



NEP PG
1-YEAR CURRICULUM
M.A. HOME SCIENCE PROGRAMME
SUBJECT CODE = HSC

FOR POSTGRADUATE COURSES UNDER RANCHI UNIVERSITY, RANCHI



Implemented w.e.f.
Academic Session 2026-27 Onwards



DEPARTMENT OF HOME SCIENCE

Ranchi University, Ranchi - 834 008 (Jharkhand)

Ref. No. : R.U.P.G.H/SC-74

Date : 14-6-2025

Members of Board of Studies of NEP Curriculum in Home Science for Two-Year Postgraduate Programme

To be implemented from 2025-26

14.06.2025

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Approval by the Members of the NEP Implementation and Monitoring Committee of Ranchi University, Ranchi

The prepared Curriculum of the Master's Degree has been approved by the NEP Implementation and Monitoring Committee of R.U., duly forwarded by the Head of the Department; it will be offered to the Students of the 1-year and 2-year Postgraduate Programme. It is implemented from the 1st Semester of the Academic Session 2025-26 and onwards.

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HIGHLIGHTS OF NEP PG CURRICULUM

CREDIT OF COURSES

The term 'credit' refers to the weightage given to a course, usually in terms of the number of instructional hours per week assigned to it. The workload relating to a course is measured in terms of credit hours. It determines the number of hours of instruction required per week over a semester (minimum 15 weeks).

- a) One hour of teaching/ Lectures or two hours of laboratory /practical work will be assigned per class/interaction.
- | | |
|----------------------------------|---|
| One credit for Theory | = <u>15 Hours of Teaching</u> |
| One credit for Practicum | = <u>30 Hours of Practical work</u> |
| One credit for Internship | = <u>02 Weeks of Practical experience</u> |

- b) For credit determination, instruction is divided into three major components:

Hours (L) – Classroom Hours of one hour duration.

Tutorials (T) – Special, elaborate instructions on specific topics of one hour duration

Practical (P) – Laboratory or field exercises in which the student has to do experiments or other practical work of a two-hour duration.

Internship – For the Exit option after 1st year of the 2-year P.G. Programme for the award of P.G. Diploma, Level 6.5, Students can either complete two 4-week internships worth 2 credits each or one 8-week internship for all 4 credits. This practical experience connects academic learning with real-world applications, offering valuable exposure to professional environments in their fields of study

PG CURRICULUM

- The PG Curriculum will be either of 1-year duration for students who studied the four-year UG Programme (FYUGP) or a 2-year duration for students who studied a three-year UG programme from a CBCS/LOCF/FYUGP Curriculum.
- There is a flexible mode in the PG programme offered to the students of Ranchi University, Ranchi. The total credit for any semester will be 20 credits.
- One-year PG curriculum:** The Courses in the 1-year PG programme and the second year of the 2-year PG programme are the same.
 - Course work only:** There will be 5 courses at level 500 of 4 credits each in every semester for the coursework offered in the programme.
 - Course work and Research:** There will be 5 courses at the level 500 bearing 4 credits each in the first semester of a 1-year PG or in the third semester of a 2-year PG. Research work will be offered in the next semester for this mode of the programme. The eligibility for this mode is available in the NEP PG curriculum of Ranchi University, Ranchi.
 - Research work only:** The eligible student will be offered this mode to conduct extensive research under the supervision of a guide. Each semester will be equivalent to 20 credits. The selection of a candidate for the research mode will depend upon the eligibility of the student, availability of the guide and seat in the department/institution of Ranchi University, Ranchi.

PROMOTION CRITERIA

One Year Post-graduation programme having coursework only:

- Each course shall be of **100 marks**, having two components: **30 marks for Sessional Internal Assessment (SIA), conducted by the Department/College and 70 marks shall be assigned to the End Semester University Examination (ESUE), conducted by the University.**
- The marks of SIA shall further break into 20 for Internal Written Examinations, 05 for Written Assignment/ Seminar presentation and 05 for overall performance of a student, including regularity in the classroom lectures and other activities of the Department/College.
- The Requisite Marks obtained by a student in a particular subject will be the criterion for promotion to the next Semester.

- iv. There shall be two written internal examinations, each of 1 hour duration and each of 20 marks, in a semester, out of which the '**better of the two**' shall be taken for computation of marks under SIA.
- v. If a student failed to secure pass marks in the Mid Semester Examination, he/she has to reappear in Mid & End Semester Examinations, of the following year.
- vi. In case a student fails to secure pass marks in End Semester Examination, then he/she has to appear only in the End Semester Examination of the following session within the period of Upper Limit of Two Years and the Marks of the Mid Semester will be carried for the preparation of the result.
- vii. Students' final marks and the result will be based on the marks obtained in the Mid Semester and End Semester Examination taken together.
- viii. The pass marks in the programme will be 45% of the total marks obtained in each Core/ Elective/ Other Courses offered.
- ix. In absolute terms of marks obtained in a course, **a minimum of 28 marks is essential in the ESUE and a minimum of 17 marks is to be secured in the SIA** to clear the course. In other words, a student shall have to pass separately in the ESUE and in the SIA by securing the minimum marks prescribed here.
- x. Every candidate seeking to appear in the ESUE shall be issued an Admit Card by the University. **No candidate will be permitted to appear in the examination without a valid admit card.**
- xi. A candidate shall be permitted to proceed in the next Semester (2nd), **provided he/she has passed at least 3 courses out of 5 courses** in the respective semester in theory and practical/ project courses taken together.
- xii. A student will have to clear all his/her papers within a maximum of Two Years of duration to qualify for the degree.

However, it will be necessary to procure pass marks in each of the papers before completion of the programme.

VALUE-ADDED COURSES

1. The Value-added course will be of **2 credits** to be covered during the first semester.
2. The End Semester University Examination (ESUE) of this course will comprise 50 objective-type questions of 1 mark each.
3. ESUE shall be OMR-based and the correct option is to be marked by a black ballpoint pen.
4. For the **50 Marks Examination**, the student will be provided **two hours** to mark their responses.
5. Students are not allowed to choose or repeat courses already undergone at the undergraduate level in the proposed major and minor streams.
6. The performance in this course will not influence the SGPA or CGPA of the PG Programme wherein the student is registered to obtain the Master's Degree. However, it will be mandatory to secure minimum pass marks in the course before exiting the Programme.
7. If a student fails to secure the minimum pass marks in this course in the first semester, he/she must reappear in the examination of the said course with the following batch of the next session.
8. The student may appear in the examination of the said course further if they could not clear the course in the following attempt, subject to the date of validation of the Registration.

The existing Regulations of the PG Curriculum of Ranchi University, Ranchi, shall guide the Regulations related to any concern not mentioned here.

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COURSE STRUCTURE FOR 'PG COURSEWORK/ COURSEWORK WITH RESEARCH/ RESEARCH ONLY'

Table 1: Credit Framework for One Year Postgraduate Programme [Total Credits = 40]

| Academic Level | Level of Courses | Semester | Coursework Level 400 | Coursework Level 500 | Research Preparedness | Research thesis/ Project/ Patent | Total Credits |
|----------------|--------------------------|----------|-------------------------|-------------------------|--------------------------|---|--------------------|
| YEAR 1 | | | | | | | |
| Level 6.5 | Coursework | III | --- | 4+4+4+4+4 | --- | --- | 20 |
| | | IV | --- | 4+4+4+4+4 | --- | --- | 20 |
| OR | | | | | | | |
| Level 6.5 | Coursework + Research | III | --- | 4+4+4+4+4 | --- | --- | 20 |
| | | IV | --- | --- | 20 | --- | 20 |
| OR | | | | | | | |
| Level 6.5 | Research | III | --- | --- | 20 | --- | 20 |
| | | IV | --- | --- | --- | 20 | 20 |
| | | | | | | | Total credits = 40 |

Note:

1. Every student has to take any one Value-added course of 2-credits compulsorily in the 1st Semester of PG programme.
2. There is no provision of 'Exit' in the 1-Year PG Programme.

AIMS OF MASTER'S DEGREE PROGRAMME IN HOME SCIENCE

The aim of Master's degree programme in Home Science is intended to provide:

The Master's degree in Home Science aims to empower students with advanced, interdisciplinary knowledge and practical skills, integrating science, arts, and technology to enhance the quality of life for individuals, families, and communities. As per NEP 2020 the program focuses on research, entrepreneurship, professional competence, and sustainable community development. Broad Aims and Objectives of the Master's in Home Science Programme are to provide

Advanced Disciplinary Knowledge & Specialization: To provide in-depth knowledge in specialized areas such as Food and Nutrition, Human Development, Resource Management, Textiles and Apparel Design, and Extension Education.

