ST.TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Affiliated to Mahatma Gandhi University, Kottayam

CURRICULUM AND SYLLABI FOR THE PROGRAMME

B.Sc. HOMESCIENCE
Program Code: BHSC

Under Choice Based Credit and Semester System
(2023 Admission Onwards)

St. Teresa's College (*Autonomous*), Ernakulam

Department of Home Science

Board of Studies in Home Science (2021-2024)

Sl. No	Category	Name	Designation	Official Address
1	Chairperson (HOD)	Dr. Susan Cherian	Associate Professor & Head	Department of Home Science, St.Teresas's College, Ernakulam.
2	Faculty Members	Dr. Betty Rani Isaac	Associate Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt. Teresa Kuncheria	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Anu Joseph	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt. Rose Mary Francis	Associate Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Shilpa Jose	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Dhanya. N	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Leena Leon	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Rashmi H. Poojara	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Dr. Nisha Vikraman	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
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		Ms. Anu C S	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt. Surya M Kottaram	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt. Ani Thottan	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt. Bhavya E.P	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.
		Smt.Priyanka P.S	Assistant Professor	Department of Home Science, St.Teresas's College, Ernakulam.

3	Subject Experts- Outside MG University	Dr. Beela G.K	Professor	Dept. of Community Science, College of Agriculture, Vellayani, Thriuvananthapuram
		Dr. Kavitha Menon	Professor	Dept. of Food Science and Nutrition, Symbiosis International University, Pune.+
4	University Nominee	Dr. Sapna Dinesh	Assistant Professor	Dept. of Home Science, Mount Carmel College, Bangalore
5	Representative from Industry/ Corporate Sector/ Allied field related to placement	Smt. Roopa George	Managing Director	Baby Marine, Thopumpady, Ernakulam
6	Alumni Representative	Dr. Aswathy Sugunan	Associate Professor & Head	Dept. of Home Science, S.N College for Women, Kollam

PREFACE

The curriculum, which encompasses the totality of student experience, should ensure a collective and dedicated effort to birth an inspiring academic culture in a campus. It is this vision of quality knowledge, its production and transmission, that has fueled the Teresian quest for essential and elemental student development. St. Teresa‘s College has taken meticulous care in the conception of the new well-balanced curriculum by retaining the fundamental prerequisites mentioned by the University/Higher Education Council. With the constraints of a prescribed syllabus in mind, we have created an academic sanctuary, where a deeper access to knowledge is achievable to students and teachers as well.

The Syllabus restructuring of 2023 instigates opportunities of real-world learning to equip a modern scholar with the practicality of experience. As an autonomous institution under Mahatma Gandhi University, St. Teresa‘s College offers a significant number of Programmes with definite placement windows to the learners. Student knowledge and training across a range of subject areas is efficiently enriched by engaging them in work-based learning, as provided by the revised and restructured curriculum.

The indefatigable effort taken by the teachers in developing Programmes and Course outcomes is commendable. The blossoming of the cognitive and intellectual skills of the scholars, the initiation of a research mentality, and pragmatic skill sets to venture out confidently into a professional space, are the core off-shoots that are anticipated. The curriculum should equip the students to be educators themselves, with a voice that echoes global effectiveness.

I congratulate the efforts taken by the Principal Dr. Alphonsa Vijaya Joseph and her team for restructuring the syllabus in keeping with the latest demands in academia. We trust that the syllabus will transform minds to embark upon higher academic summits and thereby mould learners who will make significant contributions to the world. We look forward to sharing the outcomes of our restructured curriculum and the positive changes that would reshape the academic lives of all our scholars.

Dr. Sr. Vinitha
Manager

FOREWORD

The most significant characteristic of an autonomous college is its commitment tocurriculum renewal or revision. Academic autonomy has granted the college the freedom to fine tune the syllabus keeping in mind the changing needs of the new generation of students, the new educational scenario in the global context and incorporation of skill based curricula. Revision of the syllabus implies responsibility and accountability and this in turn leads to excellence in academics and proactive governance. Education in the current scenario throws up a multitude of challenges and the curricula and syllabi ought to reflect the paradigm shift that has occurred in the various disciplines.

A revision of the syllabus is implemented by modifying the curriculum after review to evaluate the effectiveness of the curriculum after it has been implemented and to reflect on what students did and did not get out of it. In line with the new Educational policy, a big educational reform can be effected by restructuring of syllabi to maintain a high level of quality in the standard of education that we impart.

The three themes under Higher Education relevant to policy initiative for restructuring of the curriculum i.e., integrating skill development in higher education, linking higher education to society and integration of new knowledge are considered with utmost importance during revision of the syllabus.

Outcome-Based Education emphasizes that the learning process is innovative, interactive and effective, where the main goal is student achievement at the end of the learning period. St. Teresa‘s College in its pursuit of imparting quality education has adopted Outcome Based Education (OBE) system that involves restructuring of curriculum, academic processes, teaching methodologies, assessment and evaluation systems in education to reflect the achievement of high order learning. It is a student-centric instruction model that focuses on measuring student performance through outcomes that include knowledge, skills and attitudes.

The revised syllabus and curriculum is the result of the combined efforts of the members of the Board of studies, curriculum expert committee and the syllabus committee who worked as a team to revise the syllabus and curriculum in the stipulated period. Active consultations were held with various stakeholders to elicit multiple perspectives in higher education which were incorporated in the new curriculum.

With sincere gratitude I acknowledge the instinct support and constant guidance extended by Rev. Dr. Sr. Vinitha, Provincial Superior and Manager, Rev. Sr. Emeline, Director, Dr. Sajimol Augustine M., Senior Administrator, Smt. Betty Joseph, Vice-Principal and Dr. Beena Job, Dean of self-financed programmes. I specially thank the team headed by Dr. Betty Rani Isaac, the Heads of the Departments and all the faculty members for their diligence, commitment and exceptional contribution towards this endeavour.

Prof. Alphonsa Vijaya Joseph
Principal

ACKNOWLEDGEMENT

True education is designed to guide students in learning a culture, molding their behavior and directing them towards their role in society. Evolving with the current times, teaching and learning has changed much, and innovative ideas are put into practice to make the experience meaningful and fruitful.

I take this opportunity to place on record, my sincere gratitude to all those who were part for restructuring and fine tuning the curriculum and syllabi for Bachelor‘s Programme in Home Science of St. Teresa‘s College (Autonomous), Ernakulam affiliated to Mahatma Gandhi University, Kottayam. Their relentless support and guidance made this syllabus restructuring of 2023, a success.

I express my sincere gratitude to Dr. Alphonsa Vijaya Joseph, Principal, Dr. Sr. Vinitha (Celine E.), Manager, Sr. Emeline, Director, Dr. Sajimol Augustine M., Senior Administrator and Smt. Betty Joseph, Vice Principal, members of the Board of Studies in Home Science for their sincere co-operation and guidance for completion of this work. I would also like to acknowledge with much appreciation Dr. Betty Rani Isaac and the members of the syllabus committee for the guidelines, valuable suggestions and expertise provided by them. I also express my gratitude to all professionals, academicians and other stakeholders who gave valuable suggestions.

My thanks and appreciation are due to the faculty members of the Department of Home Science for their untiring efforts for setting each course and the updation of the syllabus. I also appreciate the support rendered by Smt. Nimmi Jacob and Ms. Anu C.S., faculty members for editing and consolidating the final syllabus.

Dr. Susan Cherian
Chairperson
Board of Studies in Home Science

Content

PREAMBLE

Home Science has contributed a great deal towards national development by training students to take up leadership roles in extension and community outreach programme. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages and sustainable use of resources for human development are the hall marks of education in Home Science. As a discipline, Home Science integrates the ingredients of the sciences, social sciences and technology to facilitate the study of and enhance the quality of human life. Its approach is therefore inherently interdisciplinary.

Traditionally, Home Science has adopted an ecological approach in its curriculum that engages the student through teaching, research and extension. The education process in Home Science underscores the importance of the individual's dynamic relationship with his/her family, community and society as a whole, as well as with the resources in the environment. Higher education learning in Home Science subjects provides students the opportunity to sharpen their capacities with a sense of social responsibility. In contemporary times, Home Scientists promote capacity building of individuals and communities for social and economic empowerment. They train community women and youth from various strata of society for entrepreneurship.

Many Home Scientists have done exceptionally well as entrepreneurs themselves. They do not remain job seekers but have also become job creators. They gain and provide employment in research organizations, food and textile industries, dietetic practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies.

Keeping in view the growing aspirations of today's youth and the capacity of Home Science discipline to deliver, the present 3-year choice based credit system has been drawn up. Years of national and international experience in the field has contributed to the wisdom that all the five windows of opportunity that Home Science offers be opened, i.e. Food and

Nutrition, Human Development and Childhood Studies, Resource Management and Design Application, Development Communication and Extension and Fabric and Apparel Sciences. In this course, the students will learn the fundamental principles and foundations of all the five areas. They are expected to internalize the principle of a Home Scientist, that is, to give back to the community from which they draw, for sustainable development. This is a major contribution of Home Science in both developed and developing societies.

Outcome based education involves assessment and evaluation practices in education reflecting the attainment of expected learning and mastery in the programme. It is a systematic way to determine if a programme has achieved its goal. This approach of learning makes the student an active learner, the teacher a good facilitator and together they lay the foundation for life-long learning. The process includes framing of specific course outcomes at various appropriate levels of taxonomy, mapping the course outcomes of each course with the Programme Specific Outcomes and finally calculating the course attainment based on the marks scored by the student in both the Internal and External assessments.

PROGRAMME OUTCOMES (PO)

On completion of the under graduate programme from St.Teresa's College (Autonomous) Ernakulam, Students should be able to demonstrate the programme outcomes listed below:

PO 1. ***Disciplinary knowledge***

- Demonstrate a mastery of the fundamental knowledge and skills required in the discipline to function effectively as an entry-level professional in the field.

PO 2. ***Scientific Temper***

- Experiment with new approaches, challenge existing knowledge boundaries and take informed action to solve problems related to society.
- Identify, define, and deal with problems through logical, analytical and critical thinking acquired from different domains of knowledge

PO 3. ***Research and Digital Competence***

- Develop a research culture for lifelong learning and demonstrate competency in creating new knowledge.
- Analyze and choose from available data and information sources to communicate, collaborate and network through a range of digital media.

PO 4. ***Communication Skills***

- Develop language proficiency through interactions embedded in meaningful contexts.
- Demonstrate communicative competence particularly using technology in social and global environments.

PO 5. ***Leadership, Teamwork and Interpersonal Skills***

- Function effectively both as leader and/or member of a team.
- Collaborate and interact effectively with others.

PO 6. ***Moral & Ethical Awareness and Social Responsibility***

- Demonstrate social and national responsibility.
- Engage in activities that contribute to the betterment of society, with a preferential option for the economically challenged and the marginalized.

PROGRAM SPECIFIC OUTCOMES (PSOs)

On completion of the B.Sc Home Science programme, Students should be able to demonstrate the programme outcomes listed below:

PSO1: Identify the significance of multidisciplinary subjects in Home Science. (Understand)

PSO2: Explain the domains of child development and relate the physiological basis of nutrition through life cycle. (Understand**)**

PSO3: Integrate scientific knowledge to design in the area of fashion, interior space planning and resource management to enhance entrepreneurial and career skills (Create)

PSO4: Design extension education programmes by different communication technologies. (Create)

PSO5: Apply practical skills with respect to all related aspects of Home Science. (Apply)

ELIGIBILITY

Candidates are required to have passed the plus two or equivalent examination or an examination recognized by the University as equivalent thereto.

PROGRAMME DESIGN

B.Sc in Home Science includes

(a) Common Courses, (b) Core Courses, (c) Complementary Courses,

(d) Choice based core courses (e) Open Courses and (f) Project work.

No course shall carry more than 4 credits. The student shall select any one open course in Semester V offered by any Department other than their parent Department including the Physical Education Department, depending on the availability of infrastructure facilities, in the institution. The number of courses for the restructured programme should contain 12 compulsory core courses,1 open course,1 choice based course from the frontier area of the core courses, 6 core practicals,1 project in the area of core, 8 complementary courses, 4 complementary practicals otherwise specified, from the relevant subjects for complementing the core of study. There should be 10 common courses, or otherwise specified, which includes the first and second language of study.

PROGRAMME STRUCTURE

A	Programme Duration	6 Semesters
B	Total Credits required for successful completion of the Programme	120
C	Credits required from Common Course I	22
D	Credits required from Common Course II	16
E	Credits required from Core course and Complementary courses including Project	79
F	Credits required from Open Course	3

COURSES

The programme (Model I) consists of common courses with 38 credits, core course, Choice based course and complementary courses with 79 credits and open course with 3 credits.

SCHEME OF COURSES

The different types of courses and its number and credits are as follows:

Courses	No.	Credits
Common courses	10	38
Core Theory + Practical	12+6	46
Choice based core courses	1	3
Project	1	2
Open course	1	3
Complementary Theory + Practical	8+4	28
Grand Total	**43**	**120**

SCHEME OF DISTRIBUTION OF INSTRUCTIONAL HOURS FOR CORE COURSES

Semester	Model I	
	Theory	**Practical**
First	2	2
Second	2	2
Third	3	2
Fourth	3	2
Fifth	16	9
Sixth	15	10

COURSE CODE FORMAT

The programme is coded according to the following criteria.

A. The first letter plus second letter/any letter from the programme ie., **HS**

B. One digit to indicate the semester. i.e., **HS1 (Home Science, 1st semester)**

C. One letter from the type of courses such as, **A** for common course, **B** for Complementary course, **C** for Core course, **D** for Open course, ie.., **HS1C** (Home Science, 1st semester Core course) **PR** for project and **I** for Internship.

D. Two digits to indicate the course number. ie.., **HS1C01(**Home Science, 1st semester, Core course, course number is 01)

E. The letter **B** to indicate Bachelors Programme.

F. **HS1C01B** (Home Science, 1st semester, Core course, courses number 01, and **B** for bachelors Programme)

G. 23 to indicate the year. ie.., **HS1C01B23**

H. The letter **P** denotes practical – it should come after the code letter for the course ie…,C**P** (core practical- eg.HS2CP01B23)/B**P**(complementary practical-eg. HS2BP01B23)

I. The letter **PR** denotes project ie…Home Science Core Project HS6PRB23

J. The letter **I** denotes internship– It should come after the code letter for the course ie…,C**I** (Core Internship- eg. HS2CI01B23)

DURATION OF PROGRAMME

* The duration of UG Programmes shall be **6 Semesters**.
* A student may be permitted to complete the programme, on valid reasons, within a period of 12 continuous semesters from the date of commencement of the first semester of the programme.
* **Attendance:** Students having a minimum of 75% average attendance for all the courses only can register for the examination.

