project, montages

References


• Routledge, (Taylor and Francis Group)


SKILL ENHANCEMENT COURSE
ENTREPRENEURSHIP MANAGEMENT
(CREDITS: THEORY- 0, PRACTICAL-4)

Course Description

Entrepreneurs are innovators who help improve technology, products and society. For the economic growth of any country, the contribution of manufacturing and service sector play an important role. The purpose of exposing students to entrepreneurship is to motivate them to look at entrepreneurship as a viable and preferred career and emerge as job givers.

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

Course Content

Unit-I. Concept of Entrepreneurship

Conceptual - meaning, definition and scope of entrepreneurship
Entrepreneur- meaning, qualities, functions and types of entrepreneur
Enterprise – Definition, nature and classification
Forms of Organization – Sole proprietorship, partnership, Joint Stock Company
Role of entrepreneur in economic development
Visit to enterprises to observe the qualities of entrepreneurs
Unit-II. Establishing a Small Scale Enterprise

- Concept and Classification – Product identification and product selection
- Infrastructure – Plant Location, Land, building, water and power
- 6MS – Man power, method, machine, material, marketing, mother nature
- Preparation of case studies of successful entrepreneur

Unit-III. Institutional Support

Commercial Bank
Central level
- SSIB – Small scale Industries Board
- NSIC – National Small Industries Corporation
- SIDO – Small Industries Development Organization
- KVIC – Khadi and Village Industries Commission
- NIESBUD – National Institute for Entrepreneurship and Small Business Development
- NABARD – National Bank for Agricultural and Rural Development
State Level
- DIC – District Industrial Center
- SFC – State Finance Corporations
- SSIDC – State Industrial Development Corporation
- SIDBI – Small Scale Industrial Development of India
- SISI – Small Industries Service Institutes
- ICICI – Industrial Credit Investment Corporation of India

Visit to financial and supportive Institution to understand or observe their action modalities
Lectures on the rules and regulation for financial support to entrepreneurs

Unit-IV. Project Formulation

Meaning and definition of project
Project formulation techniques – Quantifiable and Non quantifiable projects, Sectoral project, Techno economic project
Project report and preparation of project report
Project appraisal – market feasibility, technical feasibility, financial and economic feasibility

Carryout market survey

**Unit-V. Accounting for Small Enterprises**

Meaning, need and objectives of accounting

Process of Accounting, Book Keeping, Journal, Ledger and Balance Sheet, Final Accounts

Auditing – nature and types

Preparation of model project, proposal and report

**Learning Experiences**

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

**Evaluation**

- Class tests, assignments, records and reports

**References**


SKILL ENHANCEMENT COURSE
TRAINING AND PROFESSIONAL DEVELOPMENT
(CREDITS: THEORY-0, PRACTICAL -4)

Course Description

In the course of training and Programme Development, training is the process of teaching, informing, or educating people are well explained.

Learning Objectives

- Gain knowledge on training and professional development
- Apply the training skills for professional development
- Organize the training programme for professional development at community level
- Learn the various training approach for effective professional development

Learning Outcomes

- Gain basic knowledge on types and techniques of training for professional development
- Develop the skill on designing a training programme
- Conduct on campus or off campus training programme
- Use techniques like team building, group discussion and brainstorming for professional development

Course Content

Unit-I. Learning Theories

Basic concepts of learning theories
Principles of learning, learning patterns, characteristics of learning process
Theories of learning- Behaviorism, Cognitivism, social learning theory, social constructivism, multiple intelligences, brain-based learning
Purpose of learning theories in training and professional development
Advantages and limitations
Interaction with trainees and training officials and find out the method and apply the same for professionals
Unit-II. Training Approach

Basic concept of training approach
Purpose of training approach
Types of training approach
Steps involved in training approach
Advantages and limitations
Preparation of training content and procedures (methods and materials)

Unit-III. Types of Training

Meaning of training for professional development
Purpose of training for professional development
Pre-service training
In service training and staff development
Evaluation and assessment of training
Detect and predict defects in the procedural design of a training activities

Unit-IV. Phases of Training

Planning Phase – Setting the goals and objectives of an organization, analyzing the human resources, efficiency indices and organizational climate
Implementation Phase – publicity, develop training brochures, annual calendar of learning opportunities, time about their teaching plans
Evaluation Phase - reaction, behavior and result
Types of Evaluation – evaluation for planning, process of evaluation, terminal evaluation and impact evaluation
Key elements of the training activities are systematically monitored, problems are to be identified and attempts are to be made to rectify

Unit-V. Designing training programme

Gain attention
Inform learner and objectives
Stimulate recall of prior learning
Present stimulus material
Provide learner guidance
Elicit performance
Provide feedback
Assess performance
Enhance retention transfer
Interact with trainers and learn the practical requirements

Learning Experience

- Lectures, Discussion, Field Visit, ICT Enabled Teaching, Project Work

Evaluation

- Class tests, assignments, conduct of training programme, records and reports

References

- Dahama, O.P. (1979). Extension and rural welfare New Delhi: Ram Parsad and Sons
9. KEYWORDS


Resource, Management, Hospitality, Interior design, Ergonomics, Work simplification, Fatigue, Decision making, Sedentary, Life space, Proxemics, Hydroponics, Sustainable Development Goals, Pollution, Building Automation, Budget, Drudgery

Communication, Extension teaching, Extension Communication, Development communication, Traditional media, Programme planning, Plan, Planned change, Programme development cycle, Entrepreneurship, Entrepreneur, Small scale enterprise, Institutional support, Professional development, Volunteerism, Nonprofit, Participatory Rural Appraisal, Community development

Food Groups, Food Pyramid, Cooking Methods, Macronutrients, Micronutrients, Recommended Dietary Allowances (RDA), Recommended Daily Intake (RDI), Total Energy Requirement (TER), Basal Metabolic Rate (BMR), Moist heat methods, Dry heat methods, Combined (Moist and dry) Methods, Germination, Fermentation, Gelatinization, Dextrinization, Gluten formation, Immunity booster, Hypoglycemic and hypolipidemic properties, Fat Soluble Vitamins, Water Soluble Vitamins. Therapeutic diets, Diet counseling, Etiology, Pathophysiology, Food service, Dietetics, Quantity cookery, Medical nutrition therapy, Tools of management, Quantity evaluation

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