Research Innovation & Analytical Skills: To develop capacity for conducting independent research, analyzing data, and applying scientific methodologies to solve real-world problems, culminating in a thesis or dissertation.

Entrepreneurship & Employability: To foster an entrepreneurial mindset by providing skills needed for innovation, incubation, and professional practice in areas like food processing, interior design, and garment manufacturing.

Community Development & Social Empowerment: To train professionals to implement community projects related to health, livelihood, gender mainstreaming, and sustainable development goals (SDGs).

Holistic Value-Based Education: To align with NEP 2020 by focusing on student-centric, outcome-based education that promotes critical thinking, ethical reasoning, and social responsibility.

Digital Integration and ICT: Enhancing digital literacy for application in research, data analysis, and professional communication.

Interdisciplinary Approach: Blending scientific principles with human sciences.

Lifelong Learning: Fostering the ability for continuous professional growth.

Community Engagement: Bridging academic knowledge with societal

Global Citizenship: Sensitizing learners to global standards while addressing local and national needs, aiming for improved quality of life. The programme aims that students are capable of:

Professional Competence: Applying knowledge in diverse settings—family, community, and workplaces.

The curriculum covers the following domains aimed at addressing modern life challenges:

1. Nutrition and Dietetics: Improving community health through nutrition and food technology.
2. Human Development: Understanding child development, counseling, and family dynamics.
3. Family Resource Management: Efficient management of resources, consumerism, and interior design.
4. Textiles and Apparel Design: Technical understanding of clothing, textile science, and fashion.
5. Extension and Communication: Developing skills for community outreach, NGO work, entrepreneurship and social change

PROGRAMME LEARNING OUTCOMES

The broad aims of Master's degree programme in Home Science are:

The learning outcomes of a Master's degree programme in Home Science are intended to provide students with advanced specialized knowledge, research competence, and practical, application-based skills to improve the quality of life for individuals, families, and communities. The programme aims to transform traditional domestic skills into scientific, professional, and entrepreneurial competencies across areas like nutrition, human development, textiles and apparel and resource management. Key intended learning outcomes include:

1. Advanced Specialized Knowledge

Deep Disciplinary Expertise: Mastery in specific areas such as Foods and Nutrition, Clothing and Textiles, Human Development, Family Resource Management, or Extension and Communication.

Interdisciplinary Understanding: Ability to integrate scientific, social, and technological aspects to solve problems related to home, family, and community management.

2. Research and Analytical Skills

Independent Research Capability: Designing, planning, and conducting research (dissertation/thesis), including data analysis in specialized home science fields.

Critical Thinking and Problem-Solving: Applying scientific principles to analyze and solve complex issues regarding nutrition, textiles, and family resources.

3. Professional and Entrepreneurial Skills

Employability: Equipping students with the skills required to take up professional roles in industries, NGOs, hospitals, or educational institutions.

Entrepreneurship: Fostering the ability to start independent ventures in areas like food service, textile and apparel, fashion design, or interior decoration.

4. Community Development and Extension Work

Empowerment of Vulnerable Groups: Developing strategies for empowering communities through education, health programs, and social awareness.

Project Planning and Implementation: Developing skills to plan, design, and manage community extension programmes aimed at sustainable livelihoods.

5. Practical and Personal Development

Application-Oriented Skills: Enhancing technical knowledge in areas like dietetics, fabric testing, and interior landscape design.

Soft Skills: Developing communication, leadership, and team management skills essential for working in professional environments.

In summary, the program provides transformative education that prepares individuals to serve organizations as researchers, educators, counsellors, social workers, and consultants

The Courses in 1 Year P.G. Programme and in the Second year of 2 years P.G. Programme are Common.

Table 2: Semester-wise Course Code and Credit Points

| Sem | Core, AE/ GE/ DC/ EC & Compulsory FC Courses | | | | Examination Structure | | |
|-----|--|------------|--------|--|--------------------------------|--------------------------------|-------------------------------------|
| | Paper | Paper Code | Credit | Name of Paper | Mid Semester Evaluation (F.M.) | End Semester Evaluation (F.M.) | End Semester Practical/ Viva (F.M.) |
| I | Skill Enhancement Course | ECHSC311 | 4 | A. Institutional Management/ B. Techniques of Food Preservation | 30 | 70 | ---- |
| | Core Course | CCHSC312 | 4 | IKS: Ayurveda Health and Nutrition | 30 | 70 | ---- |
| | Core Course | CCHSC313 | 4 | A. Food Safety, Sanitation and Hygiene OR B. Interpersonal Relationship and Family Dynamics OR C. Textile Design and Illustration | 30 | 70 | ---- |
| | Core Course | CCHSC314 | 4 | Principle of Interior Design | 30 | 70 | ---- |
| | Practicals on Core | CPHSC315 | 4 | Practical | ---- | ---- | 100 |
| III | Elective | ECHSC411 | 4 | A. Nutritional Biochemistry & Microbiology and Genetics/ B. Gender, Society and Human Development/ C. Dyeing, Printing and Finishing of Textiles | 30 | 70 | ---- |
| | Elective | ECHSC412 | 4 | A. Advanced Physiology/ B. Parenting in Early Childhood/ C. Pattern Making and Draping | 30 | 70 | ---- |
| | Core Course | CCHSC413 | 4 | Entrepreneurship Development and Enterprise Management | 30 | 70 | ---- |
| | Practicals on Elective | EPHSC414 | 4 | A. H.Sc. Practical A/ B. H.Sc. Practical B/ C. H.Sc. Practical C | ---- | ---- | 100 |
| | PROJECT | PRHSC415 | 4 | Dissertation/ Project/ Teaching Aptitude | ---- | ---- | 100 |

Note:

1. Every student has to take any one Value-added course of 2-credits compulsorily in the 1st Semester of PG programme.
2. There is no provision of 'Exit' in the 1-Year PG Programme.

INSTRUCTION TO QUESTION SETTER

SEMESTER INTERNAL EXAMINATION (SIE):

There **Marks Weightage of a Course:** Each non-practical/non-project course shall be of **100 marks** having two components: **70 marks shall be assigned to the End Semester University Examination (ESUE), conducted by the University, and, 30 marks for Sessional Internal Assessment (SIA), conducted by the Department/College.**

The marks of SIA shall further break into, 20 for Internal Written Examinations, 05 for Written Assignment/ Seminar presentation and 05 for overall performance of a student including regularity in the class room lectures and other activities of the Department/College. There shall be two written internal examinations, each of 1-hour duration and each of 20 marks, in a semester out of which '**Better of the Two**' shall be taken for computation of marks under SIA.

In absolute terms of marks obtained in a course, **a minimum of 28 marks is essential in the ESUE and a minimum of 17 marks is to be secured in the SIA to clear the course.** In other words, a student shall have to pass separately in the ESUE and in the SIA by securing the minimum marks prescribed here.

A. (SIE 20+5=25 marks):

There will be a uniform pattern of questions for mid semester examinations in all the courses and of all the programmes. There will be **two** groups of questions in 20 marks written examinations. **Group A is compulsory** and will contain five **very short answer type** questions consisting of 1 mark each. **Group B will contain descriptive type five** questions of five marks each, out of which any three are to be answered. Department may conduct Sessional Internal Examinations in other format as per need of the course.

The Semester Internal Examination shall have two components. (a) One Semester Internal Assessment Test (SIA) of 20 Marks, (b) Class Attendance Score (CAS) of 5 marks.

Conversion of Attendance into score may be as follows:

Attendance Upto 45%, 1mark; 45<Attd.<55, 2 marks; 55<Attd.<65, 3 marks; 65<Attd.<75, 4 marks; 75<Attd, 5 marks.

END SEMESTER UNIVERSITY EXAMINATION (ESUE):**A. (ESUE 70 marks):**

There will be a uniform pattern of questions for all the courses and of all the programmes. There will be **two** groups of questions. **Group A is compulsory** and will contain two questions. **Question No.1 will be very short answer type** questions consisting of five questions of 1 mark each. **Question No.2 will be short answer type** questions of 5 marks. **Group B will contain six descriptive type** questions of 15 marks each, out of which any four questions are to be answered. The questions will be so framed that examinee could answer them within the stipulated time.

[**Note:** There may be subdivisions in each question asked in Theory Examinations]

B. (ESUE 100 marks):

Practical/ Project courses would also be of 100 marks but there **shall be no internal written examinations** of the type specified above. The total 100 marks will have two components: **70 marks for the practical ESUE and 20 marks for the Viva-voce examination** conducted during the ESUE to assess the applied and practical understanding of the student.

The written component of the project (**Project Report**) shall be of **70 marks and 20 marks will be for the Viva-voce examination** jointly conducted by an external examiner, appointed by the University, and the internal supervisor/guide.