DETAILED PROGRAMME STRUCTURE

B.Sc. HOME SCIENCE

Semester	Course type	Course code	Course title	Hrs/week	Credits	Max Marks	
						ISA	ESA
I	Common courseI	EN1A01B23	Fine-Tune Your English	5	4	20	80
		EN1A02B23	Pearls From The Deep	4	3	20	80
	Common course II	MA1A01B23	Kathasahithyam	4	4	20	80
		HN1A01B23	Kahani Aur Upanyas			20	80
		FR1A01B23	French Language and communicative skills – I			20	80
	Complementary course I	CH1B01B23	Basic Theoretical and Analytical Chemistry	2	2	15	60
	Complementary course I Practical	CH2BP01B23	Volumetric Analysis	2	-	-	-
	Complementary course II	ZY1B01B23	Non Chordate Diversity	2	2	15	60
	Complementary course II Practical	ZY2BP01B23	Non Chordate and Chordate Diversity Practical	2	-	-	-
	Core Course	HS1C01B23	Methodology of Home Science and Food Science	2	2	15	60
	Core Practical	HS2CP01B23	Food Science, Physiology and Microbiology Practical	2	-	-	-
	Total			25	17		

Semester	Course type	Course code	Course title	Hrs / wee	Credits	Max Marks	
						ISA	ESA
II	Common courseI	EN2A03B23	Issues That Matter	5	4	20	80
		EN2A04B23	Savouring The Classics	4	3	20	80
	Common course II	MA2A03B23	Kavitha	4	4	20	80
		HN2A03B23	Kavitha Vyakaran Aur Anuvad			20	80
		FR2A03B23	French Language and Communicative Skills – II			20	80
	Complementary course I	CH2B01B23	Basic Organic Chemistry	2	2	15	60
	Complementary course I Practical	CH2BP01B23	Volumetric Analysis practical	2	2	10	40
	Complementary course II	ZY2B01B23	Chordate Diversity	2	2	15	60
	Complementary course II Practical	ZY2BP01B23	Non Chordate and Chordate Diversity Practical	2	2	10	40
	Core Course	HS2C02B23	Human Physiology and Microbiology	2	2	15	60
	Core Practical	HS2CP01B23	Food Science, Physiology and Microbiology Practical	2	2	10	40
	Total			25	23		

Semester	Course type	Course code	Course title	Hrs/week	Credits	Max Marks	
						ISA	ESA
III	Common course I	EN3A05B23	Literature and/as Identity	5	4	20	80
	Common course II	MA3A05B23	Drishyakalasahityam	5	4	20	80
		HN3A05B23	Naatak Aur Lambi Kavita			20	80
		FR3A05B23	An Advanced Course In French – I			20	80
	Complementary course I	CH3B01B23	Inorganic and Organic Chemistry	3	3	15	60
	Complementary course I Practical	CH4BP01B23	Organic Chemistry Practical(Micro)	2	-	-	-
	Complementary course II	ZY3B01B23	Physiology and Immunology	3	3	15	60
	Complementary course II Practical	ZY4BP01B23	Physiology, Immunology and Applied Zoology Practical	2	-	-	-
	Core Course	HS3C03B23	Human Development	3	3	15	60
	Core Practical	HS4CP02B23	Human Development and Family Dynamics Practical	2	-	-	-
	Total			25	17		

Semester	Course type	Course code	Course title	Hrs / week	Credits	Max Marks	
						ISA	ESA
IV	Common course I	EN4A06B23	Illuminations	5	4	20	80
	Common course II	MA4A06B23	Malayala Gadhyarachanakal	5	4	20	80
		HN4A06B23	Gadya Aur Ekanki			20	80
		FR4A06B23	An Advanced Course in French –II			20	80
	Complementary course I	CH4B01B23	Advanced Bio-Organic Chemistry	3	3	15	60
	Complementary course I Practical	CH4BP01B23	Organic Chemistry Practical (Micro)	2	2	10	40
	Complementary course II	ZY4B01B23	Applied Zoology	3	3	15	60
	Complementary course II Practical	ZY4BP01B23	Physiology, Immunology and Applied Zoology Practical	2	2	10	40
	Core Course	HS4C04B23	Family Dynamics	3	3	15	60
	Core Practical	HS4CP02B23	Human Development and Family Dynamics Practical	2	2	10	40
	Total			25	23		

Semester	Course type	Course code	Course title	Hrs/week	Credits	Max Marks	
						ISA	ESA
V	Core Course	HS5C05B23	Environmental Communication And Human Rights	3	3	15	60
		HS5C06B23	Human Nutrition	3	3	15	60
		HS5C07B23	Textile Science	3	3	15	60
		HS5C08B23	Interior Decoration	3	3	15	60
	Open Course	OFFERED BY OTHER DEPARTMENTS		4	3	20	80
	Core Practical	HS6CP03B23	Environmental Communication and Extension Education Practical	2	-	-	-
		HS6CP04B23	Human Nutrition and Dietetics Practical	2	-	-	-
		HS6CP05B23	Textile Science, Fashion Designing and Apparel Production Practical	2	-	-	-
		HS6CP06B23	Interior Decoration and Resource Management Practical	3	-	-	-
	Total			25	15		

Semester	Course type	Course code	Course title	Hrs / wee	Credits	Max Marks	
						ISA	ESA
VI	Core Course	HS6C09B23	Dynamics of Extension	3	3	15	60
		HS6C10B123	Dietetics	3	3	15	60
		HS6C11B23	Fashion Designing and Apparel Production	3	3	15	60
		HS6C12B23	Family Resource Management	3	3	15	60
		HS6C13AB23 (Choice Based Course)	Women Empowerment	3	3	20	80
	Core Practical	HS6CP03B23	Environmental Communication and Extension Education Practical	2	2	10	40
		HS6CP04B23	Human Nutrition And Dietetics Practical	3	2	10	40
		HS6CP05B23	Textile Science, Fashion Designing and Apparel Production Practical	3	2	10	40
		HS6CP06B23	Interior Decoration and Resource Management Practical	2	2	10	40
	Project	HS6PRB23	PROJECT	-	2	20	80
	Total			25	25		

Total credits = 120

COURSES

SCHEME- CORE COURSES

Course Code	Title of the Course	Category	Hrs per week	Credits
SEMESTER-1				
HS1C01B23	Methodology of Home Science and Food Science	Core	2	2
HS2CP01B23	Food Science, Physiology and Microbiology Practical	Core	2	-
	Total Credits			**2**
SEMESTER-2				
HS2C02B23	Human Physiology and Microbiology	Core	2	2
HS2CP01B23	Food Science, Physiology and Microbiology Practical	Core	2	2
	Total Credits			**4**
SEMESTER-3				
HS3C03B23	Human Development	Core	3	3
HS4CP02B23	Human Development and Family Dynamics Practical	Core	2	-
	Total credits			**3**

SEMESTER-4				
HS4C04B23	Family Dynamics	Core	3	3
HS4CP02B23	Human Development and Family Dynamics Practical	Core	2	2
	Total Credits			**5**
SEMESTER-5				
HS5C05B23	Environmental Communication and HumanRights	Core	3	3
HS5C06B23	Human Nutrition	Core	3	3
HS5C07B123	Textile Science	Core	3	3
HS5C08B23	Interior Decoration	Core	3	3
Offered by other Departments	OPEN COURSE	Open	4	3
HS6CP03B23	Environmental Communication and ExtensionEducation Practical	Core	2	-
HS6CP04B23	Human Nutrition and Dietetics Practical	Core	2	-
HS6CP05B23	Textile Science and Fashion Designing Practical	Core	2	-
HS6CP06B23	Interior Decoration and Resource ManagementPractical	Core	3	-
	Total Credits			**15**

SEMESTER-6				
HS6C09B23	Dynamics of Extension	Core	3	3
HS6C10B23	Dietetics	Core	3	3
HS6C11B23	Fashion Designing and Apparel Production	Core	3	3
HS6C12B23	Family Resource Management	Core	3	3
HS6C13AB23	Women Empowerment : Choice Based Course	Core	3	3
HS6CP03B23	Environmental Communication and ExtensionEducation Practical	Core	2	2
HS6CP04B23	Human Nutrition and Dietetics Practical	Core	3	2
HS6CP05B23	Textile Science and Fashion Designing Practical	Core	3	2
HS6CP06B23	Interior Decoration and Resource ManagementPractical	Core	2	2
HS6PRB23	Project	Core	-	2
	Total Credits			**25**

SCHEME - OPEN COURSES

Sl. No	Semester	Course code	Title of course
1.	V	HS5D01AB23	Life Skill Strategies and Techniques
2.	V	HS5D01BB23	Interior Decoration and Related Arts
3.	V	HS5D01CB23	Nutrition for Wellness
4.	V	HS5D01DB23	Self -Empowerment Skills

SCHEME – CHOICE BASED CORE COURSES

Sl. No.	Semester	Course code	Title of course
1.	VI	HS6C13AB23	Women Empowerment
2.	VI	HS6C13BB23	Surface Ornamentation Techniques
3.	VI	HS6C13CB23	Early Childhood Care and Intervention
4	VI	HS6C13DB23	Gender Studies

EXAMINATIONS

The external theory examination of all semesters shall be conducted by the College at the end of each semester. Internal evaluation is to be done by continuous assessment

Examinations have two parts: Internal or In-Semester Assessment (ISA) & External or End–Semester Assessment (ESA). The ratio between ISA and ESA shall be 1:4. Both internal and external marks are to be rounded to the next integer.

MARKS DISTRIBUTION FOR END-SEMESTER ASSESSMENT(ESA) AND IN-SEMESTER ASSESSMENT (ISA)

Marks distribution for ESA and ISA and the components for internal evaluation with their marks are shown below:

Components of the internal evaluation and their marks are as below.

For all courses without practical

a) End–Semester Assessment (ESA): 80 marks

b) In-Semester Assessment (ISA): 20 marks

ISA – Theory	**Marks**
Attendance	5
Assignment*	5
Test papers (2 x 5)	10
Total	**20**

(i) *Assignment: for core papers (III & IV Semester), the student must undertake a Project/ Field work/ Industrial Visit/ Internship and the report of the same should be submitted for evaluation. The marks awarded to this can be considered for assignment of any one core paper.

(ii)* Assignment (project/field work/ Industrial Visit) for Semester I & II- to be given by language teachers, report of which has to be submitted and for those programmes which do not have additional language the students must undertake the assignment (project/field work/ Industrial Visit) for any one core paper.

Attendance:

Percentage of Attendance	**Marks**
90% or above	5
Between 85 and below 90	4
Between 80 and below 85	3
Above 75 and below 80	2
75 %	1
< 75	0

For all courses with practical

a) End–Semester Assessment (ESA): 60 marks

b) In-Semester Assessment (ISA): 15 marks

ISA – Theory	**Marks**
Attendance	5
Assignment	2
Test papers (2 x 4)	8
Total	**15**

FOR ALL PRACTICAL PAPERS (conducted only at the end of even semesters):

(a) End–Semester Assessment (ESA): 40

(b) In-Semester Assessment (ISA): 10

ISA components	Marks
Attendance	2
Test paper (1 x 4)	4
Record*	4
Total	10

* Marks awarded for Record should be related to number of experiments recorded.

FOR PROJECTS/ INDUSTRIAL VISIT*

(a) End–Semester Assessment (ESA): 80

(b) In-Semester Assessment (ISA): 20

Components of Project/I.V. and Viva – ESA	Marks
Dissertation (External)	50
Project Viva-voce (External)	30
Total	**80**

* Projects which are preferably socially relevant/ industry oriented/ research oriented are to be undertaken by the students and the reports have to be submitted.

All the four components of the ISA are mandatory

Components of Project/ I.V. – ISA	Marks
Punctuality	5
Experimentation / Data Collection	5
Knowledge	5
Report	5
Total	**20**

IN-SEMESTER ASSESSMENT - TEST PAPERS

PRACTICAL EXAMINATION

Two internal test- papers are to be attended in each semester for each paper. The evaluations of all components are to be published and are to be acknowledged by the students. All documents of internal assessments are to be kept in the college for two years. The responsibility of evaluating internal assessment is vested on the teachers who teach the course.

END-SEMESTER ASSESSMENT

The End-Semester examination of all courses shall be conducted by the College on the close of each semester. For reappearance/ improvement, students can appear along with the next batch.

Pattern of Question Paper:

A question paper shall be a judicious mix of short answer type, short essay type / problem solving type and long essay type questions.

For each course the End-semester Assessment is of 3 hours duration. The question paper has 3 parts. Part A contains 12 short answer type questions of which 10 are to be answered

.Part B contains 9 short essay questions of which 6 are to be answered. Part C has 4 long essay questions of which 2 are to be answered.

Part	**No. of Questions**	**No. of questions to be answered**	**Marks (for courses with practical)**	**Marks (for courses without practical)**
A(Short Answer type)	12	10	10 x 1 = 10	10 x 2 = 20
B(Short Essay)	9	6	6 x 5 = 30	6 x 5 = 30
C(Long Essay)	4	2	2 x 10 =20	2 x 15 = 30

CONDUCT OF PRACTICAL EXAMINATIONS

PRACTICAL EXAMINATION

Practical examinations will be conducted only at the end of even semesters for all programmes.

PATTERN OF QUESTION PAPERS

Pattern of questions for End Semester assessment of practical papers will be decided by the concerned Board of Studies of practical examinations.

GRADES

A 10-point scale based on the total percentage of marks (ISA + ESA) for all courses (theory, practical, project).

% of marks	Grade	Grade point
Equal to 95 and above	S - Outstanding	10
Equal to 85 and < 95	A^+ - Excellent	9
Equal to 75 and < 85	A - Very good	8
Equal to 65 and < 75	B^+ - Good	7
Equal to 55 and < 65	B - Above average	6
Equal to 45 and < 55	C - Satisfactory	5
Equal to 35 and < 45	D – Pass	4
Below 35	F - Failure	0
	Ab - Absent	0

PASS CRITERIA:

- A separate minimum of 30% marks each for ISA and ESA (for both theory and practical) and aggregate minimum of 35% is required for a pass in a course.
- For a pass in a programme, a separate minimum of Grade D is required for all the individual courses.
- If a candidate secures F Grade for any one of the courses in a semester/programme, only F grade will be awarded for that semester/programme until she improves this to D Grade or above within the permitted period.
- Students who complete the programme with D grade will have one betterment chance within 12 months, immediately after the publication of the result of the whole programme.

CREDIT POINT AND CREDIT POINT AVERAGE

Credit Point (CP) of a course is calculated:CP = C × GP

C = Credit; GP = Grade point

Semester Credit Point Average (SCPA) of a semester:

SCPA = TCP/TC

TCP = Total Credit Point of that semester

TC = Total Credit of that semester

Cumulative Credit Point Average (CCPA) is calculated:

CCPA = TCP/TC

CREDIT POINT AVERAGE (CPA)

CPA of different category of courses viz. Common courses, Complementary courses,Core courses etc. are calculated:

CPA = TCP/TC

TCP = Total Credit Point of a category of course

TC = Total Credit of that category of course

Grades for the different courses, semesters and overall programme are given based onthe corresponding CPA

CPA	Grade
Equal to 9.5 and above	S – Outstanding
Equal to 8.5 and < 9.5	A^+ - Excellent
Equal to 7.5 and <8.5	A - Very good
Equal to 6.5 and <7.5	B^+ - Good
Equal to 5.5 and <6.5	B - Above average
Equal to 4.5 and <5.5	C – Satisfactory
Equal to 4 and <4.5	D – Pass
Below 4	F – Failure

- For reappearance/improvement of I, II, III & IV semesters, candidate have to appear along with the next batch.
- There will be supplementary exams for V semester in the respective academic year.
- Notionally registered candidates can also apply for the said supplementary examinations.
- A student who registers her name for the end semester assessment for a semester will be eligible for promotion to the next semester.
- A student who has completed the entire curriculum requirement, but could not register for the semester examination can register notionally, for getting eligibility for promotion to the next semester.
- A candidate who has not secured minimum marks/credits in ISA can re-do the same registering along with the ESA for the same semester, subsequently
- There shall be no improvement for internal evaluation.
- All rules and regulations are subject to change as and when modified by Mahatma Gandhi University to which St. Teresa‘s College (Autonomous) is affiliated.

SYLLABI FOR CORE COURSES

SEMESTER I – CORE COURSE

HS1C01B23 : METHODOLOGY OF HOME SCIENCE AND FOOD SCIENCE

Credits: 2

Hours per week: 2 **Total Lecture Hours: 36**

Course overview and Context:

Years of national and international experience in the field of Home Science has contributed to the wisdom that all the five windows of opportunity that Home Science offers be opened, i.e. Food and Nutrition, Human Development and Childhood Studies, Resource Management and Design Application, Development Communication and Extension and Fabric and Apparel Sciences. In this course, the students will learn the fundamental principles and foundations of all the five areas. They are expected to internalize the principle of a Home Scientist, that is, to give back to the community from which they draw, for sustainable development.

This course also aims to impart knowledge of various areas related to Food Science, such as structure, composition, products, nutritional contribution, selection and changes during cooking of the various food groups and familiarize the students about the cooking and preservation techniques.

This course familiarize the students about the employment opportunities of each branch of Home Science. It also emphasizes the role of Home Science in Women‘s empowerment.

Course outcomes

CO1: Explain the interdisciplinary approach of Home Science and relevance in national development(Understand)

CO2:.Describe the concepts of food groups, balanced diet and methods of food preparation (Understand)

CO3: Differentiate the nutritional significance of food commodities for improving human nutrition and health.(Analyse)

CO4: Summarize the emerging technologies in processing, packaging and labelling of foods.(Evaluate)

Course Content

Module 1: Overview of Home Science (2hours)

History of Home Science, Disciplines of Home Science and their Scope (Educational and Vocational), Careers Opportunities, Interdisciplinary approach of Home Science, Role of Home Science in National Development.Role of Home Science in Women's empowerment.

Module 2: Food Groups and Food Preparation Methods (6 hours)

Food groups: Functions of foods, food groups (Basic food group system – (ICMR), my healthy plate for the day.

Food preparation: Objectives, Methods - moist heat, dry heat, microwave cooking, merits and demerits of various methods.Recent methods of cooking - Ohmic cooking and induction cooking

Emerging trends in foods: Convenience foods, genetically modified foods, organic foods, functional foods, pre and probiotics.

Module 3: Study of Plant Foods (10 hours)

Cereals- Basic structure of a cereal grain, composition and nutritive value, common cereals and millets in India. Processing -parboiling - merits and demerits. Cereal cookery- cereal protein - gluten formation, cereal starch -structure, effect of cooking – dry and moist heat.

Pulses–Composition and nutritive value, digestibility, wet milling and dry milling, processing, germination and fermentation, advantages, Anti-nutritional factors (trypsin inhibitors, lathyrism), Common pulses used in India.