10 marks will be assigned on cumulative assessment of examinee during the semester and will be awarded by the department/faculty concerned.

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FORMAT OF QUESTION PAPER FOR MID/ END SEMESTER EXAMINATIONS

Question format for **20 Marks**:

| F.M. =20 | Subject/ Code Time=1Hr. | Exam Year |
|--|--|------------------|
| General Instructions: | | |
| i. Group A carries very short answer type compulsory questions. ii. Answer 1 out of 2 subjective/ descriptive questions given in Group B . iii. Answer in your own words as far as practicable. iv. Answer all sub parts of a question at one place. v. Numbers in right indicate full marks of the question. | | |
| <u>Group A</u> | | |
| 1. | | [5x1=5] |
| i. | | |
| ii. | | |
| iii. | | |
| iv. | | |
| v. | | |
| 2. | | [5] |
| <u>Group B</u> | | |
| 3. | | [10] |
| 4. | | [10] |
| Note: There may be subdivisions in each question asked in Theory Examination. | | |

Question format for **70 Marks**:

| F.M. =70 | Subject/ Code Time=3HrS. | Exam Year |
|--|---|------------------|
| General Instructions: | | |
| i. Group A carries very short answer type compulsory questions. ii. Answer 4 out of 6 subjective/ descriptive questions given in Group B . iii. Answer in your own words as far as practicable. iv. Answer all sub parts of a question at one place. v. Numbers in right indicate full marks of the question. | | |
| <u>Group A</u> | | |
| 1. | | [5x1=5] |
| i. | | |
| ii. | | |
| iii. | | |
| iv. | | |
| v. | | |
| 2. | | [5] |
| <u>Group B</u> | | |
| 3. | | [15] |
| 4. | | [15] |
| 5. | | [15] |
| 6. | | [15] |
| 7. | | [15] |
| 8. | | [15] |
| Note: There may be subdivisions in each question asked in Theory Examination. | | |

SEMESTER I

I. CORE COURSE

[CCHSC311]

IKS: AYURVEDA HEALTH AND NUTRITION

| | |
|--|--------------------------------------|
| Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100 | Pass Marks: (MSE: 17 + ESE: 28) = 45 |
|--|--------------------------------------|

(Credits: Theory-04, 60 Hours)**Course Description:**

This course integrates the principles of Ayurveda with modern concepts of health and nutrition. It focuses on holistic well-being through diet, lifestyle, and preventive care. The course explores Ayurvedic concepts such as doshas, prakriti, and dietary principles, along with their application in health promotion, disease prevention, and therapeutic nutrition in contemporary contexts.

Course Objectives:

The course aims to:

1. Develop understanding of fundamental principles of Ayurveda in relation to health and nutrition.
2. Familiarize students with Ayurvedic concepts of body constitution, diet, and lifestyle.
3. Integrate traditional knowledge with modern nutritional science.
4. Promote preventive and therapeutic approaches to health through diet and lifestyle.
5. Enhance awareness of holistic and sustainable health practices.

Learning Outcomes :

After completing the course, students will be able to:

1. Explain basic concepts of Ayurveda and their relevance to health and nutrition.
2. Analyze individual constitution (prakriti) and its dietary implications.
3. Apply Ayurvedic dietary principles in planning balanced and therapeutic diets.
4. Evaluate the role of lifestyle practices in maintaining health and preventing diseases.
5. Integrate traditional and modern approaches for holistic health care.
6. Demonstrate critical thinking in the application of Ayurvedic nutrition in contemporary settings.

Course Content**Unit I: Fundamentals of Ayurveda****(12 Lectures)**

Introduction to Ayurveda: history, philosophy, and scope, Concepts of Panchamahabhuta (five elements)
Tridosha theory: Vata, Pitta, Kapha. Prakriti (body constitution) and its types
Concept of health and disease in Ayurveda

Unit II: Ayurvedic Nutrition Principles**(12 Lectures)**

Concept of Ahara (diet) in Ayurveda. Classification of foods: Satvik, Rajsik, Tamsik
Six tastes (Shad Rasa) and their importance. Agni (digestive fire) and metabolism
Dietary guidelines and eating practices

Unit III: Diet and Lifestyle in Health Promotion**(12 Lectures)**

Dinacharya (daily regimen) and Ritucharya (seasonal regimen)
Role of yoga, exercise, and mental health. Preventive health care in Ayurveda
Lifestyle disorders and their management through diet
Immunity (Ojas) and its enhancement

Unit IV: Therapeutic Nutrition in Ayurveda**(12 Lectures)**

Ayurvedic diet in common disorders (obesity, diabetes, digestive disorders)
Use of herbs and spices in nutrition. Detoxification and Panchakarma (basic concepts)
Functional foods and nutraceuticals in Ayurveda
Integration with modern therapeutic nutrition

Unit V: Contemporary Relevance and Applications**(12 Lectures)**

Ayurveda and public health. Sustainable diet and environmental perspectives
Role of Ayurveda in women and child health
Government initiatives and policies related to Ayurveda (AYUSH)
Research trends and evidence-based approaches in Ayurvedic nutrition

Recommendation Readings

1. Chunekar KC (ed.), Bhavaprakasa Nighantu of Bhavamisra, Chaukhambha Bharati Academy, Varanasi, 2004
 2. Bhaishajya Kalpana Vijnanam by K Ramachandra Reddy
 3. Sastry JLN, Dravyaguna Vijnana, Vol-I, Chaukhambha Orientalia, Varanasi, 2005.
 4. Sastry JLN, Dravyaguna Vijnana, Vol-II, Chaukhambha Orientalia, Varanasi, 2005.
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 6. Sharma PV. History of medicine in India, Chowkhamba Orientalia Varanasi.
 7. Murthy SRK, Astanga Hridayam, Chowkhambakrishnadas academy, Varanasi; 2018.
 8. Vaidyakiya Subhashitam by Bhaskara Govinda Ghanekar
 9. History of Indian Medical Literature by Meulenbeld
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II. SKILL ENHANCEMENT COURSE - A INSTITUTIONAL MANAGEMENT

[ECHSC312A]

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)

Course Description

This course provides advanced knowledge of institutional management with special reference to Home Science-related institutions such as hospitals, hostels, schools, anganwadis, and community welfare organizations. It focuses on planning, organizing, staffing, and controlling institutional operations, along with resource management, leadership, and quality assurance.

Course Objectives:

The course aims to:

1. Develop understanding of institutional management principles in Home Science settings.
2. Equip students with skills in planning, organizing, and managing institutional resources.
3. Enhance knowledge of human resource management and leadership in service institutions.
4. Familiarize students with financial management, record keeping, and administrative procedures.
5. Promote awareness of quality assurance, governance, and welfare services.

Learning Outcomes:

After completing the course, students will be able to:

1. Explain concepts and functions of institutional management in Home Science contexts.
2. Apply managerial skills in planning and organizing institutional activities.
3. Analyze human resource practices and leadership roles in institutions.
4. Manage financial, material, and infrastructural resources efficiently.
5. Evaluate institutional performance using quality and governance frameworks.

Course Content**Unit I: Introduction to Institutional Management**

(12 Lectures)

Concept, meaning, and scope of institutional management
Types of institutions in Home Science: hospitals, hostels, schools, ICDS/Anganwadi, NGOs
Principles and functions of management, Organizational structure and administration
Role and responsibilities of institutional managers

Unit II: Planning and Organization of Institutions

(12 Lectures)

Institutional planning: short-term and long-term planning
Layout, space planning, and infrastructure management
Work simplification and time management
Record keeping and documentation, Use of ICT in institutional management

Unit III: Human Resource Management

(12 Lectures)

Recruitment, selection, and training of staff
Job analysis and job description, Supervision, motivation, and leadership
Communication and interpersonal relations. Gender sensitivity and inclusiveness in institutions

Unit IV: Financial and Material Management

(12 Lectures)

Budgeting and financial planning. Cost control and resource optimization
Purchase, storage, and inventory management. Maintenance of equipment and facilities
Entrepreneurship and income-generating activities

Unit V: Quality Assurance, Welfare Services, and Governance

(12 Lectures)

Quality control and standards in institutions
Monitoring and evaluation. Institutional policies and governance
Welfare services: nutrition, health, child care, and community services
Role of government and NGOs in institutional development
Sustainability and best practices

Recommended Readings

1. Varghese, M. A., Ogale, N. N., & Srinivasan, K. (2005). *Home management*. New Age International Publishers.
2. Nickell, P., Dorsey, J. M., & Buddemeier, S. (2016). *Management in family living* (4th ed.). CBS Publishers & Distributors.
3. Koontz, H., & Weihrich, H. (2015). *Principles of management: A global perspective* (14th ed.). McGraw-Hill Education.
4. Robbins, S. P., & Judge, T. A. (2017). *Organizational behavior* (17th ed.). Pearson Education.
5. Aswathappa, K. (2017). *Human resource management: Text and cases* (8th ed.). McGraw-Hill Education.
6. Pandey, I. M. (2015). *Financial management* (11th ed.). Vikas Publishing House.
7. Park, K. (2021). *Park's textbook of preventive and social medicine* (26th ed.). Banarsidas Bhanot Publishers.
8. National Assessment and Accreditation Council. (2020). *Manual for accreditation of higher education institutions*. NAAC.

OR SKILL ENHANCEMENT COURSE - B
TECHNIQUES OF FOOD PRESERVATION

[ECHSC312B]

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| Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100 | Pass Marks: (MSE: 17 + ESE: 28) = 45 |
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(Credits: Theory-04, 60 Hours)**Course Description**

This course helps to understand food preservation, the factors that cause food to deteriorate, preservation by chemical treatments, changing the environmental conditions (temperature, moisture content, etc.) Food preservation is a course important for food handlers, whether for their own use, or on a commercial basis.

Course Objectives:

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

Learning Outcome

1. Know the principles of preservation behind the methods of preservation and acquire skills to formulate food-based products
2. Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved food products
3. Explore the principles of preservation in fruits and vegetable-based products
4. 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****(12 Lectures)**

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**(12 Lectures)**

Methods of drying & dehydration, different types of driers, freeze drying- lyophilisation, packing & storage
 Drying methods for the selected 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, Khakharas etc and Masala Powders, onion, garlic, ginger powder etc.). Hands on experience: Drying of vegetables- peas, potato, carrot, French beans, Reconstitution of dried vegetables, Drying & preparation of powders garlic, ginger, spices mix etc

Unit-III. Preservation by Using Sugar**(12 Lectures)**

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**(12 Lectures)**

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**(12 Lectures)**

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
 Visit to Food Industries

Recommended Readings:

1. Srivastava R.P. (2012), Fruit and vegetable preservation Principles and Practices, International Book Distributing Co., (IBDC), New Delhi.
2. Maria Parloa (2009), canned fruit, preserves and jellies: Household methods of preparation, US Department of Agriculture, Washington.
3. Shafiur, Rahman, M. (2007), Handbook of Food Preservation, 2nd edition, CRC press, New Delhi.

III. CORE COURSE

[CCHSC313A]

FOOD SAFETY, SANITATION AND HYGIENE

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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 work place safety standards in Food Service Industries

Learning objectives

1. Learn the various aspects of food safety. Understand about food laws and labeling
2. Understand the need for consumer education

Learning outcomes

1. 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
2. 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

(12 Lectures)

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

Frame-work 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**(12 Lectures)**

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 Alimentarius, WTO, JEFA, APEDA, ISO 22000 series,

Hazard Analysis Critical Control Point (HACCP): principles of HACCP, applications of HACCP

Unit-III. Current Food Safety Standards in India**(14 Lectures)**

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**(12 Lectures)**

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**(10 Lectures)**

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

Recommended Readings:

1. Mahtab, S, Bamji S, Kamala Krishnaswamy, Brahmam G.N.V, *Text Book of Human Nutrition*, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi, 2012.
2. Srilakshmi, B., *Dietetics*, New Age International (P) Ltd., New Delhi, 2013.
3. Swaminathan, M., *Advanced Textbook on Food and Nutrition*, Vol. 1, Second Edition, Bangalore Printing and Publishing Co. Ltd., Bangalore, 2012.
4. *Dietary Guidelines for Indians*, ICMR, National Institute of Nutrition.

OR CORE COURSE

[CCHSC313B]

INTERPERSONAL RELATIONSHIP AND FAMILY DYNAMICS

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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.

Course 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.

Course Content**Unit-I Understanding the Self****(12 Lectures)**

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**(10 Lectures)**

Perspectives: On friendships, love, family and other interpersonal relationships

Ethological Perspective

Psychological Perspective

Sociological Perspective

Cross-cultural perspectives

Theories:

Social Exchange Theory

Triangular theory of love - Robert Sternberg

Unit-III Basics of Interpersonal Communication**(10 Lectures)**

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)**(12 Lectures)**

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**(16 Lectures)**

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.

Recommended Readings:

1. Arnett, J.J. (2005). Youth, cultures and societies in transition: The challenge of growing up in a globalized world. In F. Gale & S. Fahey. (Eds.), *Youth in Transition – The challenges of generational change in Asia* (pp 22-35). Bangkok: Regional Unit for Social and Human Sciences in Asia and the Pacific.
 2. Baron, R. A., Byrne, D., & Branscombe, N. R. (2006). *Social psychology*. ND: Pushp Print Services.
 3. Chaudhary, N., & Shukla, S. (2019). Family, identity, and the individual in India. In G. Misra (Ed.), *Psychology: Volume 2: Individual and the social: Processes and issues* (pp.143-189). New Delhi, India: Oxford University Press.
 4. D'cruz, P., & Bharat, S. (2001). Beyond joint and nuclear: The Indian family revisited. *Journal of Comparative Family Studies*, 32(2), 167-194.
 5. Duck, S. (1998). *Human relationships*. ND: Sage.
 6. Ganguly-Scrase, R. (2007). Victims and agents: Young people's understanding of their social world in an urban neighbourhood in India. *Young*, 15, 321-341.
 7. Gardiner, H.W., Mutter, J.D. & Kosmitzki, C. (1998). *Lives across cultures: cross-cultural human development*. Boston: Allyn and Bacon.
 8. Gudykunst, W. B., & Toomey, S. T. (1998). *Culture and interpersonal communication*. ND: Sage.
 9. Mines, M. (1998). Conceptualizing the person: Hierarchical society and Individual autonomy in India. *American Anthropologist*, 90(3), 568-579.
 10. Pestonjee, D. M. (1992). *Stress and coping: The Indian experience*. New Delhi: Sage
 11. Weiten, W., & Llyod, M. A. (2004). *Psychology applied to modern life*. Singapore: Thompson Asia Pvt. Ltd.
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OR CORE COURSE
TEXTILE DESIGN AND ILLUSTRATION

[CCHSC313C]

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| Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100 | Pass Marks: (MSE: 17 + ESE: 28) = 45 |
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(Credits: Theory-04, 60 Hours)**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:

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

Learning Outcomes:

Successful completion of this course will enable students to

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

Course Content**Unit-I. Understanding Design****(10 Lectures)**

Design-its meaning and importance, structural and decorative design
 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**(12 Lectures)**

Point, Line, Colour, Plane, Volume, Space, Shape, Form, light, Texture, pattern

Unit-III. Principles of Design and Its Co-Relation**(12 Lectures)**

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

Unit-IV. Line, Colour and Pattern in Design**(14 Lectures)**

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**(12 Lectures)**

Balance and proportion in human body: average and fashion figures
 Postures of male, female and children croques and its significance: Front view, Back view, Side view and 3/4th view. Stylizing the croque and its importance, Understanding fabric textures and drapes

Recommended Readings:

1. Derrick, L. (2018) Fashion Sketchbook: Fashion Sketchbook with figure templates (Fashion Croquis), Create Space Independent Publishing Platform
2. Elaine, S. (2013) The Dynamics of Fashion. 4th Ed. New York: Bloomsbury publication.
3. Julia Y., & Donna G., (2011), the Fashion Careers Guidebook: A Guide to Every Career in the Fashion Industry and How to Get It, Barron's Educational Series.
4. Linda, T., (2010), Portfolio Presentation for Fashion Designers, 3rd Edition, Fairchild books, New York.
5. Mary, L. G., (2008), The Fairchild Encyclopedia of Menswear, Fairchild Publications, New York.
6. Michele W. B., Diane D., (2006), the Spec Manual, Fairchild Publications, New York.
7. Patrick, J. I. (2009) New Encyclopedia of Fashion Details: Over 1000 Fashion Details, London: B. T. Batsford.
8. Patrick, J. I. (1996) Fashion Design Illustration - men, London: B. T. Batsford.
9. Patrick, J. I. (2005) Fashion Design Illustration - men, London: B. T. Batsford
10. Patrick, J. I. (2003) Introduction to Fashion Design, London: B. T. Batsford
11. Sharon L. T. and Glazer, S. S. (2017), Illustrating Fashion, 4th Ed. New York: Fairchild Books. The Snap Fashion Sketch Book, Prentice Hall, New Jersey.
12. Stipelman, S. (2017) Illustrating Fashion, 4th Ed. New York: Fairchild Books.
13. Tate, S. L. & Glazer, B. (2007) The Snap Fashion Sketchbook, New Jersey: Prentice Hall