Fruits and Vegetables

Vegetables - Classification, nutritive value, selection, vegetable cookery- loss of nutrients during cooking, conservation of nutrients, pigments, effect of acid and alkali, Enzymatic browning- methods of prevention

Fruits – Nutritive and antioxidant value, pigments, flavour components, changes in fruits during ripening, storage of fruits.

Nuts and oil seeds - Nutritive value, types, rancidity in oils - types, factors leading to rancidity, prevention, hydrogenation of fats.

Sugars and related products - Stages of sugar cookery and its applications, artificial sweeteners.

Spices and condiments - Major spices and condiments of India, Health benefits.

Module 4: Study of Animal Foods (10hours)

Milk and milk products - Composition and nutritive value, pasteurization and homogenization – advantages, types of milk and milk products.

Eggs - Structure and nutritive value, evaluation of egg quality, deterioration in egg quality during storage, egg white foam -stages, factors affecting foam formation, culinary role of eggs, designer eggs.

Meat - Structure, composition and nutritive value, post mortem changes - rigor mortis, effect of cooking on meat, types of meat and products.

Fish - Classification, nutritive value, selection, fish spoilage and preservation

Module 5: Food preservation, Packaging and Labelling (8 hours)

Principles, objectives and methods of food preservation- low temperature, high temperature, preservatives, dehydration, irradiation.

Functions of packaging, materials used,

Food labelling, Front -of -pack (FOP) labelling, Requisites for labelling.

References

1. Adebo O., Chinma C., Obadina A., Soares A. , Panda S., Ren-You Gan (2023), Indigenous Fermented Foods for the Tropics,1st Edition , Elsevier Publication.
2. Benion M. (2010), Introductory Foods, 13 th Ed, Prentice Hall, USA.
3. Platt G.C. (2017), Food Science and Technology, John Wiley and Sons,U.S.A
4. ICMR (2017), Indian Food Composition Tables Published by National Institute of Nutrition, Hyderabad.
5. Manay N.S. and Shadaksharaswamy M. (2021). Food Facts and Principles, 4th
6. Edition. New Age International (P) Ltd,New Delhi.
7. Paul P.C. and Palmer H.H.(2000),Food-Theory nd Applications,John Wiley and Sons,New
8. York,Revised ed.
9. Srilakshmi B. (2018), Food Science,.7 th Edition, New Age International (P) Ltd, New Delhi.
10. Chandrasekhar U. (2002), Food Science and its Applications in Indian Cookery, Phoenix Publishing House, New Delhi
11. Vickie A.V.and Elizabeth,W.C(2005), Essentials of Food Science,2 nd edition,Springer,U.K

MODEL QUESTION PAPER
(with practical)
B.Sc. DEGREE(C.B.C.S) EXAMINATION……

SEMESTER 1 - CORE COURSE

HS1B01B18 - METHODOLOGY OF HOME SCIENCE AND FOOD SCIENCE

Time: 3 hours Maximum marks: 60

Part A
(Answer any ten questions. Each question carries 1 mark)

Qn.No.	Questions	CO	Level of Question
1.	Name any two important institutions offering Home Science education in India.	1	R
2.	State any two objectives of steaming.	1	U
3.	Define convenient foods.	2	U
4.	State the importance of gluten in baking.	3	U
5.	Examine the health problem due to Trypsin Inhibitor.	3	A
6.	List the pigments present in fruits and vegetables.	2	R
7.	Give two examples of artificial sweeteners.	2	U
8.	Discuss any two advantages of homogenization.	3	U
9.	What are designer eggs?	2	U
10.	Define rigor mortis.	2	U
11.	What is Dehydrofreezing?	2	U
12.	Comment on the importance of Front of Pack labelling.	4	E

(10 x 1 = 10 marks)

Part B

(Answer any six questions. Each question carries 5 marks)

Qn.No	Questions	CO	Level of Question
13.	Identify the importance of Home Science education as a means of women empowerment.	1	U
14.	Explain the principle of microwave cooking and mention its merits and demerits.	2	R
15.	Discuss the merits and demerits of genetically modified foods	2	U
16.	What is rancidity? Mention the types and factors affecting rancidity.	3	A
17.	Comment on the benefits of germinated foods.	3	U

18.	Discuss on the loss of nutrients in vegetables during cooking. Identify effective methods of prevention.	**3**	**A**
19.	Describe the different stages of egg white foam formation.	**3**	**U**
20.	Express the nutritive contribution of meat.	**3**	**U**
21.	Recall the principles and functions of food preservation.	**4**	**E**

(6 x 5 = 30 marks)

Part C

(Answer any two questions. Each question carries 10 marks)

Qn.No.	Questions	CO	Level of Question
22.	Discuss the different stages of sugar cookery and its applications.	**2**	**U**
23.	Explain fruits under the following headings : a) Nutritive value b)Flavor omponents c) Changes during ripening.	**2**	**U**
24.	llustrate the structure of an egg and explain its nutritive value.	**3**	**A**
25.	lain the importance of nutrition labelling to the consumer. Show the delines for nutrition labelling.	**4**	**E**

(2 x 10 = 20 marks)

CO: Course Outcomes

Level: R – Remember, U – Understand, Ap- Apply, An- Analyze, E- Evaluate, C- Create

SEMESTER II – CORE COURSE
HS2C02B23: HUMAN PHYSIOLOGY AND MICROBIOLOGY

Credits:2
Hours per week: 2 **Total Lecture Hours: 36**

Course overview and Context:

Human physiology is the science of the mechanical, physical, and biochemical functions of human beings, the organs in their body and the cells that comprise these organs. Microbiology is important to food safety, production, processing, preservation, and storage.

This course seeks to give a clear understanding about the basic concepts of human physiology and the essentials of microbiology.

Course Outcomes

CO1: Discuss the fundamental concepts in Physiology (Understand)

CO2: Describe the integrated functions of the various systems of the human body. (Understand)

CO3: Identify the morphology of microorganisms, their economic importance and factors controlling their growth and multiplication. (Understand).

CO4: Relate the sources of microbial infections to defense mechanisms of the body and immunity

Course Content:

Human Physiology

Module 1: Basic aspects of Physiology and Blood (5 hours)

Cell as a unit of the body, Cell organelles and their functions, Blood-Composition and functions, Haemoglobin, Coagulation of blood and Blood groups.

Module 2: Cardiovascular and Respiratory System (7 hours)

Structure of heart and blood vessels, Special junctional tissues of the heart, Systemic, pulmonary, coronary and portal circulation, Properties of cardiac muscles, cardiac cycle, cardiac output, blood pressure and hypertension, Structure of the respiratory system, Functions of the organs of respiratory system, Physiology of transport and exchange of oxygen and carbon dioxide, lung volumes and capacities, regulation of respiration.

Module 3: Digestive, Excretory and Reproductive System (8 hours)

Structure and function of major organs of the digestive system, digestion and absorption of food. Structure and functions of kidney and nephron, formation of urine, composition of urine, role of kidneys in homeostasis. Structure and functions of male and female reproductive system, menarche, physiology of pregnancy and lactation, menopause.

Microbiology

Module 4: Basic Concepts of Microbiology (8 hours)

Brief history of microbiology, important micro-organisms and their economic importance (Bacteria, fungi and yeast) Culture of micro organisms, Nutritional requirements, types of culture media.

Sterilization- heat, light, radiation, desiccation, filtration. Disinfection acid and alkalies, salts, halogens ,phenols, dyes, oxidising agents, alcohols. Factors affecting the growth of micro-organisms, growth characteristics, spore formation, gram positive and gram negative micro-organisms.

Module 5: Infection, Resistance and Immunity **(**8 hours)

Sources of micro-organisms, transmission of infection, bacterial infections in man-Typhoid, Pneumonia, Viral infections – Hepatitis, AIDS.

Natural defenses of the body—primary and secondary defense mechanisms. Immunity types, Immunization followed for various diseases.

Nutrition for immunity

Contamination of food,food borne disease outbreak, factors affecting Food spoilage, foodborne infections and intoxications , (bacterial) - Salmonella food poisoning, Staphylococcal food poisoning, Botulism.

References

1. Best C.H, Taylor.(1989). The Human Body. National Book depot. Mumbai, India.
2. Bijlani R.L. (1995). Understanding Medical Physiology. Jaypee Brothers Medical (P) Ltd, New Delhi, India.

3. Winwood.(1988).Sear's Anatomy and Physiology for nurses. Edward Arnold Publishers. London
4. Wilson. (1989).Anatomy and Physiology in Health and Illness. Churchill Livingstone, Edinburgh.
5. Chatterjee C.C. (1988). Text book of Medical Physiology. W.B, London.
6. Pearce Evelyn. (1992). Anatomy and Physiology for Nurses. Faber & Faber Ltd London.
7. Vidya Ratan. (2004) .Handbook of Human Physiology. 7th Edition. Jaypee Brothers Medical Publishers (P) Ltd .New Delhi.
8. Joshua A.K. (1994). Microbiology. Popular Book Depot Publishers.
9. Anathanarayan R.and Panicker C.K.J. (2009). Text book of Microbiology. 8th edition. Universities Press (India)Pvt. Ltd. New Delhi.
10. James M.Jay.(1986) Modern Food Microbiology. 3rd edition.Van Nostrand. New York.
11. FrazierW.C and Westhoff D.C.(2008). Food Microbiology. 1st edition. CBS Publishers, New York.

I & II SEMESTER - CORE PRACTICAL
HS2CP01B23 : FOOD SCIENCE, PHYSIOLOGY AND MICROBIOLOGY PRACTICAL

Credit: 2

Hours per week: 2 **Total hours: 72**

Course Overview and Context

This practical course is aimed to generate knowledge about foods through experiments, with the goal of ensuring the availability of safe, nutritious, appealing food, with minimum environmental impact, for the benefit of all people.

With this special training in the practical aspects of food Science, physiology and microbiology many exciting and productive careers with a wide range of employment opportunities exist for the trained students.

Course Outcomes

CO1: Identify the composition and properties of foods, the physical and chemical changes of food components and its application in food preparation (Understand)

CO2: Apply the principles and techniques of food preservation.(Apply)

CO3: Interpret various aspects of physiology (Understand)

CO4: Identify and differentiate the morphological characteristics of the various micro - organisms (Analyse).

Course Content:

Food Science (36 hours)

1. Grouping of foods
2. Stages of sugar cookery
3. Evaluation of gluten content in a flour
4. Components of an egg by weight
5. Stages of egg white foam formation
6. Changes of meat during cooking

7. Effect of cooking on vegetable pigments
8. Methods to prevent enzymatic browning in fruits
9. Non enzymatic browning in foods
10. Food preservation techniques

Physiology and Microbiology (36 hours)

1. Estimating haemoglobin content of blood (Using Haemocytometer)
2. Determination of blood pressure using Sphygmomanometer.
3. Determination of Blood Group and Rh factor.
4. Case study of Iron deficiency Anemia, investigations and diagnosis.
5. Interpretation of a blood report for biochemical parameters
6. Demonstration of procedures of clinical examination to see for pallor, jaundice, edema and dehydration and their importance.
7. Demonstration and Hands on Training-Basic First aid procedures, CPR, Burns ·
8. Preparation of a project on Menstrual Hygiene/Preparation of a project on Antenatal Care for women ·
9. Identification of microorganisms in fermented foods.
10. Identification of spoilage microbes in food.
11. Identification of microorganisms by gram staining.

SEMESTER III- CORE COURSE

HS3C03B23 – HUMAN DEVELOPMENT

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context

Three broad goals guide the study of Child Development: the description, explanation and optimization of development. Human development is an interdisciplinary field devoted to the study of human constancy and change from conception upto old age.

Students develop a strong theoretical foundation which in turn will help develop the requisite skills for jobs related to early intervention and identification of developmental delays, remediation of learning disability and in the field of child welfare.

Students develop an understanding of human values and laws pertaining to gender equity.

Course Outcomes:

CO1: Interpret the stages of growth and development of children using different methods of child study (understand)

CO2: Explain prenatal stimulation and assess the sensory capacities and reflexes in a newborn. (Analyze)

CO3: Identify developmental delays, learning disability and develop strategies for early stimulation and intervention to deal with delayed developments in children. (Apply)

CO4: Critically examine the problems faced by children in distress. (Apply)

Course Content:

Module I: Introduction to Child Development (12 hours)

• Definition, Significance of Child Development, Scope of Child Development in contemporary India.

• Domains, Stages of Child Development

• Principles of Growth and Development

• Factors influencing development: Nature versus Nurture

• Methods of Child Study: Longitudinal and Cross- sectional Methods

• Methods of data collection: Interviews, Observations, Experimental research, Surveys, Case studies, Projective Techniques

Module II: Prenatal development and Neonate (12 hours)

• Prenatal development: Stages, Prenatal care, Prenatal stimulation, Factors influencing development

• Neonate: Definition, Care of new born- feeding and immunization

• Adjustments of the new born, Sensory capacities and reflexes of the new born.

• Assessment of the new born: (Apgar scale, Phenylketonuria test, hearing test)

Module III: Development of Infant and Toddler/baby (12 hours)

• Brain development (structure of the brain and neurons, pruning and synapsis)

• Low birth weight babies, Pre-term babies

• Early Stimulation: Importance and impact, the role of parents

• Attachment and Bonding

• Physical and motor development

• Cognitive development (Piaget Sensory motor development stage)

• Language development

• Factors influencing all domains

• Emotions and temperament

• Developmental delays, importance of early detection and intervention

Module IV: Development during early Childhood/Pre-school years (12 hours)

• Importance of early childhood and early childhood education

• Importance of play, types and functions

• Physical and Motor Development

• Cognitive Development (Piaget‘s Pre-operational and Concrete operational stage)

• Language Development
• Factors influencing all domains
• Communication disorders and Learning disability
• Behaviour disorders
• Parenting styles: Democratic/Authoritative, Authoritarian, Permissive

Module V: Child Protection Issues (6 hours)

- Basic rights of Children: right to Survival, Protection, Development, Participation.
- Children in need of care and protection: Street children, Orphaned and institutionalised children, Children of migrant workers, Children with special needs, Children with HIV Aids, Child victims of sexual abuse, children of drug dependent individuals.
- Laws pertaining to gender equity

Assignment

Undertake a Project/ Field work/ Industrial Visit/ Internship and the report of the same should be submitted for evaluation.

Text Books

1. Bee, H. (1995). The Developing Child. Harper Collins College Publisher.
2. Berk. L. (2006). Child Development. New York: Allyn and Bacon.
3. Mangal, S. K. (2007). Educating Exceptional Children: An Introduction to Special Education. New Delhi: Prentice Hall of India.
4. Santrock, J. W. (2013). Child Development. New York: McGraw Hill Publications.
5. Sharma, D. (2003). Infancy and Childhood in India. New Delhi: Oxford Press.
6. Sigelman C.K and Rider E.A (2006) Life Span .Thomson Wadsworth. Corporation

References

1. Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press.
2. Barnes, C., Mercer, G. Shakespeare. T (2005). Exploring Disability: A Sociological Introduction. Cambridge: UK: Polity Press.

3. Behera, D. K. (Ed). (2007). Childhood in South Asia: New Delhi. Pearson-Longman.
4. Berger, J. M. (2010). Personality, Belmont, CA. Thomson/Wadsworth.
5. Bhargava, V. (2005). Adoption in India: Policies and Experiences. New Delhi: Sage Publications.
6. Chopra, G. (2012). Early Detection of Disabilities and Persons with Disabilities in the Community. New Delhi: Engage Publications.
7. Chopra, G. (2012). Stimulating Development of Young Children with Disabilities at Anganwadi and at Home: A Practical Guide. New Delhi: Engage Publications.
8. Heward, W. L. (2000). Exceptional Children: An introduction to special education. New Delhi: Prentice –Hall of India.
9. Journal of Child Development, Wiley publications.
10. Journal of Early Childhood Education.
11. Singh, A. (Ed). (2015). Foundations of Human Development: A Life Span Approach. New Delhi: Orient BlackSwan.
12. Virani, (2000). Bitter Chocolate: Child Sexual Abuse in India. New Delhi, Penguin Publications.
13. Weiner, M., Burra, N., Bajpai, A. (2007). Born Unfree: Child Labour, Education, and the State in India: Oxford University Press.

SEMESTER IV -CORE COURSE

HS4C04B23: FAMILY DYNAMICS

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

Explains the different domains of development like physical, psychological, cognitive and moral development in adolescence and to create awareness on the issues faced by today's adolescents with emphasis on prevention and remediation.

Students imbibe skills necessary for transition to healthy adulthood.

Students develop a sense of their own gender identity and gender roles to be performed in the later stages of their lives and also acquire professional ethics in jobs such as counseling and human values towards the aged.

Course Outcomes:

CO1: Observe, identify and interpret the stages of growth and development of adolescent. U

CO 2: Map the milestones in the different domains like physical, psychological, cognitive and moral development during adolescence. A

CO3. Track the current issues confronting adolescents and derive preventive and remedial measures to be taken to resolve the same.

CO4: Critically examine the problems and care mechanisms available for the elderly and undertake studies on the various critical situations confronting families.

Course Content:

Module 1: **Adolescent Development** **(12 hours)**

- Definition and Significance of Adolescence , developmental tasks of adolescents
- Stages of Adolescence: Early (Ages 11-14), Middle (15-17 years) and Late (17-19 years)
- Physical changes: Primary and secondary sex characteristics; Psychological response to puberty
- Adolescent population in India and their significance.

Module 2: Developments: Social, Emotional, Cognitive, And Moral (12 hours)

- Parent-adolescent relationships, changing social networks: Peers (cliques and crowds), Social media; Emotional Intelligence, Sexual/romantic relationships.
- Identity formation including Gender Identity
- Reasoning, Moral reasoning and judgement; Piaget's Formal operational period, Changes in moral concepts, religious beliefs and attitudes.
- Factors influencing all domains of development

Module 3: Issues and concerns in Adolescence (13 hours)

Health Issues: Obesity, Underweight, Anaemia in girls, Sexually Transmitted Diseases; Reproductive health issues; Mental Health Issues: Anxiety, Depression, Suicide, Eating disorders (Anorexia Nervosa, Bulimia), Drug dependence; Social Issues: Academic Pressure, Bullying, Sexual abuse, Delinquency; Anti-social Behaviour, Adolescent labour, Teen Marriage, Adolescent Trafficking. Counselling and therapeutic measures to overcome various issues.

Module 4: Adulthood and Ageing (5 hours)

- Marriage – Factors affecting mate selection, types, marital relations
- Family – definition, types, roles and responsibilities of different members in the family, Family life cycle, developmental tasks of adulthood and the aged
- Demographic profile of the aged, Needs and Problems of the Elderly, Care of the Aged, welfare schemes.

Module 5: Contemporary Issues Affecting Family (12 hours)

- Urbanization and globalization, single lone parenthood, blended families, influence of electronic media, Live-in relationships
- Infidelity, desertion, divorce, alcoholism, death, suicide, disabilities, financial crisis and its effect on family.

Assignment

- Undertake a Project/ Field work/ Industrial Visit/ Internship and the report of the same should be submitted for evaluation.

Text Books

1. Berk, L E (2000) Child Development (8th edition) PHI learning Pvt. Ltd, New Delhi.
2. Behera, D. K. (2007). Childhood in South Asia: Pearson-Longman. New Delhi.
3. Berger, J. M. (2010). Personality. Belmont. Thomson/Wadsworth.
4. Hetherington and Parke (1999). Child Psychology: A Contemporary View point (5th edition): Tata McGraw Hill New York
5. Patterson, C.J. (2009). Infancy and Childhood.(International Ed): McGraw Hill, New York.
6. Santrock, J.W. (2010). Child Development: An Introduction (12th edition International Edition). McGraw Hill New York.
7. Shaffer, D.R, and Kipp, K (2007). Developmental Psychology: Childhood and Adolescence (7th edition). Thomson Wadsworth, Australia.
8. Sigelman , C.K. and Rider, E.A. (2003). Human Development, Cengage Learning Pvt. Ltd., New Delhi.

References

1. http://www.educationforallindia.com/Education-of-Youth-and-Adolescents-in-India.pdf
2. ncpcr.gov.in/view
3. nobaproject.com/modules/adolescent-development
4. Novak G, Peláez M, B. (2004) Child and Adolescent Development: A Behavioural Systems Approach Sage Publications, New Delhi.
5. Singh, A. (Ed). Foundations of Human Development: A Life span Approach. Orient Blackswan, New Delhi.
6. www.apa.org/pi/families/resources/develop.pdf
7. www.jhsph.edu/research/centersandforadolescent/guide.pdf

III & IV SEMESTER - CORE PRACTICAL

HS4CP02B23 : HUMAN DEVELOPMENT AND FAMILY DYNAMICS PRACTICAL

Credits: 2

Hours per week: 2 **Total lecture Hours: 72**

Course Overview and Context:

Three broad goals guide the study of Child Development: the description, explanation and optimization of development. Human development is an interdisciplinary field devoted to the stusdy of human constancy and change from conception upto old age.

Students develop entrepreneurial skills such as developing toys from indigenous materials that are marketable, develop teaching and learning resources for preschoolers, and professional skills such as assessment of infants and preschoolers and to address and educate the community on various concerns related to children, adolescence and ageing.

Students develop values of social commitment.

Course Outcomes:

CO1: Prepare educational aids for classroom application (Apply)

CO2: Map the milestones in the different domains like physical, psychological, cognitive and moral development during childhood and adolescence (Apply)

CO3: Design prototype of indigenous toys for preschool children (Create)

CO4: Conduct research related to ageing, adolescence and children and document (Apply)

Course Content:

Human Development : (36 hours)

1. Document and map milestones of development in a preschool child – Physical, motor, intellectual, emotional, language and social developments.
2. Plan and develop activities to facilitate development in different domains. Preparation of material for parents of children (poster, toys etc).
3. Prepare a checklist/questionnaire or conduct an experimental research on any topic related to children and conduct a study and report the same.

4. Design a prototype of an educational/indigenous toy for pre schoolers and evaluate it- (self, peer, teacher evaluation)
5. Visit to any one of the following places: (i) Home for the aged (ii) SOS village (iii) Orphanage (iv) Institutions for children with special needs. Report it in the form of a case study/interview.
6. Prepare teaching aids and plan activities for special children. Develop activities for enhancing vocabulary and cognitive skills of preschoolers
7. Observe (i) infant assessment and report (ii) anthropometric measurement of children
8. Prepare a sensory stimulation kit for infants and young children.
9. Conduct an education programme for parents/teachers on any topic pertaining to preschool children.

Family Dynamics: (36 hours)

1. Study the cognitive development and creativity during adolescence.
2. Case profile of an adolescent – including study of self, family relationships and peer relationships
3. Understanding self as an adolescent: exercise on self-reflection.
4. Conduct a workshop on managing emotions, promotion of well-being – yoga, self-development resources etc.
5. Study the main issues facing today‘s adolescents and document.
6. Prepare a checklist/schedule/questionnaire on any issue facing the elderly, conduct a survey and report.
7. Prepare and conduct some relevant activities for senior citizens.
8. Arrange a class for college girls on any one or two issues faced by adolescents and report
9. Conduct a skill development workshop for adolescent girls who are victims of substance abuse/mobile addiction/sexual abuse etc.
10. Visit a counselling centre and make a report on the counselling facilities available in Ernakulam

SEMESTER V -CORE COURSE

HS5C05B23: ENVIRONMENTAL COMMUNICATION AND HUMAN RIGHTS

Credits: 3
Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Content:

The course creates knowledge base on the current food and nutrition scenario in India, established scientific concepts in the field of nutrition, the role of nutrition and Recommended Dietary Allowances in different stages of the life cycle as well as familiarize with newer concepts and basis of computing dietary guidelines for Indians .To obtain an insight into the physiological role, metabolism, functions and effects of deficiency of macro and micronutrients in the human body.

The course will enable students to plan and compute menus in accordance with basic concepts and principles of nutrition to make practical applications of nutrition knowledge in personal and professional levels.

The course also addresses the need for good and healthy dietary practices contributing to environmental sustainability.

Course Outcomes:

CO1: Observe, identify and interpret the significance of environmental science. (Understand)

CO2: Track the current issues of depletion of natural resources and pollution. (Understand)

CO3: Develop environmental communication aids by critically examining the problems (Apply)

CO4: Create programs on advocacy for human rights and environmental protection. (Create)

Course Content:

Module 1: Multidisciplinary nature of environmental studies (10 hours)

- Definition, scope, and importance need for public awareness. Natural Resources- Renewable and non-renewable resources: Natural resources and associated problems.

- Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.
- Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits, and problems.
- Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.
- Land resources: Land as a resource, land degradation, man-induced soil erosion, and desertification. Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.
- Ecosystems: Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers, and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs, and ecological pyramids. Introduction, types, characteristic features, structure, and function of the following ecosystem: -Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans estuaries)

Module 2: Social Issues and the Environment (10 hours)

- Biodiversity and its conservation: Definition, Bio geographical India. Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic, and option values. India as a mega-diversity nation. Hot-sports of biodiversity, Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India
- Environmental Pollution Definition. Cause, effects, and control measures of - Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, nuclear hazards Solid industrial wastes. Role of an individual in prevention of pollution. Pollution case studies. Disaster management: floods, earthquakes, cyclones, and landslides. Waste Management: Causes, effects, and control measures of urban and industrial waste

- From Unsustainable to Sustainable development. Urban problems related to energy, Water conservation, rainwater harvesting, and watershed management. Resettlement and rehabilitation of people; its problems and concerns.

Module 3: Environmental ethics and Acts (15 hours)

- . Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents, and the holocaust.
- Consumerism and waste products. Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and Control of Pollution) Act. Wildlife Protection Act Forest Conservation Act. Issues involved in the enforcement of environmental legislation. Public awareness.

Module 4: Environmental Communication (12 hours)

- Functions of mass communication and its relevance to society especially in communicating environment-related messages
- Public health impacts and environmental factors related to the entire food system. Using an Environmental Nutrition Approach to Define Healthy Food. The Environmental Footprint of Industrial Food Production.
- The Role of Social Justice in Environmental Nutrition.
- Rethinking Diet and Disease from an Environmental Nutrition Perspective. Creating a Healthier, Sustainable Food System.

Module 5: Human Rights (7 hours)

- Human Rights– An Introduction to Human Rights, Meaning, concept, and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights)
- Human Rights and United Nations – contributions, main human rights-related organizations - UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights.
- Human Rights in India – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes, and Minorities.

- Environment and Human Rights - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear
- Technologies, Issues of Waste Disposal, Protection of Environment Conservation of natural resources and human rights: Reports, Case studies, and policy formulation.
- Conservation issues of Western Ghats- mention Gadgil committee report, Kasthurirengan report. Overexploitation of groundwater resources, marine fisheries, sand mining etc.

Textbook :

- Bharucha E. (2013) Text Book of Environmental Studies for undergraduate Courses. India; Universities Press; ISBN: 9788173718625; Edition: Second; Pune.
- Law Relating to Human Rights, (2001). Asia Law House.

References :

1. Clark. R.S., (2001)Marine Pollution; 5 edition , Oxford University Press
2. Cunningham, W.P. Cooper, T.H. Gorhani E & Hepworth, M.T.(2001) Environmental Encyclopedia, Jaico Publ. House. Mumbai.
3. Heywood, V.H & Watson, R.T.(1995). Global Biodiversity Assessment, United Nations Environment Programme., Cambridge University Press, New York
4. Jadhav. H & Bhosale. V.M. (1995) Environmental Protection and Laws. Himalaya Pub. House, Delhi .
5. Mekinney, M.L & Schock. R.M. (1996) Environmental Science Systems & Solutions. Web enhanced edition 5th edition, Jones & Bartlett Learning,
6. Rao. M.N & Datta. A.K. (1987) Waste Water treatment Oxford & IBII Publication Co. Pvt. Ltd. New Delhi .
7. Rajagopalan. R(2016) Environmental Studies from crisis and cure, Oxford University Press, Canada
8. Sacks J D (2015) The Age of Sustainable Development, Colombia University Press, New York,
9. Trivedi R.K(1996) Handbook of Environmental Laws Acts, Rules, Guidelines, Compliances and Standards, Vol. l, Enviro Media, Karad.
10. Wanger K.D., 1998 Environmental Management. W.B. Saunders Co. Philadelphia, USA.
11. Centre for Science and Environment (1999). State of India‘s Environment: The Citizens Fifth Report, 59
12. Amartya Sen, (2009). The Idea Justice, New Delhi: Penguin Books,
13. Chatrath, K. J.S. (1998). (ed.), Education for Human Rights and Democracy (Shimla: Indian Institute of Advanced Studies)
14. Hingorani, R.C. (1985). Human Rights in India, Oxford and IBH Publishing Company,New Delhi

SEMESTER V - CORE COURSE

HS5C06B23: HUMAN NUTRITION

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

The course creates knowledge base on the current food and nutrition scenario in India, established scientific concepts in the field of nutrition, the role of nutrition and Recommended Dietary Allowances in differrent stages of the life cycle as well as familiarize with newer concepts and basis of computing dietary guidelines for Indians .To obtain an insight into the physiological role, metabolism, functions and effect of deficiency of macro and micronutrients in the human body.

The course will enable students to plan and compute menus in accordance with basic concepts and principles of nutrition to make practical applications of nutrition knowledge in personal and professional levels.

The course also addresses the need for good and healthy dietary practices contributing to environmental sustainability.

Course Outcomes:

CO1: Describe the functions, sources and role of nutrients in the maintenance of good health (Understand)

CO2: Explain the biological processes and systems as applicable to human nutrition (Understand).

CO3: Summarize how dietary components, macronutrients (carbohydrates, proteins and fats) and micronutrients (vitamins and minerals), influence health and disease at the whole organism, organ, cellular and molecular level (Evaluate).

CO4: Describe the basis of human nutritional requirements and recommendations through the life cycle (Understand).

Course Content:

Module 1: Introduction to Human Nutrition and Energy (4 hours)

Nutrition Scenario in India, Food guide pyramid, model food plate, Dietary guidelines for Indians. Dietary Reference Intake (DRI), Estimated Average Requirement (EAR), ICMR 2020, Factors affecting nutrient intake of various age groups, Indian reference man and woman.

Energy –Units of energy, determining energy content of foods using Bomb Calorimeter, Gross Calorific Value, Physiological Fuel value of Foods. Total energy expenditure- measurement and components. Direct and Indirect calorimetry. Basal metabolism -definition, factors affecting BMR, measurement, thermic effect of activity, thermic effect of food, adaptive thermogenesis, Energy requirement for different age groups.

Module 2: Macro Nutrients (15 hours)

Carbohydrates– Composition, classification, functions, Digestion and absorption, food sources. Metabolic pathways of carbohydrates. Dietary and functional fiber and potential health benefits.

Proteins-Amino Acids – Essential and Non Essential, Structure, classification and functions of proteins, Digestion and absorption, metabolism (Deamination, Transamination and Decarboxylation, Urea cycle), Requirements and sources. Methods of evaluating protein quality of foods (BV, PER, NPU). Deficiency disorder-PEM.

Lipids-Types of fatty acids, Composition, functions, classification, fat metabolism (Beta oxidation), ketone body formation, Food sources and requirements.

Water- Distribution and functions in human body. Water balance from intake and output. Water deficiency (Dehydration) and Intoxication (oedema)

Module 3: Micronutrients (15 hours)

a) Vitamins- Functions, food sources, requirements and deficiency.

Fat soluble vitamins- A, D, E and K

Water soluble vitamins–Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, B 12 and C

b) Minerals-Calcium, Phosphorous, Iron, Iodine, Selenium and Zinc

Nutritional Deficiency Disorders- Vitamin A Deficiency Disorders(VADD), Iron Deficiency Anemia, Iodine Deficiency Disorders (IDD)

Module 4: Nutrition in Childhood (10 hours)

Planning balanced diets, Factors considering for planning of menu for various age groups,

Nutrition in Infancy- Growth and development, Composition of breast milk, advantages of breast feeding, weaning and supplementary foods, IYCF Initiatives, BFHI, Breast Milk Bank

Nutrition for Preschool Children-Growth pattern, nutritional requirements, need for developing good food habits.

Nutrition for School Going Children - Growth pattern, nutritional requirements, packed lunch, Nutritional programmes and policies for children

Module 5: Nutrition during Adolescence and Adulthood (10 hours)

Nutrition in Adolescence - Growth and development, nutritional requirements, factors affecting eating habits, Processed Foods and their health impact, Eating disorders.

Nutrition in Adulthood – Classification of activities, Nutritional requirements and health problems of adults.

Nutrition in Pregnancy - Physiological changes during pregnancy, importance of nutrition during the preconception period, Effect of malnutrition on pregnancy outcome, nutritional requirements, problems during pregnancy.

Nutrition in Lactation - Physiology of lactation, Nutritional requirements, galactogogues

Nutrition in Old age – Physiological changes during old age, nutritional requirements, dietary modifications, nutrition related problems of elderly.