IV. CORE COURSE

[CCHSC314]

PRINCIPLE OF INTERIOR DESIGN

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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

1. Gain knowledge and interpret the elements and principles of art in interior design
2. Use the elements and principles to create beautiful designs and interiors
3. Apply theoretical knowledge for practical situations
4. Decipher the nuances of Indian interior design

Learning Outcomes

1. Appreciate growth and development of interior design and decoration in India
2. Enabling students distinguish between Interior decoration and Interior design
3. Analyze place of elements and principles in interior designing
4. Gain knowledge on Institutes offering Interior design as professional Courses

Course Content**Unit I. Interior Design vs. Interior Decoration****(12 Lectures)**

Interior Design and Interior Decoration: concept and basic differences Aims of Interior Design: Beauty, Expressiveness and Functionalism
 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**(12 Lectures)**

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**(12 Lectures)**

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 colour Colour (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**(12 Lectures)**

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 oblong in 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**(12 Lectures)**

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

Recommended Readings:

1. Asher, F.M. (2003). Art of India – Prehistory to the Present. Encyclopedia Britannica Inc.
 2. Bhatt,P. (2011). Foundation of Art and Design. Mumbai: The Lakhani Book Depot.
 3. Chaudhari, S.N.(2005). Interior Design.Jaipur: Aavishkar Publishers
 4. Craig, H and Rush,O.(1969).Homes with Character. New Delhi: Universal Book Store
 5. De Van D. S., Darlene, M, K., Logan, K, C., and Szekely, L. (1980). Introduction to Interior Design. New York: Macmillan Publishing Co. Inc.
 6. Gandotra, V. ,Shukul, M., and Jaiswal, N .(2010-11). Introduction to Interior Design & Decoration. New Delhi: Dominant Publishers and Distributors. (ISBN No.81-7888-295-7)
 7. Goldstein,H., and Goldstein, V. (1967).Art in Everyday Life. N Delhi: Oxford and IBH Publishing Co.
 8. Kasu, A.A (2005).Interior Design. Delhi: Ashish Book Centre
 9. Mullick, P. (2016).Text Book of Home Science.(4th Ed.),Kalyani Publishers (ISBN13 9789327262766)
 10. Nissen,L., Faukner,R., and Faulkner S .(1994). Inside Today's Home (6th Ed.).Florida : Harcourt Brace College Publishers (ISBN No. 0-03-0555492-6)
 11. Rutt, A, H. (1969).Home Furnishing. New Delhi: Wiley Eastern Pvt. Ltd.
 12. Seetharaman, P., and Pannu, P.(2010). Interior Design and Decoration.New Delhi : CBS Publishers & Distributors Pvt. Ltd(ISBN No. 81-239-1192-0)
 13. Shaw, R.B. (2003).Interiors by Design. London, New York: Ruland Peters and Small,
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**I. CORE COURSE
PRACTICAL**

[CPHSC315]

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| Marks: 30 (MSE: 20 Viva + 5 Attd. + 5 Record) + 70 (ESE Pr: 6 Hrs) = 100 | Pass Marks = 45 |
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(Credits: Practical-04, 120 Hours)**SECTION I (Compulsory)****Unit 1****20Hrs. =10 classes**

1. Field visit to institution (school/hospital/anganwadi/NGO) for organisational chart and role analysis
2. Preparation of short-term and long-term institutional plan with Layout/space planning (manual or digital)
 - a. and work simplification and time management suggestions
3. Visit to an institution to analyse
 - a. job description, and job specification
 - b. Recruitment and training plan, communication and motivation strategies
 - c. Preparation of institutional budget, Cost control measures
 - d. Maintenance off stock register/inventory formats
 - e. Evaluation of welfare services
 - f. Quality Indicator and Maintenance

OR

1. Identify types of food spoilage (microbial and enzymatic) using common foods, and demonstrate use of basic preservatives (salt, sugar, acid)
2. Drying of selected vegetables (peas, potato, carrot, beans) using sun/mechanical drying, and preparation of dehydrated products (chips, papad, spice powders, garlic/ginger powder)
3. Testing of pectin, pH, and acidity and preparation of jam, jelly, marmalade, squash, and sauce: preparation of candied and crystallized fruits/toffee
4. Preparation of pickles (oil and brine based)
5. Demonstration of fermented foods (curd, idli batter, etc.)
6. Demonstration of blanching and freezing of vegetables/fruits
7. Visit to observe pasteurization, sterilization, and canning methods (demo) , vacuum packaging and packaging materials. Preparation of a report on food industry visit

Unit 2**20Hrs. =10 classes**

1. Preparation of one-day meal plans for Vata, Pitta, and Kapha
 2. Preparation Satvik meals, herbal drinks (e.g., kadha), digestive preparations
 3. Study of Shad Rasa (Six Tastes), Identification and inclusion in daily diet
 4. Lifestyle Assessment and Planning -Designing Dinacharya and Ritucharya schedules
 5. Diet and lifestyle planning for common conditions (obesity, acidity, diabetes Cold & cough
 6. Constipation, Gas)
- Use of Herbs and Spices in Nutrition -Functional role and preparation methods

Unit 3**20Hrs. =10 classes****Market Study on:**

1. furniture construction and detailing, availability and cost of different types of furniture
2. Availability and popularity of eco-friendly materials
3. availability and cost of building materials and finishes
4. Submission of layout drawings for different rooms & furniture using cut outs
5. Area arrangement - Interior design for different rooms as mock up spaces
6. Visits to:
7. hotels, restaurants, conference hall, corporate offices to study significant differences in designing of interiors and space organization

SECTION II (Select any one group as per the theory group chosen)**A. FOOD SAFETY, SANITATION AND HYGIENE****60Hrs. =30 classes**

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 the identification of bacteria
6. Scheme for the detection of food-borne pathogens

7. Detection of common adulterants 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).

OR

B. INTERPERSONAL RELATIONSHIP AND FAMILY DYNAMICS

60Hrs. =30 classes

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.

OR

C. TEXTILE DESIGN AND ILLUSTRATION

60Hrs. =30 Classes

1. 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 apparel.
 11. Preparation of an album of accessories suitable for different occasions.
 12. Observation of people in different situations and live sketching of styles worn
 13. Designing of apparel and accessories for men, women and children as per the given brief.
 14. Portfolio development
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SEMESTER II

I. ELECTIVE COURSE-A

[ECHSC411A]

NUTRITIONAL BIOCHEMISTRY, MICROBIOLOGY & GENETICS

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**Course Description:**

This course offers an integrated understanding of biochemical processes related to human nutrition and the role of microorganisms in food and health. It covers the digestion, absorption, and metabolism of macro and micronutrients, with emphasis on enzyme functions, energy production, and metabolic disorders. The microbiology component focuses on foodborne pathogens, beneficial microbes, food spoilage, fermentation, and food safety. Students will gain foundational knowledge in both biochemistry and microbiology, preparing them for advanced work in nutrition, clinical dietetics, food technology, genetics and public health.

Course Objectives

The course aims to:

1. Develop advanced understanding of biochemical processes related to nutrition
2. Explain the role of microorganisms in food, health, and disease
3. Introduce genetic principles and nutrigenomics in human health
4. Apply interdisciplinary knowledge to public health, food safety, and personalized nutrition

Course Outcomes

After completion, learners will be able to:

1. Explain biochemical pathways of macronutrients and micronutrients
2. Analyze microbial roles in food spoilage, fermentation, and health
3. Understand genetic mechanisms influencing nutrition and metabolism
4. Apply nutrigenomics concepts in disease prevention
5. Evaluate food safety and microbial control strategies
6. Integrate biochemistry, microbiology, and genetics in real-life nutrition problems

Course Content**Unit I: Fundamentals of Nutritional Biochemistry****(10 Lectures)**

Cell structure and biochemical organization
 Water balance, pH, buffers
 Enzymes: classification, mechanism, factors affecting activity
 Bioenergetics and ATP cycle
 Overview of metabolism

Unit II: Metabolism of Macronutrients**(12 Lectures)**

Carbohydrates: Glycolysis, TCA cycle, gluconeogenesis, glycogen metabolism
 Proteins: Amino acid metabolism, transamination, urea cycle
 Lipids: β -oxidation, lipogenesis, cholesterol metabolism
 Hormonal regulation of metabolism

Unit III: Micronutrients and Functional Components**(8 Lectures)**

Vitamins (fat-soluble & water-soluble): biochemical roles
 Minerals: calcium, iron, iodine, zinc
 Antioxidants (e.g., carotenoids like lutein)
 Phytochemicals and functional foods