References

1. Abraham. S (2016), Nutrition through Life Cycle, First Edition, New Age International (P) Ltd. Publishers, New Delhi.
2. Bamji M.S., Krishnaswamy K and Brahmam GNV (2009), Text book of Human Nutrition- 3 rd Edition, Oxford and IBH Publishing Co .Pvt .Ltd. New Delhi.
3. Chadha R and Mathur P (2015), Nutrition : A Lifecycle Approach. Orient Blackswan, New Delhi.
4. Nutrient Requirements for Indians and Recommended Dietary Allowances and Estimated Average Requirements(2020) Published by National Institute of Nutrition, Hyderabad.
5. ICMR (2017) Indian Food Composition Tables, Published by National Institute of Nutrition, Hyderabad.
6. Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013), Textbook of Nutrition and Dietetics, Phoenix Publishing House Pvt. Ltd.
7. Medeiros DM ,Wildman REC (2015), Advanced Human Nutrition,3 rd Edition, Jones and Bartlette Learning, USA.
8. Seth V and Singh K (2006), Diet Planning through the Life Cycle: Part 1 Normal Nutrition, A Practical Manual, Elite Publishing House Pvt. Ltd. New Delhi.
9. Srilakshmi B (2008), Nutrition Science, 3rd Edition, New Age International (P) Ltd. Publishers, New Delhi.
10. Swaminathan. M (2001), Principles of Nutrition and Dietetics, The Bangalore Printing and Pub. Co. Ltd. Bangalore.
11. Wardlaw GM, Hampi JS, DiSilvestro RA (2004), Perspectives in Nutrition,6 th edition., McGraw Hill.

SEMESTER V - CORE

HS5C07B23: TEXTILE SCIENCE

Credits 3

Hours per week: 3 **Total Lecture Hours : 54**

Course Overview and Context

Textile science provides knowledge regarding textile fibres, yarns, production, properties, selection and use of textile fabrics. It helps to gain in depth knowledge about the different natural and synthetic textile fibres currently used, develops an understanding about the techniques of creation of traditional and modern fabrics, their structure and utility. It imparts knowledge about textile dyeing and printing and enhances skill in understanding different textiles available in the market.

The course enables students to get an insight into the various properties of fibres, and therefore enable better selection, for apparel, home linen or other applications. They can utilize this knowledge to effectively develop products for everyday use/enter into various entrepreneurial ventures whose success is dependent on the correct choice of fibres/yarns/fabric, or take up ventures in dyeing/printing.

Environment sustainability, use of organic textiles, eco labelling of products and strategies to minimize the carbon footprint is addressed.

Course Outcomes:

CO1: Describe the various types of fibres, their processing, properties and manufacturing of yarns and fabrics. (Understand)

CO2: Apply of various fibres, yarns and weaves for different end uses. (Apply)

CO3: Explain the basics of printing, dyeing and new methods of fabric finishing. (Understand)

CO4: Comprehend modern methods of fabric creation and ornamentation. (Analyse)

Course Content:

Module1: Study of Fibres (20 hours)

Definition, classification of textile fibres. Manufacture, properties and uses of Textile Fibres:- Cotton, Linen, Wool, Silk, Rayon, Nylon, and Polyester; Methods of identification of textile fibres.

Module 2: Study of Yarns (6 hours)

Processes of making Fibre in to yarn (cotton and woolen systems):-Mechanical (Ring and Open End spinning) and chemical. Classification of yarn:-type, count, twist, number of parts, novelty yarns.

Module 3: Fabric Structure (10 hours)

Weaving: Loom – parts and its operations. Weaves:- Basic weaves - plain, twill, satin and its variations ; Fancy weaves-pile, dobby, jacquard, leno, lappet, clip spot, double cloth, and crepe. Other methods of making fabrics:-knitting-types of knits, felting, braiding, netting, lace making and bonding.

Module 4: Dyeing, Printing and Finishes (15 hours)

Dyes and dyeing: - classification of dyes- natural, artificial-acid, basic, direct, sulphur, vat naphthol, disperse and mordants, Stages of dyeing- fibre, yarn, fabric.

Printing: Direct- block, roller and screen, discharge, resist-tie and dyeing and batik.

Finishes-definition, purpose, classification and types-singeing, scouring, bleaching, sanforizing, calendaring, tentering, sizing, weighting, brushing, napping, functional finishes- Stain resistant and antimicrobial finishes.

Bio Processing of textiles – Bio desizing, Bio scouring, Bio Bleaching, Bio polishing, enzymatic degumming,enzymatic retting,trends in natural finishing process

Module 5: Modern Textiles (3 hours)

Technical textiles – Geo textiles, Agro textiles,Packaging textiles, Sports textiles, medicinal textiles, Protective textiles.Nano fabrics,and eco-friendly textiles – organic cotton, organic wool,ahimsa silk,jute, bamboo fibre. Global organic textile standard (GOTS),Oeko – tex standard 100, European eco label.

References

1. Corbman.B.P. (2005). Fibre to Fabric. International student‘s edition. Mc. Graw Hills book co. Singapore
2. Dantyagi.S.(2008).Fundamentals of Textiles and Their care. Orient Longman, New Delhi

3. Gokarneshan.U.(2005). Fabric Structure and Design. New Age International Publishers. New Delhi
4. Kadolf. S.J.(2008).Textiles. Anne Langford. Prentice Hall, New Jersey
5. Sekhri, S(2011)Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning pvt Ltd, New Delhi.
6. Smith J.L. (2006).Textile Processing. Abhishek Publications. Chandigarh
7. Wells. K (2002). Fabric Dyeing and Printing. Conran Octopus, London

SEMESTER V – CORE COURSE

HS5C08B23 : INTERIOR DECORATION

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

The course seeks to cover the basics of art and design, use of colour and its impact in interior, application of elements and principles of design, home lighting, arrangement of furniture, furnishings and accessories in residential interior and exterior space organization.

The course enables the student to understand and apply basics of design and develop basic skills among the students for a career option in Interior Designing. Basic knowledge and skill development for furnishing and accessorizing residential interior enable the students to become interior decorators. Students also gain knowledge of furniture arrangement in residential interior and exterior space, basic awareness of reading house plans and calculating space requirements and acquire skills in interiorscaping, gardening and decorating for special occasions.

Environmental sustainability is one of the key areas of the course. Interiorscaping and flower arrangement, brings nature into interior.

Course Outcomes

CO1: Describe various elements and principles of design, role of elements and principles of design in creating good interior design (Understand).

CO2: Apply the elements and principles of design, application of colour harmonies in interior designing (Apply).

CO3: Select suitable lighting, furniture, furnishings and accessories for interior (Apply)

CO4: Create decorations for special occasions (Create)

Course Content

Module 1: Design Basics & Interior Space Organization (14 hours)

Introduction to Interior Designing, Definition & Concept, Objectives of Interior Decoration, Importance of Good Taste; Elements of Design- Line, Form/Shape, Texture, Colour, Light and Space; Motifs and Patterns; Principles of Design- Harmony, Proportion, Balance, Rhythm &

Emphasis; Design Applications, Types of Designs; Housing - Basics of House Planning Principles, Reading House Plans; Space Requirements for Various Activities in Different Rooms; Storage for Living, Dining and Bed Rooms, Points to be considered in Space Planning; Space Saving Techniques; Kitchen - Types and layout, Modular Kitchen, Work Spaces & Work Triangle.

Module 2: Colour and Lighting in Homes (12 hours)

Qualities of Colour, Study of Colour Chart - Prang Colour System, Colour Harmonies and Schemes for different rooms; Use and Effects of various Colours; Importance of Home Lighting, Sources of Lighting- Natural and Artificial, Types of Lamps and Types of Lighting - General, Task, Spot and Decorative; Direct, Indirect, Semi Direct and Semi Indirect, Lighting requirement for various rooms; Physical and Psychological Aspects of Lighting.

Module 3: Furniture, Furnishing and Accessories (12 hours)

Types of Furniture, Upholstered Furniture, Materials for Furniture Making; Furniture Requirement for various Rooms, Guidelines for Selection and Arrangement of Furniture; Interior Surfaces finishes - Traditional and Modern Surface Finishes - Wall Finishes, Floor Finishes & Ceiling Finishes; Classification and Selection of Soft Furnishings, Types of Windows, Window Treatments –Classification- Hard and Soft; Curtain Styles, Top Dressing, Selection of Rugs and Carpets. Accessories used in interiors – Classification – Functional & Decorative; Flower Arrangement - Principles, Styles, Types and Basic Shapes, Ikebana; Drying Techniques and Dry Flower Arrangements.

Module 4: Care and Maintenance of Interiors: (6 hours)

Cleaning methods and agents for various surfaces- Fabric, Metal, Leather, Glass, Wood, Curtains and carpets, Selection and use for different surface, the Cleaning procedure and care of different articles, Cleaning Equipment- selection, care and maintenance, Types of common pests and effective methods to control.

Module 5: Interiorscaping and Gardening (10 hours)

Indoor plants & Interiorscaping - Enhancement of Indoor Environment through Interiorscaping;

Dish garden & Terrarium. Decorations for Special Occasions - Theme Setting, Stage Decoration for Party and celebrations; Table setting & Napkin folding. Outdoor gardening – Principles of external space organization, Kitchen garden, Rooftop garden, recent trends in gardening such as Vertical garden, Aquaculture etc.

References

1. Agarwala, S.C and Agarwala N.C (2015), Interior Decoration, Dhanpat Rai & Co. (Pvt.) Ltd.
2. Dutt, D. R., (2003) How best to plan and Build your Home, Pustak Mahal, Bangalore
3. Kasu, A. (2005) Interior Design, Ashis Book Centre, Mumbai
4. Khanna, G., (2007) Art of Interior Design, Indica Publishers, Delhi
5. Mike Lawrence and Janeaton, (2018) Great Home Decorating Ideas, Anness Publishing Limited, London
6. Pratap Rao M., (2001) Interior Design –Principles and Practice, Standard Publishers and Distributors, N. Delhi.
7. Premavathy S and Parveen P. (2010) Interior Design and Decoration, CBS Publishers, New Delhi.

SEMESTER VI – CORE COURSE
HS6C09B23: DYNAMICS OF EXTENSION

Credits: 3

Hours per week : 3 Hrs **Total Lecture hours: 54**

Course Overview and content:

Extension Education is the process of teaching urban and rural people how to live better by learning ways to improve their farm, home, and community institutions. _Extension Education' is that particular branch of sciences or social sciences which helps in the process of transferring/ spreading the new information and innovations for community development.

The content of the course introduces the students to the concept and philosophy of Extension education. The process of extension education and to link it to governmental programmes implemented in community. The skills to develop communication aids for programme planning implementation and evaluation.

Course Outcomes:

CO1: Observe, identify and interpret the significance of Extension education. (Understand)

CO2: Understand and develop skill in using extension communication techniques. (Understand)

CO3: Critically examine the problems and develop audio visual aids and extension programmes. (Apply)

CO4: Develop skill in planning, implementing and evaluating an extension programme. (Apply)

Course Content:

Module1: Extension (10 hours)

- Extension-Meaning, principles, concepts, scope and objectives of extension education in India. Role of an extension worker, Qualities of an extension worker.

- Steps in extension teaching process, criteria for effective extension teaching and learning, Home Science Extension Education, vocationalization of Home Science in India, self-employment and Entrepreneurship through Home Science.

Module 2: Community development in India (15 hours)

- Community development- Objectives and principles of community development and extension programme in India. Community development set up-at the national, state, district, block and village levels.
- Types of communities and its special features-Rural and Urban, and Tribal. Basic rural Institutions- school, panchayat, co-operatives; other institutions mahilamandals, youth clubs, farmers organizations. Some of the Women and child development programmes implemented by the Government of India-, Support to Training and Employment.
- Programme for Women (STEP), Swarnajayanti Gram SwarojgarYojana (SGSY), Integrated Child Development Service (ICDS).
- Leadership- Concept and definitions, types of community leaders-Professional leader and lay leaders; autocratic, democratic and lassiez-faire leaders. Methods of identifying community leaders. Importance of rural Leadership for community development.

Module 3: Programme planning, implementation and evaluation in Extension (5 hours)

- Objectives, principles and steps involved. Plan of work-components, developing a plan of work, factors to be considered. Implementation and evaluation. Evaluation and feedback of programmes

Module 4: Communication and methods of approaching people (15 hours)

- Definition and importance, elements of communication- leagen‘s model, problems in communication, motivation- methods of motivating people.
- Classification of extension teaching methods/methods of approaching people individual, group and mass methods.
- Individual methods- personal visits, letters.

- Group methods-meetings, discussions, demonstrations, folk songs, drama, role play, seminar, field trips, exhibitions. Mass methods-Print and electronic media.
- Modern methods-computer based technologies-email, blogs, podcast, video sharing, Tele conferencing, social networking. Scope, advantages and limitations of methods. Factors guiding the selection and use of methods.

Module 5: Audio-Visual Aids (9 hours)

- Definition, Importance of audio-visual aids in communication, Classification of audio-visual aids-audio, visual and audio-visual aids cone of experience, factors to be considered in selection, preparation and use of audio-visual aids their merits and demerits.

Textbook:

1. Sithara V and Chande .S‖ A text book on –Extension. Education and Communication‖ published by Modern Books,. Thiruvananthapuram .
2. Reddy,A.(1987) *Extension Education*. Bapatha , Sreelekshmi Press, Andra Pradesh, India
3. Dahama,O.P., & Bhatnagar, O.P .(1998) *Education and Communication for Development*, Oxford and IBH Publishing Co. Pvt. Ltd, New Delhi
4. Shekhar. S and Ahlawat. S (2013),Textbook of Home Science Extension Education, Daya Publishing House, New Delhi.

References:

1. Waghmare, S.K.(1980). *Teaching Extension Education*. Prasant Publication
2. Supe,A.N.(1983). *An introduction to Extension Education.* Oxford IBH Publishing Company. New Delhi
3. Maimun, N. (2006).Understanding Extension Education ,Kalpaz Publications. New Delhi
4. Devadas,R.P. (1980).*Text Book of Home Science. New Delhi.*
5. Dubey, V.K and Bishnoi I (2009). –*Extension Education and Communication*‖, New Age International Pvt Ltd Publishers, *New Delhi*

6. Aggarwal, R. (2008). *"Communication- today and tomorrow‖*, Sublime Publications, New Delhi.
7. Aggarwal, R .(2008*). "Effective Communication Skills‖*. Sublime Publications, New Delhi.
8. Shinde, P.S .(1997). *"Communication patterns in Extension Education‖*, Rawat Publications. Jaipur.
9. Pamar & Sryam. (1976). *Traditional folk media in India*.Geka books. New Delhi

SEMESTER V & VI - CORE PRACTICAL
HS6CP03B23: ENVIRONMENTAL COMMUNICATION AND EXTENSION EDUCATION PRACTICAL

Credits: 3

Hours per week: 4 **Total hours: 72**

Course Overview and Content:

The Environmental Education and Communication Specialization equips students with the knowledge and skills needed to raise the environmental consciousness and commitment of others through direct interpersonal teaching, media-based advocacy and public awareness campaigns.

Extension communication takes many forms, including face-to-face meetings, newsletters, websites, social media, and videos. The extension needs to use a variety of communication methods to reach as many people as possible.

The content of the course is to gain the knowledge and skills needed to teach, raise public awareness, advocate and motivate for environmental change using a broad base of mediums and communication strategies.

Course Outcomes:

CO1: Develop communication tools for Extension education. (Apply)

CO2: Use extension communication techniques. (Apply)

CO3: Critically examine the problems and develop extension programmes. (Apply)

CO4: Plan, implementing and evaluating an extension programme. (Apply)

Course Content:

Module 1: (8 hours)

• Make a power point on green consumerism.

• Develop any recycled product

Module 2: (8 hours)

• Make a poster related to environment conservation

• Make a chart on the harmful chemicals in baby care products.

• Make a leaflet on any one environment issue.

Module 3: (10 hours)

• Write an article to create awareness on any one of the environmental issues.

• Write a radio script for any one environmental issue

• Make a small video clipping on environment.

• Make a street drama /mime on environment

Module 4: (5 hours)

• Make a collage on sustainable living

Module 5: (5 hours)

• Make an illustrated chart on rights of women & children in India

Internal: Field work

• Visit to a local area to document environmental assets river/forest/grassland/hill/mountain

• Visit to a local polluted site-Urban/Rural/Industrial/Agricultural

• Study of common plants, insects, birds.

• Study of simple ecosystem-pond, river, hill slopes etc.

(Field work Equal to 5 lecture hours)

Module 6: Extension Education (5 hours)

• Interview an extension worker to find out his/her role.

Module 7: Community Development in India (10 hours)

• Visit any one community organization (Panchayat / Cooperatives / School / Krishy Vigyan Kendra) to find out its role in community development and record the services rendered.

• Observe the working of any one community development programme in your

community and record its features.

Module 8: Programme planning, implementation and evaluation in extension (12hours)

• Plan, implement and evaluate an extension programme related to Home Science.

Module 9: Communication, and methods of approaching people (2 hours)

• Write a report of an exhibition /fairs/street drama you observed.

Module 10: Audio-Visual Aids (7 hours)

• Collection and evaluation of visual aids

• Preparation of visual aids.(leaflet, pamphlet, poster and two types of charts)

• Review of media on selected development issues and report its characteristics (news paper article, Radio and TV message.)