Unit IV: Food Microbiology and Safety**(10 Lectures)**

Classification and characteristics of microorganisms
 Microbial growth and control
 Food spoilage and food-borne diseases
 Beneficial microorganisms: Prebiotics, Probiotics and Postbiotics

Unit V: Human Genetics and Nutrigenomics**(10 Lectures)**

Basic genetics: DNA, RNA, gene expression
 Mendelian inheritance and genetic disorders
 Molecular genetics and mutations
 Nutrigenomics and nutrigenetics

Gene–diet interaction in diseases: Obesity, diabetes, cardiovascular diseases

Unit VI: Applied Aspects and Emerging Trends**(10 Lectures)**

Personalized nutrition
Gut microbiome and health
Biotechnology in food and nutrition
Functional foods and nutraceuticals
Ethical, legal, and social issues (ELSI)

Recommended Readings

1. Lehninger, A.L., Nelson, D. L., & Cox, M. M. (2021). *Principles of biochemistry* (8th ed.). W. H. Freeman and Company.
 2. Rodwell, V. W., Bender, D. A., Botham, K. M., Kennelly, P. J., & Weil, P. A. (2021). *Harper's illustrated biochemistry* (32nd ed.). McGraw-Hill Education.
 3. Frazier, W. C., & Westhoff, D. C. (2013). *Food microbiology* (5th ed.). Tata McGraw-Hill.
 4. Lewis, R. (2020). *Human genetics: Concepts and applications* (13th ed.). McGraw-Hill Education.
 5. Indian Council of Medical Research. (2024). *Dietary guidelines for Indians*.
 6. National Institute of Nutrition. (2020). *Recommended dietary allowances and nutrient requirements for Indians*.
 7. Food Safety and Standards Authority of India. (2021). *Food safety and standards regulations and manuals*.
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OR ELECTIVE COURSE-B

[ECHSC411B]

GENDER, SOCIETY AND HUMAN DEVELOPMENT

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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.

Course Objectives

1. 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.
2. Recognize how social institutions are patriarchal.
3. Develop sensitivity regarding the socio-cultural, economic and political factors that shape life experiences in relation to gender
4. Learn about women's human rights and laws related to women in India.
5. Learn about different gender identities and sexual orientations- masculinities, LGBTQIA in the Indian context

Learning Outcomes

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

Course Content**UNIT-I Gender: A Social Construction****(12 Lectures)**

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**(12 Lectures)**

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**(12 Lectures)**

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**(12 Lectures)**

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**(12 Lectures)**

Implemented from Academic Session 2026-27 & Onwards

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)

Recommended Readings

1. Bhasin, K. (2003). *Exploring masculinity*. New Delhi: Women Unlimited.
 2. Bhasin, K. (2000). *Understanding gender*. New Delhi. Kaali for Women.
 3. Chakravarti, U. (2018). *Gendering caste: Through a feminist lens*. New Delhi: Sage.
 4. Chatterjee, P. (2002). *Community, gender and violence*. Delhi: Permanent Black.
 5. Das, B. (2009). *Gender issues in development*. Jaipur: Rawat Publications.
 6. Goel, A, Kaur, A and Sultana, A. (2006). *Violence against women: Issues and perspectives*. New Delhi: Deep& Deep Publishers.
 7. Dasgupta, S., Sinha, D., & Chakravarti, S. (2011). *Media, gender, and popular culture in India: Tracking change and continuity*. New Delhi: Sage Publishing India.
 8. Kannabiran, K. (Ed.). (2013). *Women and law: Critical feminist perspectives*. New Delhi: Sage.
 9. Kumar, S. (2019). *LGBT Community in India: A study*. New Delhi: Educreation Publishing
 10. Thomas, S. E. (2019). *Gender, human rights and law*. Volume - 6 Bangalore: Centre for Women and the Law, National Law School of India University
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OR ELECTIVE COURSE-C

[ECHSC411C]

DYEING, PRINTING AND FINISHING OF TEXTILES

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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:

1. Introduce basics of dyeing, printing and finishing
2. Inculcate the knowledge of auxiliaries and chemicals used for dyeing and printing
3. Enhance the understanding of the relation between the dyes, pigments and fabrics.
4. Acquaint students with the importance of finishing of textiles
5. Develop the skills in doing dyeing and printing of textiles
6. Reproducing the required shade from batch to batch.

Learning Outcomes:

Successful completion of this course will enable students to

1. Describe the basics of dyeing, printing and finishing.
2. Examine the knowledge of auxiliaries and chemicals used for dyeing and printing
3. Explain the relation between the dyes, pigments and fabrics.
4. Recommend the finishing for textiles
5. Dye and print textiles.
6. Reproduce the required shade from batch to batch.

Course content**Unit-I. Introduction of Dyeing and Printing****(12 Lectures)**

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**(12 Lectures)**

Classification of dyes Classification of Printing
 Difference between dyes and pigments
 Preparation of fabrics before dyeing and printing designing, scouring, bleaching, mercerization, carbonization Heat setting: processing method

Unit-III. Dyeing**(12 Lectures)**

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**(12 Lectures)**

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**(12 Lectures)**

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

Recommended Readings:

1. Chavan, R.B. (1979). Textile Printing (Book of Papers) Department of Textile Technology, IIT New Delhi.
 2. Giles, G.H. (1974) Laboratory Course in Dyeing Hart & Clough; Bradford; England Kale
 3. D.G. (1976) Principles of Cotton Printing. Maharaja Brothers Ahmedabad.
 4. Saraiya, N.S. & Gupta P.C. Technology and Management of Printing.
 5. Shenai, V.A. (1979). Chemistry of Dyes and Principles of Dyeing. Sevak Publications Mumbai
 6. Trotman E.R. (1975). Dyeing and Chemical Technology of Textile Fibre. Charles Griffin & Co. Ltd., London
 7. Wynne Andrea (1997). Textiles. The Motivate Series Mcmillain Education Ltd., London.
 8. Vilensky L.D. & Gohil E.P. G. (1987) Textile Science, An explanation of fiber properties. CBS Publishers & Distribution, Delhi.
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II. ELECTIVE COURSE-A ADVANCED PHYSIOLOGY

[ECHSC412A]

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)

Course Description:

This course provides an in-depth understanding of physiological processes at the molecular, cellular, and systemic levels. It emphasizes the interrelationship between nutritional status, health, and physiological functions.

Course Objectives:

On completion of this course, the students will be able to understand:

1. To introduce students to the scientific study of human strength, well-being and flourishing and to apply positive HSC psychological principles to enhance personal and collective life.

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Analyze the cellular and molecular mechanisms underlying physiological processes.
2. Evaluate the interrelationship between nutrition, metabolism, and organ system function.
3. Interpret physiological changes during different life stages and in common pathological conditions.
4. Apply knowledge of advanced physiology to nutritional assessment and clinical dietetics.
5. Demonstrate an understanding of the hormonal regulation of human body systems.

Course Content**Unit I: Cellular Physiology and Tissue Dynamics**

(12 Lectures)

Cellular Structure & Function: Advanced molecular structure, cellular transport mechanisms (active/passive), and intercellular communication. Cell Signaling: Transmembrane signaling, second messengers, and G-proteins.

Tissue Dynamics: Physiological basis of regeneration and repair in epithelial, connective, muscular, and nervous tissues.

Membrane Potential: Resting potential, action potential, and synaptic transmission.

Unit II: Cardiovascular and Respiratory Dynamics

(12 Lectures)

Cardiovascular Physiology: Cardiac output, cardiac cycle, hemodynamics, blood pressure regulation, and vascular resistance. Blood Physiology: Hemoglobin and oxygen transport, plasma proteins, blood coagulation mechanisms, and immune system activation (complement system).

Respiratory Physiology: Pulmonary function tests, mechanics of breathing, alveolar ventilation, gas exchange, and transport, regulation of respiration (chemical and neural).

Unit III: Gastrointestinal and Renal Physiology

(12 Lectures)

Gastrointestinal Tract (GIT): Advanced regulation of secretion, motility, digestion, and absorption of nutrients. Gastric, pancreatic, and biliary secretions. Microbiome & Gut Health: Role of gut flora in nutrient metabolism and immunity.

Renal Physiology: Nephron structure and function, glomerular filtration, tubular reabsorption/secretion, and concentration of urine. Fluid & Electrolyte Balance: Regulation of body fluid balance, water distribution, and acid-base balance (respiratory and renal control).

Unit IV: Endocrinology and Reproduction

(12 Lectures)

Endocrine System: Mechanism of hormone action, regulation of hormone secretion, and feedback loops (hypothalamic-pituitary-target organ axis).

Metabolic Hormones: Thyroid, parathyroid, insulin, glucagon, and glucocorticoids in metabolic regulation.