References:

1. Ahuja KK. 1983. Personnel Management. Kalyani.
2. Dhama OP & Bhatnagar OP. 1991. Education and Communication for Development.
3. Oxford & IBH.
4. Grover I. 2002. Extension Management. Agrotech Publ.
5. Ray GL. 2006. Extension Communication and Management. Kalyani.
6. Tripathi PC & Reddy RN. 1983. Principles of Management. Tata McGraw Publications.

SEMESTER VI – CORE COURSE
HS6C10B23: DIETETICS

Credits: 3

Hours Per Week: 3 **Total Lecture Hours: 54**

Course overview and context:

The course aims at bringing about an understanding on the significance of the Nutrition Care process, the role of nutrition support in critically ill patients, study of the etiology, consequences and principles of dietary management for different disease conditions. The course also intends to emphasize the importance of diet in prevention and treatment of lifestyle diseases such as cardiovascular diseases, cancer etc. arising as a result of the process of nutrition transition taking place globally.

The course enables to develop capacity and aptitude for taking up dietetics as a profession in hospitals and as nutrition consultants in wellness or fitness centers. involving assessing the nutritional status of patients and counselling for proper diet and lifestyle in the management of the disease condition.

Course Outcomes

CO 1: Identify the clinical, biochemical changes and dietary management of various disease conditions (Understand)

CO 2: Plan and prepare therapeutic diets (Create)

CO 3: Evaluate appropriate dietary modification for various disease conditions (Evaluate)

CO 4: Describe different lifestyle disease and develop dietary management (Apply)

CO 5: Assess nutritional status and appraise Public health nutrition strategies (Evaluate)

Course Content:

Module 1: Introduction to Dietetics (5 hours)

Meaning and scope of dietetics, Dietician: Classification, responsibilities. Nutrition Care Process , Assessment of Nutritional Status, Diet therapy, Diet Counselling.

Module 2: Therapeutic Diets

Therapeutic adaptation of normal diets, principles and classification of therapeutic diets

a) Routine hospital diet- Clear fluid, full fluid, soft and normal diets

b) Critical Care Nutrition- Special feeding methods-oral, enteral and parenteral feeding

c) Gut microbiome – Role of Pre and probiotics

Module 3: Fevers and GI disorders (14 hours)

Fevers - Classification and etiology of acute and chronic fevers. Medical Nutrition therapy in Typhoid, Tuberculosis, HIV/AIDS Gastrointestinal disorders- Diarrhoea, Constipation, Peptic Ulcer, GERD.

Liver disorders: Etiology, Risk factors, Clinical symptoms and Dietary Management of NASH, Hepatitis, Cirrhosis and Hepatic Coma

Module 4: Lifestyle Diseases / Non Communicable Diseases (17 hours)

Nutrition Transition in India

● Weight Management: Classification, Etiology, Clinical manifestations, Consequences- Management of Obesity-Lifestyle, Dietary, Medical and Surgical Intervention , Underweight

● Diabetes Mellitus- Prevalence, classification and etiology, symptoms, diagnosis and complications. Glycemic Index, Glycemic Load, Management of Diabetes- Lifestyle, Dietary and Medical , Food Exchange List

● Coronary Artery Diseases

(a) Atherosclerosis - Phases, Etiology, Symptoms, Complications, Dietary and Medical Management.

(b) Hypertension- Classification of BP, Hypertension Stages, etiology, complications, dietary management, DASH diet.

● Metabolic Syndrome

● Cancer- Etiology, Risk factors – Dietary and Non dietary, Nutritional requirements for Cancer patients. Dietary and Medical management in cancer. Functional foods

Module 5: Kidney Disorders (6 hours)

Etiology, Clinical symptoms and Dietary Management of common renal disorders: Nephritis, Nephrotic Syndrome, Acute and chronic renal failure

References

1. L. Kathleen Mahan and Sylvia Escott-Stump. (2007). Krause‘s Food Nutrition and Diet therapy-11thEdition. Saunders. USA
2. Whitney E.N. Cataldo C.B. and Rolfes.S.R.(2002). Understanding Normal and Clinical Nutrition. Sixth Edn. Thomson Learning Inc.USA.
3. Srilakshmi. (2009). Dietetics IVth Edition. NewAge International(P)Ltd. Publishers.New Delhi
4. Bamji. M.S., Krishnaswamy. K and Brahmam (Eds.). (2009). Textbook of Human
5. Nutrition Third Edition. Oxford & IBH publishing Co. Pvt. Ltd. New Delhi.
6. Subhangini. A. Joshy (2010). Nutrition and Dietetics. Third edition. Tata Mc. Graw.Hill Education Pvt. Ltd. New Delhi
7. Paul Insel, Elaine Turner and Don Ross. (2004) Nutrition, Second edition. American
8. Dietetic Association. Jones and Bartlett Publishers, London

SEMESTER V AND VI - CORE PRACTICAL

HS6CP04B23 : HUMAN NUTRITION AND DIETETICS PRACTICAL

Credits: 2 **Total hours: 90**

Course Overview and Context:

The course enables understanding of the techniques for assessing qualitative and quantitative analysis of nutrients in foods, planning, computing and preparation of diets for normal nutrition throughout the lifecycle with appropriate nutritional and dietary modifications. Planning, computing and preparation of diets for therapeutic conditions based on the dietary principles for various disease conditions based on their pathophysiology.

The course develops the skill and aptitude for taking up roles as dietitians in hospitals and nutrition consultants in fitness and wellness centres.

Course Outcomes:

CO 1: Conduct qualitative and quantitative analysis of nutrients in foods (Analyse)

CO 2: Prepare the basic recipes in normal nutrition and modified recipes for therapeutic diets (Apply)

CO 3: Planning and preparation of therapeutic diets with appropriate dietary modification for various disease conditions (Analyse, Create and apply)

CO4: Observe and evaluate the functioning of a Dietary Department or feeding programme (Understand and Evaluate).

Course Content:

A. Food Analysis

1. Qualitative tests for carbohydrates, protein, calcium, phosphorus and iron.
2. Quantitative tests for

a) Lactose in milk
b) Vitamin C in food stuffs
c) Calcium in foods

B. Basics of Food Preparation

1. Record the weight of 1cup/1tbsp/1tsp of different types of food stuffs

2. Record the ratio of raw to cooked volume of cereals, pulses, vegetables

3. Basic Preparations– Prepare main dish, side dish, snacks, desserts.

4. Table Setting

C. Normal Nutrition

Planning, preparing and serving diets for:
1. Preschool child
2. School going child
3. Adolescents
4. Adults (Sedentary man/woman / labourer)
5. Pregnant woman
6. Lactating woman
7. Old age (Man/woman)

D. Dietetics (36 hours)
a. Calculation of BMI using height- weight measurements

b. Preparation of Therapeutic Recipes
Types of Therapeutic Diet - Normal, Soft, Full Fluid and Clear Fluid Diets

c. Diet plan for -
1. Fevers-Typhoid or Tuberculosis
2. Peptic Ulcer
3. Constipation
4. Hepatitis
5. Obesity
6. Underweight
7. Diabetes Mellitus
8. Atherosclerosis
9.Hypertension
10. Cancer
11. Nephritis
12. PEM
13. Iron Deficiency Anaemia

d. Visit to a feeding programme / Diet clinic

SEMESTER VI – CORE COURSE
HS6C11B2 : FASHION DESIGNING AND APPAREL PRODUCTION

Credits: 3
Hours per week: 3 **Total Lecture Hours: 54**

Course overview and Context:

The course provides knowledge in the fundamentals of fashion designing, and gain practical experience in apparel illustration. It also gives an insight into the aspects of apparel production, marketing and merchandising and enables students to develop skills in pattern making and garment construction. A clear understanding can be gained on the methods of fashion designing and apparel production.

A wide range of entrepreneurial opportunities are open to the students in the field of garment designing, illustration, apparel production, managing boutiques, free-lance designing ventures, production units etc.

Environmental consciousness, zero waste and sustainability practices and the need for Eco fashion is emphasized in the course content.

Course Outcomes:

CO1: Explain the various terminologies used in fashion, ways in which fashion is adopted by the consumers, methods of illustrating fashion. (Understand).

CO2: Forecast fashion trends using the knowledge of consumer behavior and the social and economic changes (Apply)

CO3: Comprehend traditional and contemporary methods of fabric creation and ornamentation. (Analyse and apply).

CO4: Distinguish various methods of pattern making, drafting, patter alteration and construction of garments. (Analyse and apply)

Course Content:

Module 1: Fashion Introduction and Interpretation (10 hours)

Fashion:- Definition, terminologies - style, fad, classic, fashion trend, haute couture, fashion

life cycle, Consumer groups in fashion cycle, Adoption of fashion
– trickle down, trickle up and trickle across theory, fashion fore-casting and present day fashion.

Fashion Illustration, Basic 8-head theory, Ten Head Illustration, Garment designing- Creation of mood board . Factors considered in designing, basic shapes, the proportion of figures- unusual figures(problems and remedies)-fort all figure, short figure, stout figure, and thin figure.

Module 2: Structural and Applied design in Fashion (10 hours)

Elements and principles of design as applied to apparel designing, Principles andf actors influencing fashion.

Fashion and retro fashion- Traditional textiles and embroideries in present day fashion- Brocades, Jamdanis, Kalamkari, Bhandhani,Ikat, Baluchars, embroideries- Kanthas, Kasuthi, Phulkari,Chikankari, Kasidha. New trends in applied design.

Module 3: Introduction to Body measurements and pattern making (10 hours)

Body measurements:- Importance and methods of taking body measurements.

Pattern making:- Methods of pattern making-Drafting. Pattern Alteration- lengthening and shortening bodice block and skirt, sleeve variations - puff and ¾ sleeve.

Module 4: Garment Construction (12 hours)

Tools and equipments used for garment construction.

Sewing machine-parts, functions, care, maintenance common problems, reasons and remedies, Steps in preparing fabric for construction, layouts, marking, cutting, stitching and finishing of garments.

Module 5: Apparel marketing and merchandising (12 hours)

Marketing- definition, marketing mix-4P‘s (product, promotion, prices and place)

Merchandising-definition, role and responsibilities of merchandiser—brief outline of various departments in an apparel industry.

Visual merchandising – importance, store interior, window displays, display techniques, mannequin draping, decorative displays, colour, lighting and fixtures.

The environmental impact of the clothing industry, ethical issues in fashion, eco-fashion, principles of sustainable production, zero waste design practices.

References

1. Bhalla S and Anurag S (2010) Visual Merchandising, Tata McGraw Hill Education Pvt Ltd, New Delhi.

2. Henninger, C.E.,Alevizou J.P, Goworek, H(2017) Sustainability in Fasshion – A Cradle to Upcycle Approach, Palgrave macmillan – Springer Nature, Switzerland.

3.Ireland P.J. (2007). New fashion Figure Templates. Anova Books Co .Ltd. London

4.Ireland P.J.(2004). Fashion Design, Drawing and Presentation. Kyodo printing co. Ltd. Singapore.

5.Koumbis, D(2020) Fashion Retailing: From Managing to Merchandising, Bloomsbury Publishing, New Delhi.

6.Mullick .P.(2002).Garment Construction Skills. Kalyani Publishers. NewDelhi.

7.Narang.M.(2007).Fashion Technology Hand Book. Asia Pacific Business Press. New Delhi.

8.Pleasantville (2010) – Complete guide to Sewing- The Reader‘s Digest Association.Inc. – New York/Montreal,Canada.

9.Rajkishore Nayak,(2020) Sustainable technologies in Fashion and Textiles, Woodhead Publishing, Uk

10. Sumathy.G.H.(2002). Elements of Fashion and Apparel Design. New Age International (p) Ltd. New Delhi.

11. Zarapkar K.R.(2008). Zarapkar System of Cutting. Navaneet Publications India Ltd, Gujarat.

SEMESTER V AND VI - CORE PRACTICAL
HS6CP05B23: TEXTILE SCIENCE, FASHION DESIGNING AND APPAREL PRODUCTION PRACTICAL

Credit : 2 **Total hours: 90**

Course overview and Context:

The course provides practical application of the fundamentals of fashion designing, apparel illustration and apparel production. It gives hands on experience in textile dyeing, printing and selection of various types of fabrics. It enables students to develop skills in pattern making and garment construction.

A wide range of entrepreneurial opportunities are open to the students in the field of garment designing, illustration, apparel production, managing boutiques, free-lance designing ventures, production units etc.

Students practice the concept of sustainability and ensure less wastage of fabric. Recycling fabric waste is also encouraged

Course Outcomes

CO1: Differentiate the various fabric types, fibre weaves and their properties. (Apply)

CO2:Apply different weaves, prints and dyes on fabrics. (Apply)

CO3: Apply traditional and contemporary methods of fabric creation and ornamentation. (Analyse and apply).

CO4: Develop various methods of pattern making, drafting, pattern alteration and construction of garments. (Apply)

Course Content:

A. Textile Science (36 hours)

1. Collection of different fibres (Cotton, Silk, Polyester, Nylon, wool and rayon). Testing of fibres:- Visual Inspection, Burning and Microscopic

2. Fabric structure: Basic weaves – Collect samples for all the Basic weaves and their variations. Fancy weaves- Collect samples for (Pile, Dobby, Jacquard, Clip spot and Double cloth)

3. Prepare samples for Block, Batik / Tie and Dye (any two variations)

B. Fashion Designing And Apparel Production (54 hours)

1. Fashion Illustration and Sketching Development of 8-head croquie.

2. Basic Construction Processes.

•Hand Stitches– Basting-, over casting, hemming. Embroideries- Decorative stitches (min.5no)

•Seams and seam finishes: Plain seam-French seam, flat fell seam, top stitched seam, and piped seam, seam finishes– double stitched seam finish.

•Fullness: gathers – gathering by hand, gathering by machine, gathering by elastic,

•Pleats- knife, box, and inverted – pin tuck, darts- standard dart and double pointed dart. Plackets: one piece placket and two piece placket.

•Bias and its applications- joining of bias pieces–bias facing bias binding, shaped facing. Hems- narrow machine stitched hem, stitched and turned hem

•Fasteners- button and button hole, press button, hooks and eye

•Preparation of Paper pattern: Prepare paper pattern for child‘s frock, salwar and kameez.

3. Construction of garments: child‘s frock with any collar and any type of sleeve. Construction of a Kameez–Aline. (A record of the entire practical should be maintained)

SEMESTER VI – CORE COURSE

HS6C12B23: FAMILY RESOURCE MANAGEMENT

Credits: 3

Total Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

The course convinces the students of the significance of resource management and decision making to enhance the quality of life of family and society and enable them to acquire scientific and technical abilities in personal, familial and community resource management and identify and resolve conflicts in group living situations.

Accomplish creative and innovative management skills for organizing events and programmes and become event coordinators. They will become adept in keeping systematic records of family finances and develop capability to be resourceful managers and supervisors.

Acquainted with Renewable Energy Devices in order to conserve conventional energy, Empowerment through enough competency in identifying means of supplementing family income and savings and conversant in innovative and indigenous devices / techniques for conservation of natural resources

Course Outcomes:

CO1: Explain the principles of management and its application in the individual and family context.(Understand)

CO2: Analyze management in the family and relationship between other systems in the society. (Analyze)

CO3: Use scientific skills in the management of personal, familial and community resources for successful living.(Apply)

CO4: Develop actions needed for protection and preservation of resources.

Course Content:

Module 1: Introduction to Management (10 hours)

Management Basics: Introduction to Management, Management as a process and Major Steps involved in the process - Planning, Organising, Controlling and Coordinating the Plan in Action and Evaluating. Systems Approach to Management.

Decision Making – Role of Decision Making in Management, Types of Decisions, Steps in Decision Making and Methods of Resolving Conflicts in Group Interactions.

Significance of Management for Individual and family role and importance, Qualities of a Good Manager.

Module 2: Concepts and Factors influencing Management (10 hours)

Concepts of Management– Values, Goals and Standards, Factors Motivating/ Influencing Management Process, Family - Types, Composition and Characteristics, Stages of Family Life Cycle.

Family Resources: Meaning, Classification and Types, Characteristics of Resources, Factors influencing Resource Management, Means to Optimize satisfaction in Resource Management. Resources available for individual and family and constraints during various Life Cycle Stages. Family as an Economic Unit.

Module 3: Management of Human Resources (12 hours)

Management of Time: Time as Human Resource, Significance of Time Management, Time management constraints, Tools and Aids in Time Management such as Time norm, Time cost, Peak load, Work curve, Time Schedule – Preparation and Evaluation, Practical Strategies - Time Management Matrix, Leisure time and its utilization.

Management of Energy: Energy as Resource, Significance of Energy Management, Energy Requirements for Various Household Activities. Fatigue– Classification, Causative Factors and Alleviating Techniques, Human factors and Ergonomics, Work Simplification–Meaning and Techniques, Mundell‘s Classes of Changes. Importance of Labour Saving Devices.

Module 4: Management of Material Resources (12 hours)

Family Expenditure And Financial Management: Family Income as a Resource – Types of Income, Income Profiles; Methods of handling income, Family Expenditure, **Management of**

Money: Family Budget– Types of Budget, Steps in Making Family Budget, Engel's Laws of Consumption; Basic understanding on different Taxes.

Financial Records–Types, Purpose and Advantages; Savings and Investments– Meaning, Saving Institutions and Schemes, Supplementing Family Income, Family Credit–Types, Sources, Use and Misuse.

Management of Natural and Community resources: Household Fuels, Water, Waste: Importance and significance, Classification,Conservation, Devices / techniques for conservation, Green Protocol, familiarization with Sustainable technologies for material resource management and conservation: Digital Technologies, Solar devices, Water harvesting, Integrated Waste Management, Community Resources.

Module 5: Consumer Education (10 hours)

Consumer Education – Meaning, Consumer Problems and Malpractices in Marketing, Rights and Responsibilities of a Consumer, Consumer Aids, Consumer Protection- Protective services and Consumer Protection Laws, Consumer Redressal Procedure, Quality control and Standardization, Advertising and Labelling Information, Smart Consumerism and Better Buying Practices.

References

1. Agarwala S.C. (1999) Interior Decoration, Dhanpat Rai & Co.(P) Ltd., Delhi.
2. Deacon R. E. and Firebaugh F. M. (1998) Family Resource Management- Principles and application, Roy Houghton Mifflin Company, N. Delhi.
3. Moorthy G. (Ed.), (1985) Home Management, Arya Publishers. New Delhi.
4. Mullick P. (2000) Text book of Home Science, Kalyani Publishers, Ludhiana.
5. Nambiar R. K. (2007) Text book of Environmental Studies, SCITECH Publication, New Delhi.
6. Nickel P. and Dorsey J. M. (1997) Management in Family Living. Wiley Eastern Ltd., Bangalore.
7. Swanson S.S. (1981) Introduction to Home Management, Mc Millan Publishing Company, New York
8. Varghese M. A., Ogale N. N and Srinivasan K. (2001), Home Management, New Age International (P) Ltd., New Delhi.

SEMESTER V AND VI - CORE PRACTICAL

HS6CP06B23: INTERIOR DECORATION AND FAMILY RESOURCE MANAGEMENT PRACTICAL

Credits: 2 **Total Hours: 90**

Course Outcomes:

CO1: Develop well designed space using design elements, Color patterns. Flower arrangements, lightning and furnishing. (Evaluate)

CO2: Develop and execute money and material resource management plans.()

CO3: Use the principle of manegment in a group, event or organization setting (Apply).

CO4: Apply the skills learned in management of various aspects of day today life.

Course Content:

INTERIOR DECORATION **(54 Hours)**

1. **Design**

Application of Elements and Principles of Design; Development of Motifs and Patterns and its application in designs suitable for furnishing / accessories.

2. **Colour**

Preparation of Primary, Secondary & Intermediate colours, Colour Charts, Harmonies of Colour and Application of Colour Schemes in a Room Design.

3. **Flower Arrangement**

Demonstration of basic shapes in Flower Arrangement, Dry Flower Arrangement, Ikebana, Artificial Flower Making, Arrangement & Bouquet making.

4. **Furnishings**

Illustration of various Curtain styles, Measurement taking and Material calculation for curtains, Table setting for the planned Event.

5. **Home Lighting**

Development of Designs for Lamps Shades suitable for various rooms.

6. **Interior Layouts**

Furniture plans of specific areas- Living room, Dining room, Bed room, Children‘s

room, Bath room, Kitchen etc. (Any 4 rooms).

7. Evaluation of Interiors

Evaluation of interiors of Rooms based on suitability of design elements and principles.

8. Decorations for Special Occasions

Setting of a stage or room for a special occasion / event, Creation of art objects using waste materials based on the theme for the planned Event/ Occasion.

RESOURCE MANAGEMENT (36 Hours)

1. Management of Time and Energy

Time schedule: Preparation of time plan for College girl/ Homemaker and its evaluation. Conduct a time utilization study among college students.

Work study: Determination of working heights in vertical and horizontal planes, study of Anthropometry and Furniture sizes for various activities.

2. Management of Money and Material resources

Budget Preparation – Study of expenditure pattern of your family and preparation of a model family budget, Conduct household survey on income management practices.

Energy Conservation- Visit to an organization involved with Energy management/ Alternate energy programmes/ Study of Devices and Techniques for Conservation of Energy or Renewable Energy Devices (Solar Devices and Biogas)/ Attend seminar on Energy Management. Organize a community based awareness programme on energy or fuel conservation.

Waste Management - Study the waste management practices in your house and locality/ Prepare a booklet on Integrated Waste Management Practices and organizations providing assistance, Prepare functional and decorative craft items from waste materials.

3. Consumer Education

Development and evaluation of Labels and Advertisements for consumer products, Report on Organizations / NGO working for consumer education, Preparation of a consumer complaint for any defective consumer product to consumer redressal forum. Conduct an Awareness programme for Smart Consumerism.

Event Management

a) Residence stay for a week incorporating Principles of Management

OR

b) Planning, Organizing, Implementing and Evaluating a group event (Party/ Exhibition/ Seminar/ Workshop/ Tour)

(A record of the entire practical should be maintained)

SYLLABI FOR OPEN COURSES

SEMESTER V – OPEN COURSE

(For students of other Programmes)

HS5D01AB23: LIFE SKILL STRATEGIES AND TECHNIQUES

Credits 3
Hours per week : 4 **Total Lecture Hours: 72**

Course Overview and Context:

Life Skill Strategies is a multi-disciplinary course encompassing the various disciplines of Home Science. It includes a wide range of subjects like Health and Nutrition, Resource Management and Interior Designing, Clothing and Grooming, Inter and Intra Personal Development, career and Entrepreneurship Development.

The course provides required skills and strategies for all round personality development and successful living and helps to impart entrepreneurial skills and avenues for the students.

Thus the course aims to empower women for a holistic development.

Course Outcomes

CO1: Explain the concepts of Food, nutrients, food groups, balanced diet, and life style diseases (Understand)

CO2: Describe the significance of resource management and interior design (Understand)

CO3: Explain the importance of personality enhancement and communications in daily life (Understand)

CO4: Identify entrepreneurial avenues and develop entrepreneurial ventures (Evaluate)

Course Content:

Module 1: Health and Nutrition Strategies (20 hours)

Dimensions of health, Food, Nutrition -terms and definitions, Nutrients, Food groups, Balanced diet, Food Guide pyramid, My healthy plate Principles of Dietary planning, Dietary guidelines for Indians (NIN), Indian reference Man and Woman, Nutrition Transition, Prevalence of life style diseases and risk factors, Food safety and hygiene, Food adulteration and food labeling.

Module 2: Resource Management and Interior Design (15 hours)

Resources-meaning, characteristics and classification

Time Management- Significance, Tools and aids in time Management.

Money Management –Types of income, Budgeting, Supplementation of Income and savings

Energy management for sustainable living, Work simplification-meaning techniques, Mundell's classes of changes.

Principles and Elements of Design, Accessories for Home Décor, Adding life to Interiors by Plant and Floral decoration.

Module 3: Enhancing Personality through Clothing and Grooming (14 hours)

Essentials in good grooming, Elements and Principles of design applied to clothing, Selection of suitable costume for different figure types, for various occasions- interview, formal and informal; Care of Fabrics.

Module 4: Development of Self, Interpersonal relationships, Career skills (14 hours)

Self, Dimensions of self, Self-constructs, Communication-Intra and Interpersonal Communication skills: Verbal and non-verbal communication (Body language), Stress management, Goal setting, Interview skills, leadership skills, Team Work.

Module 5: Developing Entrepreneurial Skills (9 hours)

Baking: Role of ingredients in baking, mixing methods.

OR

Flower arrangement: Basic principles in flower arrangement, Types of flower arrangements.

OR

Arts and Craft making: Types of arts and crafts, Technique and supplies needed.

OR

Designs on Fabrics: Techniques and supplies needed for Fabric painting, / Bathik designs, /Screen printing, /Block printing.

OR

Table Setting and Table etiquettes

References

1. Varghese M. A., Ogale. N. N and Srinivasan. K. (2001). Home Management. New Age International (P) Ltd. New Delhi.
2. Nickell P. and Dorsey .J.M. (1997). Management in family living, Wiley Eastern Ltd. New Delhi.
3. Sigelman. C. K and Rider. E. A. (2003). Life Span Human Development, Thomas Wadsworth Publishing Company, USA
4. Krause. M. V and Mahan. (2005). Food Nutrition and Diet Therapy. WS Saunders Co., Philadelphia.
5. Srilakshmi.B.(2010)Dietetics. New Age International(P) Ltd. Chennai
6. Norman Vincent Peal (2004). Power of Positive Thinking, Rohan Book Company, Delhi.
7. Manay, N. Shakuntala and Shadaksharaswamy M. (2008). Food Facts and Principles, 3rd Edition. New Age International (P) Ltd, New Delhi.
8. Kasu, A.(2005). Interior Design, Indica Publishers, Delhi.

SEMESTER V – OPEN COURSE (OPTIONAL)

(For students of other Programmes)

HS5D01BB23: INTERIOR DECORATION AND RELATED ARTS

Credits: 3
Hours per week: 4 **Total Lecture Hours: 72**

Course Overview and Context:

Interior decoration is one area of specialization which focuses attention on the functional and aesthetic aspects of residences, commercial establishments and work spaces. This subject has grown so much in scope and career and is attracting students for pursuing a lifelong career.

The course enables the student to understand and apply basics of design and develop basic skills among the students for a career option in Interior Designing. Basic knowledge and skill development for furnishing and accessorizing residential interior enable the students to become interior decorators.

Course Outcomes:

CO1: Identify basic elements and principles of design and their role in creating good interior design (Understand).
CO2: Apply of basics of design and colour harmonies in interior designing (Apply).
CO3: Calculate lighting requirements for different room and select suitable lighting for interior (Analyse)
CO4: Evaluate furniture, furnishings and accessories requirement for interior (Analyse).
CO5: Devise basic hand stitches and other ornamentation techniques for application in furnishing (Apply).

Course Content:

Module 1: Art & Design **(18 hours)**

Introduction to foundation of art, importance of good taste in interior decoration; Definition and types of Design: structural and decorative; Elements of design-line form,

shape, texture, space pattern, light. Principles of design- harmony, proportion, balance, emphasis, rhythm; Colour-Importance of colour in interiors, Prang colour system, colour harmonies, application of colour.

Module 2: .Basics of Fine Arts (18 hours)

Basic drawing techniques, pencil drawing, charcoal drawing, cartoon drawing, portrait drawing, doodling etc.; Painting- water colour painting, painting with crayons/oil pastels, oil painting, glass painting, fabric painting; Special painting such as Madhupani, Kalamkari, Thanjore; Warli art, Gond art, alpana/kolam; Sculpture and Photography.

Module 3: Furniture, Furnishing & Accessories (14 hours)

Selection and arrangement of furniture, types-dual purpose, built in, furniture requirements for various rooms. Soft furnishings- Selection, classification, curtain styles, hanging of curtains- pelmets, swags, valences and their effect, planning curtain styles for different types of windows; Accessorizing interiors.

Module 4: .Flower Arrangement & Bouquet Making (12 hours)

Floral arrangement and display, Types of Flower arrangements;- Mass arrangement, Line arrangement, Line cum Mass arrangement; Basic shapes in flower arrangement – Triangular, Horizontal, Vertical, All-round, Crescent and Hogarth; Floating arrangement, Diminutive arrangement; Selection of suitable containers, Dos and Don‘ts in flower arrangement; Japanese floral art, Basic principles of Ikebana – levels and angles, types of Ikebana, Rules and Regulations; Bouquet Making.

Module 5: Creative Art with Waste Materials (10 hours)

Product Development and Evaluation - Creation of art objects using waste materials.

References

1. Faulkner.R and Faulkner.S. (1974) Inside Today‘s Home, Holt Rinehart and Wonston Inc , New York.
2. Pratap Rao M., (2001) Interior Design –Principles and Practice, Standard Publishers and Distributors, N. Delhi.

3. Premavathy S and Parveen P. (2010) Interior design and Decoration, CBS publishers, New Delhi,2010
4. Premlatha Mulick- (2003) Text Book of Home Science, Kalyani Publishers, Ludhiana.
5. Sally. A. –Enjoy flower arranging, Faber and faber, 24 Runnel square, London.

SEMESTER V – OPEN COURSE (OPTIONAL)

(For students of other Programmes)

HS5D01CB23 : NUTRITION FOR WELLNESS

Credits 3

Hours per week : 4 **Total Lecture Hours: 72**

Course overview and context:

The course seeks to provide an overview of nutrition science and cover major nutrients.

Lifestyle diseases and equips the student to formulate a healthy diet for normal and major therapeutic conditions.

Course Outcomes:

CO1: Discuss the relationship between nutrition, health and dietary components (Understand)

CO2: Modify diets in order to promote health in different stages of life cycle (Apply)

CO3: Develop on menu planning principles to formulate therapeutic diets for lifestyle diseases. (Evaluate)

CO4: Assess the nutritional status of individuals in different stages of life cycle. (Evaluate)

Course Content:

Module 1 : Introduction to Nutrition: (6 hours)

Introduction, Classification of foods (based on origin, chemical composition predominant function, nutritive value, ICMR Food Groups) Relation of food and health, food and its functions. Dietary guidelines for Indians.

Nutrients and their function: Energy, Proteins, fats, Vitamins, Minerals and Trace elements:-sources, functions, Recommended dietary allowances, prevention and treatment of deficiency diseases.

Module 2: Menu Planning (24 hours)

Factors affecting meal planning, balanced diet, steps in planning balanced diet, Life cycle nutrition : Nutritional requirements and planning diets during pregnancy, lactation , Infancy, preschool ,school age, adolescents, adults and old age.

Module 3: Management of Lifestyle diseases (18 hours)

Introduction- Purpose of diet therapy, classification of modified diets, Diets for selected lifestyle disorders: Obesity, Diabetes Mellitus, Cardiovascular diseases- Atherosclerosis and Cancer. Prevention and Management of lifestyle diseases.

Module 4: Assessment of Nutritional Status (12 hours)

Methods of assessment of nutritional status:

Direct Methods :- - Anthropometry, Biochemical changes, Clinical assessment, Dietary Assessment.

Indirect Methods :- Vital health statistics.

Module 5: Functional foods and Phyto chemicals (12 hours)

Functional foods and its role in health.Types of phytochemicals, Sources and Disease Preventing Properties of Phytochemicals. Probiotics and prebiotics.

References

1. Insel P, Turner E.R. and Ross D(2003).Discovering Nutrition, American Dietetic Association,Jones and Bartlett Publishers, London.
2. Park K, (2009). Park`s Textbook of Preventive and Social Medicine, 20th Edition, Banarsidas Bhanot Publishers, Jabalpur, India,
3. Joshi S.A, (2010).Nutrition and Dietetics, third Edition, Tata McGraw Hill Education Pvt.Ltd, New Delhi.
4. Srilakshmi B(2010). Dietetics , New Age International (p) Ltd, Publishers, New Delhi.
5. Dietary guidelines for Indians (2000),ICMR, NIN, Hyderabad.
6. Sreelakshmi B.(2010). Nutrition Science , New Age International (p) Ltd, Publishers, New Delhi.

SEMESTER V- OPEN COURSE
(For students of other Programmes)

HS5D01DB23: SELF EMPOWERMENT SKILLS

Credits: 3

Hours per week: 3 **Total Lecture Hours :54**

Course Outcomes:

CO1: Explain the concepts of personality development and resource management (Understand)

CO2: Identify the importance of interpersonal skills (Understand)

CO3: Explain the importance social skills (Understand)

CO4: Develop strategies to manage family life using appropriate soft skills (Apply)

CO5: Develop aesthetic and income generating skills (Create)

Content:

Module 1: Personality Development and Life Skills (15 hours).

The concept of personality - Dimensions of personality – Theories of Freud & Erickson- Significance of personality development. The concept of success and failure: What is success? - Hurdles in achieving success - Overcoming hurdles - Factors responsible for success – What is failure - Causes of failure. SWOT analysis. Problem-solving - Conflict and Stress Management - Decision-making skills - Leadership and qualities of a successful leader.

Module 2: Resource Management (15 hours)

Resources – Definition, Types Management- definition, Steps in management process, Decision making Time management- Time Schedule, Tools in Time management Money Management – Steps in making Budget, Record keeping. Energy management – Types of fatigue, Causes of fatigue, Work simplification. Waste management, Wealth from waste.