Reproductive Physiology: Physiology of puberty, menstrual cycle, pregnancy, lactation, and menopause.

Hormonal Basis of Infertility: Causes and management.

Unit V: Neuro-muscular and Life Cycle Physiology

(12 Lectures)

Nervous System: Central and peripheral nervous system interaction, neurotransmitters, and autonomic nervous system (ANS) influence on metabolism.

Special Senses: Physiology of taste, smell, and vision (as related to food intake and nutrition).

Physiology of Exercise: Cardiovascular and respiratory changes during exercise.

Physiology of Aging: Changes in body composition, organ systems, and metabolism during aging.

Recommended Readings

1. Guyton, A.C. & Hall, J.E. (Latest Ed). Textbook of Medical Physiology. Elsevier.
2. Barrett, K.E. et al. (Latest Ed). Ganong's Review of Medical Physiology. McGraw-Hill.
3. West, J. B. (Latest Ed). Respiratory Physiology: The Essentials. Lippincott Williams & Wilkins.
4. Johnson, L. R. (Latest Ed). Essential Medical Physiology. Academic Press.
5. मानव शरीर एवं पोषण विज्ञान, दिल्ली। आशा कुमारी, क्लासिकल पब्लिशिंग, नई
6. Foundation of Anatomy and physiology (1973) Ross and Wilson, Medical division of Longman Group Ltd

OR ELECTIVE COURSE-B

[ECHSC412B]

PARENTING IN EARLY CHILDHOOD

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**Course Description:**

This course explores the pivotal role of parenting in the early years of a child's life (0–8 years), focusing on the physical, emotional, social, and cognitive development of young children. It examines parenting styles, practices, and challenges in diverse socio-cultural contexts. The course emphasizes positive parenting, parent-child bonding, discipline strategies, and the influence of parental behavior on child outcomes. Students will gain insights into supporting parents through education, counseling, and community-based interventions. The course also aligns with contemporary frameworks like NEP 2020 and promotes holistic development through informed and responsive parenting.

Course Objectives:

1. To understand the significance of parenting in early childhood development.
2. To study different parenting styles and their impact on children's behavior and personality.
3. To explore the role of family, culture, and socio-economic status in shaping parenting practices.
4. To develop skills in guiding and supporting parents for effective child-rearing.
5. To promote positive parenting strategies for nurturing emotional security and healthy development.

Course Outcomes:

After completing this course, students will be able to:

1. Describe the developmental needs of children in early childhood and the role of parenting in meeting them.
2. Differentiate between parenting styles and assess their effects on child development.
3. Apply knowledge of developmental psychology in suggesting age-appropriate parenting practices.

Contents:**Unit I. Introduction:**

The task of parenting and the concept of parenting skills.
Changing concept of parenthood and childhood.

(12 Lectures)**Unit 2. Individual parenting roles:**

Determinant of Parenting behaviour.
Characteristics of the parenting roles.
Role of Father, Role of Mother, Concept of Family.

(12 Lectures)**Unit 3. Developmental interaction in early childhood years:**

Parent role in developing self-awareness in children.
Family relation and communication.
Helping the child to learn to express and control emotions.
Helping the children to discover personal capabilities.
Establishing routine and showing responsible behaviour.

(12 Lectures)**Unit 4. Mental Health:**

Definition concept and importance of Mental Health.
National Mental Health Policy of India.

(12 Lectures)**Unit 5. Theories of Human Development:**

Freud's Psychoanalytic theory
Learning theory of Pavlov, Skinner
Cognitive theory of Piaget.

(12 Lectures)**Recommended Books**

1. S K Mangal and Shubhra Mangal, (2022), Child Psychology & Development, Sterling Publishers Pvt .Ltd
2. Ginott, G. Haim, (2003), Between Parent and Child, Harmony Publishers.
3. Sinha, A. (2006) Organization and Management of Early Childhood Education, H.B Bhargava Book House, 4/230 Kacheri Ghat, Agra, 1st edition

OR ELECTIVE COURSE-C
PATTERN MAKING AND DRAPING

[ECHSC412C]

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|--|--------------------------------------|
| Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100 | Pass Marks: (MSE: 17 + ESE: 28) = 45 |
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(Credits: Theory-04, 60 Hours)**Course Description**

This comprehensive course in Pattern Making and Draping is designed to bridge the gap between two-dimensional design sketches and three-dimensional garment construction. It covers fundamental techniques of flat pattern, drafting, dart manipulation, and fabric draping on a dress form, enabling students to create accurate, well-fitting, and creative apparel. The Pattern Making and Draping course introduces students to the essential, technical foundation of fashion design.

Course Objectives

1. To familiarize students with the tools, terminology, and techniques of flat pattern making and 3D draping.
2. To develop proficiency in creating basic blocks/slopers (bodice, skirt, sleeve) from, and adapting them for various designs.
3. To master dart manipulation, including transferring darts to create princess lines, gathers, pleats, and cowls.
4. To impart understanding of fabric behavior and grainlines, and how to utilize them during the draping process on a dress form.
5. To equip students with skills to evaluate and rectify garment fit, ensuring balance and proper fit in final garments.

Course Outcomes

Upon successful completion of this course, students will be able to:

1. Draft and manipulate basic patterns (bodice, skirt, sleeve) to produce various design variations.
2. Drape and create original, 3D garments by arranging fabric on a dress form, including bodice blocks with single/two darts and skirts.
3. Execute pattern alterations for proper fit, adjusting for body measurements and improving balance.
4. Transfer muslin drapes to paper patterns, adding appropriate seam allowances, notches, and grainlines.
5. Produce high-quality, wearable prototypes that demonstrate understanding of fabric characteristics and construction principles.

Course Content**Unit I: Introduction to Pattern Making****(5 Lectures)**

Tools, terms and techniques, Fabric terms, Dart and Grain line, Flat pattern making, Draping.

Unit II : Basic Upper and lower sloper/ Block**(10 Lectures)**

Principles in pattern making for -
 Upper garment
 Lower garment
 Sleeves, Collars, Dresses

Unit III: Introduction to Draping**(10 Lectures)**

Basic Preparation – Equipment, dress form and preparation of muslin
 Basic Patterns – Basic Bodice, Basic Skirt, Sleeve Block
 Pattern Making Principles

Unit IV: Designing of the Bodice**(15 Lectures)**

Dart Variation
 Princess line
 Added fullness
 Necklines including cowl

Unit V: Design Variations**(20 Lectures)**

Midriff
 Yokes
 Collars – Flat, Roll and Stand collars
 Skirts

Recommended Readings

1. Kiisel K. (2013), Draping: The Complete Course, Laurence King Publishing.
2. Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York.

III. CORE COURSE

[CCHSC413]

ENTREPRENEURSHIP DEVELOPMENT AND ENTERPRISE MANAGEMENT

Marks: 30 (MSE: 20 Th. 1 Hr + 5 Attd. + 5 Assign.) + 70 (ESE: 3 Hrs) = 100

Pass Marks: (MSE: 17 + ESE: 28) = 45

(Credits: Theory-04, 60 Hours)**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 marginalised communities across the country, and projects the organising and capacity-building measures that community development professionals and activists have sought to improve these conditions.

Learning Objectives

1. Understand the conceptual meaning of community development and community organization
2. Become aware of community development approaches
3. Study community organization modalities in various settings
4. Learn to evaluate community development programmes

Learning Outcomes

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

Course Content**Unit I: Entrepreneurship Development****(15 Lectures)**

Entrepreneurship- concept, definition, need and significance of entrepreneurship development in India, entrepreneurship growth process, barriers, entrepreneurship education model.
Entrepreneur-their characteristics, types, gender issues, role demands and challenges.
Entrepreneurial Motivation.
Challenges faced by Women Entrepreneurs

Unit II: Enterprise Planning and Launching**(15 Lectures)**

Types of enterprises classification based on capital, product, location, ownership pattern and process
Sensing business opportunities and assessing market potential; market research
Appraising of project and feasibility

Unit III: Enterprise Management and Networking**(12 Lectures)**

Managing Production
Organizing Production; input-output cycle
Ensuring Quality
Managing Marketing
Understanding markets and marketing
Functions of Marketing
4Ps of Marketing (same as marketing mix)
Financial Management
Meaning of Finance
Types and Sources of Finance
Estimation of project cost
Profit Assessment
Networking of Enterprises

Unit IV Setting up Small Enterprises**(15 Lectures)**

Counselling Centre – Diet Counselling, Parenting Counselling, Adolescent Counselling
Food Production Unit- Bakery Set up, Food Preservation unit,
Boutique, Small garment related business, Dyeing and Printing unit

Recommended Readings

1. Gundry Lisa K. & Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
2. Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company

**IV. ELECTIVE COURSE-A
PRACTICAL-IVA**

[EPHSC414A]

Marks: 30 (ESE: 20 Viva + 5 Attd. + 5 Record) + 70 (ESE Pr: 6 Hrs) = 100**Pass Marks = 45****(Credits: Practical-04, 120 Hours)****Part A- Nutritional Biochemistry, Microbiology and Genetics****60 Hrs.=30 classes**

1. Qualitative test for carbohydrate, Protein and Fat
2. Sterilisation of Pots, bottle and lab glassware for food preservation.
3. Identification of the food items spoiled by bacteria, fungus, moulds and other pathogens
4. Production and evaluation of fermented dairy products – production of yogurt, curd, buttermilk and identify lactic acid bacteria
5. Identification of food borne pathogens like *E.coli*, Salmonella, from red meat and poultry
6. Evaluation of effectiveness of preservation techniques such as salting, refrigeration and sugar
7. Food adulteration testing for microbial contamination of common food (Milk, Bread, Meat)
8. Bacteriological Examination of Water.