Module 3: Communication and Learning Skills (22 hours)

Importance of Communication-Verbal and Non Verbal Communication. Intelligent Listening, Effective speaking, Impressive writing skills- letters, note taking. Presentation skills. Intelligence – Definition, areas of intelligence, Types of learning, Memory techniques Scientific learning. Barriers to communication: Physiological Barriers, Physical Barriers, Cultural Barriers, Language Barriers, Gender Barriers, Interpersonal Barriers, Psychological Barriers, Emotional barriers

Module 4: Family life skills. (10 hours)

Marriage – definition, Areas of Marital adjustment, Factors influencing adjustment. Parenting skills, Reproductive health – diet, personal hygiene. Stress management, Life skills for psycho – social development Importance of interpersonal skills in relationships (Husband- Wife, Parent –Child, Teacher – student and sibling relationships).

Module 5: Employability Quotient. (10 hours)

Resume building- The art of participating in Group Discussion – Facing the Personal (HR & Technical) Interview -Frequently Asked Questions - Psychometric Analysis - Mock Interview Sessions.

References

1. Mitter, S. & Aggarwal, S.C. (2002). How to develop Your Personality Potentialities. Sultan Chand & sons, New Delhi
2. Khera Shiv **(**2002). You Can Win .Macmillan Publishing. New Delhi.
3. Varghese M. A., Ogale. N. N and Srinivasan. K. (2001). Home Management. New Age International (P) Ltd. New Delhi.
4. Nickell P. and Dorsey .J.M. (1997). Management in family living, Wiley Eastern Ltd. New Delhi.
5. Sigelman. C. K and Rider. E. A. (2003). Life Span Human Development, Thomas Wadsworth Publishing Company, USA

SYLLABI FOR CHOICE BASED CORE COURSES

SEMESTER VI – CORE COURSE

CHOICE BASED COURSES (*Elective)*

HS6C13AB23: WOMEN EMPOWERMENT

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

This course intend to introduce women empowerment as a discipline of life management science to refresh the basic concepts of women rights and responsibilities so that the students have sound foundation to empowering themselves and get a strong foundation to upscale their potentials and confidence during the study of the programme.

It also focuses to create awareness about various commissions and schemes for women, legal aids for women, various government and non- government organizations for women in the organized and unorganized sector and various aspects of women entrepreneurship.

The course addresses gender issues and aims to empower women for a sustainable and equal future.

Course Outcomes:

CO1: Recall the transition of women from ancient to modern millennium establishing the significance of women empowerment (Understand)

CO2: Summarize the methods to improve the current status of women and girl children from a regional, national and global perspective (Apply)

CO3: Critically examine women's entrepreneurship and key entrepreneurial skills. (Analyze)

CO4: Develop awareness among youth regarding the constitutional and legal aids and create programs on advocacy for women‘s legal and fundamental rights (Apply)

Course Content:

Module 1: Status of Women in India -past and present (10 hours)

Demography, Concept, significance and need for Women empowerment, Social aspects of Women empowerment. Transition of women towards the new millennium, Multiple Roles of Women- Role conflict and Role changes, Issues Related to Female children - Female foeticide, Female Infanticide, child marriage. Issues Related to Women- Dowry, Divorce, Widowhood, Domestic violence, problems of elderly and single women. National Committees and Commissions for Women, Organizations for Women, Ministry of Women and Child Development.

Module 2: Women and Law (12 hours)

Indian constitution and provisions relating to women, Need for legal literacy, Laws pertaining to Marriage, Divorce, Dowry, Succession/Property rights, Sexual abuse, Immoral Traffic, and Abortion, Indecent Representation of Women Act 1986, Family courts, Enforcement machinery, Human Rights as Women‘s Rights.

Module 3: Empowering women-Sustainable and equal future (10 hours)-

Empowerment of Women: Alternative approaches - Women in Development (WID) - Women and Development (WAD) - Women‘s Development- Definition. Types of Empowerment: Social, Educational, Political, Economical, Legal to Holistic levels-Role of Govt. and NGOs - Help line numbers in promoting women‘s empowerment - National and International Funding Agencies in promoting research on women. Women in organized and unorganized sectors, Special problems and needs of women in work force, Gender division of work, Globalization and impact on women‘s employment, role of SHGs.

Module 4: Entrepreneurship (10 hours)

Definition, concept and characteristics. Role of entrepreneur, Personal Effectiveness-factors affecting entrepreneur‘s role and skills-effective communication skill, interpersonal skills, achievement, motivation, goal orientation, creativity, assertiveness and quick response, Barriers and challenges of women‘s self-employment. Trends in Indian women Entrepreneurship Development.

Module 5: Procedures to be an entrepreneur (12 hours)-

Product identification, generation of new product ideas, sources of ideas. Product formulation, feasibility analysis, Project planning, Project proposal for fund from bank/other funding agencies, significance, cost analysis. List of documents to be submitted for registration and licence, Principles of marketing and basics of accounting. Agencies for development of entrepreneurship (SSI, KITCO, KIED, KSWDC). Banks and other voluntary organizations/ Institutions assisting entrepreneurs)

Related Experiences

a) **Visits**-Visit to small scale industries. Visit to Agencies that finance SSI.
b) **Preparation of Articles based on the following**-Bakery / confectionary / bouquet-making / flower arrangement /Dyeing/ printing/ embroidery / Garment manufacturing.

Minimum two articles from the above are to be prepared and organize an exhibition-cum-sale of the prepared products.

References

1. Ashok S Kolaskaer and Motilal Dash(2012). Women and Society; The road to change. Oxford Universitypress.
2. Charu Gupta. (2012). Gendering Colonial India. Reforms.Print. Caste and communalism, Orient Black Swan.
3. Mary E. John ed.(2008).Women's Studies in India: A Reader. New Delhi: Penguin Books India.
4. Hisrich.R.D and Peters M.P.(1995). Entrepreneurship-Starting. Developing and managing an enterprise. INC USA.
5. Gupta. Srinivasan, (2004). Entrepreneurship Development in India. Sultan Chand. New Delhi.
6. J.S.Saini.B.S.Rathore. (2001). Entrepreneurship Theory and Practice. Wheeler. New Delhi. Rani Sandhya, ‒Development of Women – Issues and Challenges‖, Discover Publishing House Pvt Ltd, New Delhi, 2012.

7. Anil Kumar Jha, ‒Gender Inequality and Women Empowerment‖, Axis Books, New Delhi, 2012.
8. NandalSantosh , ‒Women and Development‖, A Mittal Publications, New Delhi, 2012
9. RaoPulla, ‒Political Empowerment of Women in India – Challenges and Strategies‖, ABD Publishers, New Delhi, 2012.
10. Jenny Edwards, Andrea Cornwall, et al., ‒Feminisms, Empowerment and Development: Changing Women‘s Lives‖, Kindle Edition, 2014.
11. Elson Diane, et al. ‒Gender Equality and Inclusive Growth: Economic Policies to Achieve Sustainable Development‖, UN Women, 2019
12. Priyanka Sharma Gurnani, ‒Women Entrepreneurship – Emerging Dimension of Entrepreneurship in India‖ Educreation Publishing House, New Delhi, 2016

SEMESTER VI – CORE COURSE

CHOICE BASED COURSES (*Elective)* - OPTIONAL

HS6C13BB23: SURFACE ORNAMENTATION TECHNIQUES

Credits : 3

Hours per week: 3 **Total Lecture Hours: 54**

Course overview and context:

The course introduces the various traditional and modern surface ornamentation terminologies and techniques to the students.

It also aims to create awareness about special techniques of surface ornamentation and its application methods in textiles.

The course focuses on sustainable skill development of women and empowering them for an equal future

Course Outcomes

CO1: Explain the various terminologies used in surface ornamentation and the ways in which it can be adopted by the consumers. (Understand)

CO2: Apply basic traditional embroidery, tools and techniques in garments. (Apply)

CO3: Comprehend contemporary methods of ornamentation and special techniques. (Analyse).

CO4: Apply different methods of printing and dyeing (Apply)

Course Content:

Module 1: Embroidery (10 hours)

Embroidery tools and techniques, embroidery threads and their classification, selection of threads, needle and cloth, tracing techniques, ironing and finishing of embroidered articles.

Module 2: Basic Hand Embroidery (12 hours)

Two variations of running stitch, back stitch, stem stitch, chain stitch, lazy daisy stitch, buttonhole stitch, feather stitch, herringbone stitch, knot stitch, satin stitch and cross stitch.

Module 3: Traditional and modern Embroidery (10 hours)

Origin, application and colours. Kantha, Chikan, Kasuthi, Zardosi, Kutch and Mirror work. Market survey on latest trends in surface ornamentation-crochet, macrame, lace insertion techniques, net and lace ornamentation and decorative borders.

Module 4: Special embellishment techniques (12 hours)

Ribbon work, Applique, quilting, Patch work, Smocking, Honey comb, gathered with embroidery, Fabric Painting, Hand Stencil, Dabbing and Spraying,

Module 5: Dyeing, printing, Trimming and decorations (10 hours)

Advanced Tie & Dye techniques, Batik and Block printing, Laces, tassels, Tucks, Show buttons, Eyelet and Cord, Bead work, Cut work and Crocheting.

References

1. Richard M. Proctor and Jennifer FLew.(1998). Surface design for fabric. University of Washington Press.
2. LantoSynge. (1995). Art of embroidery: History of style and technique. Woodridge
3. Helen M. David & Charles.(1986.) The Timeless Embroidery.
4. Readers Digest.(1993). Complete guide to Sewing..Pleasantville- Nu Gail L. Search Press Ltd.
5. Barbara. S.(1998).Creative Art of Embroidery. Lundon.NumblyPub.group Ltd.
6. Shailaja N.(2001). Traditional Embroideries of India. APH Publishing. Mumbai.

SEMESTER VI – CORE COURSE

CHOICE BASED COURSES (*Elective)* – OPTIONAL

HS6C13CB23: EARLY CHILDHOOD CARE AND INTERVENTION

Credits: 3
Hour Per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

Identification of developmental delays, mode and importance of early stimulation. The methods of assessment would be instilled through the subject content enlisted.

Students develop a strong theoretical foundation which in turn will help develop the requisite skills for jobs related to early intervention and identification of developmental delays, remediation of learning disability and in the field of child welfare.

Course Outcomes:

CO1: Identify developmental delays, mode and importance of early stimulation. (Understand)

CO2: Identify the tools, techniques and methods of assessment of visual & hearing impairment. (Understand)

CO3: Explain early stimulation programmes and its significance. (Apply)

CO4: Plan activities in early childhood center and deal with challenged children in the optimum level possible. (Apply)

Course Content:

Module 1: Developmental milestones and Developmental Delay (10 hours)
Definition, Different developmental milestones .Definition and causes for developmental delays. Child development & Home environment

Module 2: Developmental assessment (12 hours)
Definition, purpose of assessment, Assessment below two years, Tools &techniques used for assessment-TDSC, DASII,DDST,DOC, Neurological evaluation, Assessment of visual & hearing impairment.

Module 3: Early Intervention and Early Developmental Stimulation (12 hours)

Definition of early intervention. Techniques of intervention for head control, rolling, creeping, sitting, standing and walking, development of hand functions. Definition, aims, importance, Role of parents , Newborn stimulation in NICU & at Home, sensory training, early stimulation programmes.

Module 4: Pre-School programme (10 hours)

Definition, principles of programme planning, Short & long term planning. Daily programme, Pre–school organization-physical arrangement, equipment needed, maintenance of records, preschool personnel, home–school relationships.

Module 5: Intervention programmes for Children with challenges (10 hours)

Visual & Hearing Impairment-Signs & Symptoms, Intervention programmes, Characteristics, identification & intervention programmes for the Gifted, Learning disabled, Autistic & Attention Deficit Hyperactivity Disorder (ADHD) children

References

1. Guide book – mother & child protection card. Ministry of Human Resource Development. Govt. of India.
2. Hurlock (2008). Developmental Psychology - 4thEdition, Mc Graw Hill Publishers, UK
3. Hurlock (2004).Personality development, Mc Graw Hill Publishers, UK
4. M.K.C.Nair (2004). Module on early stimulation, Sage Publishers, Ahmedabad.
5. Marshall & Stuart(2001). Child Development, Prentice Hall, London
6. Suriakanthi.A(2009).ChildDevelopment-4th edition, Sage Publication, Ahmedabad.

SEMESTER VI – CORE COURSE

CHOICE BASED COURSES (*Elective)* - OPTIONAL

HS6C13DB23: GENDER STUDIES

Credits: 3

Hours per week: 3 **Total Lecture Hours: 54**

Course Overview and Context:

The focus of this course is to introduce students to concepts and issues emerging in the field of women's/gender studies and contemporary debates taking place in feminist theory. In addition to providing a history of feminist theory and movements, this course provides an introduction to critical thinking about the construction of gender and the intersections of gender with race, ethnicity, class, sexuality, and nation.

Gender as a category of social analysis and gender bias in contemporary society. It assesses various patriarchal ideologies, practices, normative structures which will enable students to understand how the state, media and market reproduce these hierarchies.

Course Outcomes:

CO 1: Explain the concept of Gender and its importance with special reference to women in the society. (Understand)

CO 2: Review to the life experiences of gender and family in Indian context. (Understand)

CO 3: Identify Gender based support systems and its importance (Understand)

CO 4: Analyse the roles of media in gender ideologies and enabling gender inequalities. (Analyse)

Course Content:

Module I. Conceptualizing Gender (12 hours)

- Key concepts in Gender studies.
- Women's Studies to Gender Studies, Need for Gender Sensitization. Constructing Sex and Gender, Patriarchy, Sexual Division of Labour, Construction of sexuality , Masculinity and Femininity.

- Concept of Work – Productive and non – productive work – Use value and market value.
- Gender Division of Labour – Mode of Production – Women in organized and
- unorganized sector.

Module II. Gender and Family in India (15 hours)

- Family as a gendered institution
- Family as a site of violence
- Women as honour and shame of caste, religion, clan
- Gender diversities and disparities in enrolment, Curriculum content, Dropouts, profession and Gender.
- Gendered Education- Family, Culture, Gender roles, Gender Identities.

Module III. Women's movement in India (15 hours)

- Women's Education – Gender diversities and disparities in enrolment, Curriculum
- content, Dropouts, profession and Gender.
- Gendered Education- Family, Culture, Gender roles, Gender Identities.
- Education for the Marginalized Women.
- Recent Trends in Women's Education – Committees and Commissions on Education.
- Vocational education and skill Development for women.Education for the Marginalized Women.

Module IV: Experiencing Globalization, Consumerism and Neoliberalism in India

(15 hours)

- Role of Media in constructing ideologies enabling gender inequalities
- Discourse on Women and Media Studies- Mainstream Media, Feminist Media.
- Coverage of Women's issues and issues of women in Mass Media and Media
- Organizations (Audio-Visual and Print media).
- Digital Media and legal protection.
- Indecent Representation of Women (Prohibition) Act, 1986, Impact of media on women
- Market and gender construction

- New Economic Policy and its impact on Women‘s Employment – Globalization – Structural Adjustment Programs.

Module V: Gender and Entrepreneurship (15 hours)

- Concept and meaning, Importance of Entrepreneurship, Entrepreneurial traits, Factors
- contributing to Entrepreneurship, enabling environment, small Enterprises, women in agri-business.
- Gender and emerging Technology – Impact.
- Self-help Groups and Micro Credit.
- Gender mainstreaming**,** Gender budgeting, planning and Analysis.

Textbook:

1. Oakley, Ann. (1972). Sex and Gender and Society. London; Temple smith
2. Robinson, Victoria., & Diane, Richardson. (Eds.). (1993). Introducing Women‘s Studies:Feminist Theory and Practice. London: Macmillan
3. Krishnaraj, Maithreyi. (1995). Remaking Society for Women: Visions Past and Present. New Delhi: Indian Association for Women‘s Studies.
4. Saraswati, Ayu. L., Shaw, Barbara & Rellihan, Heather. (2017). Introduction to Women's, Gender,and Sexuality Studies: Interdisciplinary and Intersectional Approaches. Oxford UniversityPress.

References:

1. Bhasin Kamala (2000): Understanding gender, kali for women , N. Delhi.
2. Basu Aparna(1999) Women‘s Education in India in Ray and Basu (edt): From Independence Towards Freedom, OUP, New Delhi.
3. Chodhuri Maitreyee (2004): Feminism in India, Women Unlimited, New Delhi.
4. Chakravarty Uma (2003), Gendering caste through a feminist Lense, Stree, Calcutta.Courting Disaster, PUDR report.
5. Davis Kathy, Evans Mary, Lorber, J (edt) (2006): Handbook of Gender and Women‘s studies, Sage, UK.
6. Geetha V.: Gender, Stree, Calcutta, 2002.

7. Ghadially Rehana (Edt): Urban Women in Contemporary India, Sage Publications, 2007.
8. IGNOU : Kits on Women in Indian Contexts, Delhi
9. Kaplan Karen, An Introduction to Women‘s Studies: Gender in a Transnational World.2nd ed. Eds. Inderpal Grewal and New York: McGraw Hill, 2006.
10. Rege Sharmila: Sociology of gender, Sage, New Delhi , 2003