Part B- Advanced Physiology**60 Hrs.=30 classes**

Case study of Iron deficiency Anemia, investigations and diagnosis. Blood indices.

1. Measurement of Blood pressure by using sphygmomanometer.
2. Demonstration of Reflex action.
3. Demonstration of procedures of clinical examination to see for pallor, jaundice, oedema and dehydration and their importance.
4. Basic First aid procedures, CPR, Burns,
5. Visit to a DOTS centre.
6. Preparation of a project on Antenatal Care for women.
7. Preparation of a project on various contraceptive devices and understanding their basic mechanism of action.

Recommended Readings

1. Roberts Diane & Greenwood Melody "Practical Food Microbiology"
 2. Shen Cangliang & Zhang Yifan, Food Microbiology: Laboratory for the Food Science Student: A Practical Approach"
 3. "Analytical Food Microbiology: A Laboratory Manual" by John Wiley & Sons:
 4. Sehgal Shalini et. al. Food Microbiology: A Practical Approach
 5. Neelima et. al. Laboratory Manual of Food Microbiology".
 6. Bell Chris, Neaves Paul & Williams Anthony P., Food Microbiology and Laboratory Practice" by
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Marks: 30 (ESE: 20 Viva + 5 Attd. + 5 Record) + 70 (ESE Pr: 6 Hrs) = 100

Pass Marks = 45

(Credits: Practical-04, 120 Hours)

Part A- Gender, Society and Human Development**60 Hrs.=30 classes**

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. Critically analyse with Laws and Acts for Women in India
5. Observe the representation of masculinity in Indian movies
6. Submit report after visiting local Women's organization and LGBTQAI organizations

Part B- Parenting in Early Childhood**60 Hrs.=30 classes**

1. Preparing teaching material, kit and presentation.
2. Preparing different types of Puppets, Song Booklets.
3. Music – Singing, listening and rhythmic activities.
4. Language based activities – Story listening and telling, Poetry, Group discussion such as show and tell and question-answer.
5. Arranging workshop with children through art and Creation activities.
6. Designing – Leaflets/ Pamphlets/ Cover pages/ Posters for children's activities.
7. To study Curriculum and Management of Pre-primary standard children in local area.
8. Case study regarding problems, behaviour of a child.

Recommended Reading

1. Chakravarti, U. (2018). *Gendering caste: Through a feminist lens*. New Delhi: Sage.
2. Chatterjee, P. (2002). *Community, gender and violence*. Delhi: Permanent Black.
3. Das, B. (2009). *Gender issues in development*. Jaipur: Rawat Publications.
4. Goel, A, Kaur, A and Sultana, A. (2006). *Violence against women: Issues and perspectives*. New Delhi: Deep& Deep Publishers.
5. Dasgupta, S., Sinha, D., & Chakravarti, S. (2011). *Media, gender, and popular culture in India: Tracking change and continuity*. New Delhi: Sage Publishing India.
6. Kannabiran, K. (Ed.). (2013). *Women and law: Critical feminist perspectives*. New Delhi: Sage.
7. Kumar, S. (2019). *LGBT Community in India: A study*. New Delhi: Educreation Publishing

Marks: 30 (ESE: 20 Viva + 5 Attd. + 5 Record) + 70 (ESE Pr: 6 Hrs) = 100

Pass Marks = 45

(Credits: Practical-04, 120 Hours)

Part A-Dyeing, Printing and Finishing of Textiles**60 Hrs=30 Classes**

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.
3. Dyeing of cotton yarn and fabric with direct dyes, vat and reactive dyes.
4. Dyeing of silk, wool and nylon yarn and fabrics with basic and acid dyes.
5. Dyeing of polyester yarn and fabric with disperse dyes.
6. Making designs for a. Blocks, stencil and screen
7. Preparation of a. Blocks, stencil and screen
8. Printing of fabrics using:
 - a. Direct style - block, stencil and screen
 - b. Resist style - Tie & Dye, Batik
 - i. Natural starch
 - ii. Synthetic starch
9. Product development

Part B-Pattern Making and Draping**60 Hrs=30 Classes**

1. Development of the Bodice Block and its variations through Flat Pattern Making and Draping
 - ii. Dart manipulation
 - iii. Contouring
 - iv. Fullness Principles
1. Skirts, Sleeves and Collars (two each), through draping
2. Development of basic patterns (Bodice & Skirt) Block through draping
3. Adaptation and Construction of any two designs by draping

Recommended Readings

1. Chavan, R.B. (1979). Textile Printing (Book of Papers) Department of Textile Technology, IIT New Delhi.
2. Giles, G.H. (1974) Laboratory Course in Dyeing Hart & Clough; Bradford; England Kale D.G. (1976) Principles of Cotton Printing. Maharaja Brothers Ahmedabad.
3. Saraiya, N.S. & Gupta P.C. Technology and Management of Printing.
4. Shenai, V.A. (1979). Chemistry of Dyes and Principles of Dyeing. Sevak Publications Mumbai
5. Trotman E.R. (1975). Dyeing and Chemical Technology of Textile Fibre. Charles Griffin & Co. Ltd., London
6. Wynne Andrea (1997). Textiles. The Motivate Series Mcmillain Education Ltd., London.
7. Vilensky L.D. & Gohil E.P. G. (1987) Textile Science, An explanation of fiber properties. CBS Publishers & Distribution, Delhi.
8. Kiisel K. (2013), Draping: The Complete Course, Laurence King Publishing.
9. Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York

V. PROJECT
DISSERTATION/ PROJECT/ TEACHING APTITUDE

[PRHSC415]

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|--|------------------|
| Marks: 30 (MSE: 20 Viva + 5 Attd. + 5 Record) + 70 (ESE Pr: 6 Hrs) = 100 | Pass Marks: = 45 |
|--|------------------|

(Credits: 04, 120 Hours)**Guidelines to Examiners for**

End Semester Examination (ESE):

The evaluation of the dissertation will be done in 100 marks (70 marks + 30 marks of the session). The sessional component will be evaluated by the concerned supervisor.

The end term evaluation (70 marks) will be done by a board of examiners. The end term evaluation in 70 marks will include the literary and scientific presentation of the dissertation and the performance in the viva-voce.

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Participation in Internship programme with a reputed organization
- Application of Research technique in Data collection
- Report Presentation
- Presentation style
- Viva-voce

Course Objectives:

1. To develop research skills and scientific inquiry through independent investigations on a problem.

Course Outcomes:

On successful completion of this course, the student should know:

1. About conducting research with approved stages of research methodology in Home Science. A dissertation will enable student to further investigate and navigate different aspects and events of life through research.

PROJECT WORK

Each student has to submit three copies of hard-bound dissertation work (along with the raw data), duly forwarded by the HOD of the department concerned. The forwarded copies will be submitted to the Department of Home Science, Ranchi University, for evaluation (one month before the viva voce examination).

The paper may involve:

- (a) Laboratory research/ Field work/ Lab work related to the project.
- (b) Survey research, Case Study or any other type of applied research
- (c) One Large study/ Experiment or several studies/experiments, depending on the objectives of the research.
- (d) The writing of the dissertation must be in accordance with the Publication Manual of the American Psychological Association (APA) or any acceptable style and should be within 80 to 100 pages, including references and appendices.
- (e) Content must be typed in Font: Times New Roman with Line Spacing: 1.5 and Font Size 14 points.

Presentation of project work in the seminar on the assigned topic in the P.G. Department of Home Science, Ranchi University, Ranchi & open viva there on.

Topics: As decided by the Supervisor/Guide

Teaching Aptitude: Only selected candidates, in alternative to the Dissertation, may be provided duty to teach the assigned topics in selected colleges. The performance may be evaluated based on the organized feedback for the candidate.
