## THE MAHATMA GANDHI UNIVERSITY UNDERGRADUATE PROGRAMMES (HONOURS) SYLLABUS

**MGU-UGP (Honours)** 

(2024 Admission Onwards)



Faculty : Science

BoS : Home Science

**Programme : Bachelor of Science (Honours) Home Science** 

Mahatma Gandhi University Priyadarshini Hills Kottayam – 686560, Kerala, India

# CONTENTS

SI. No	Title
1.	Preface
2.	Board of Studies & External Experts
3.	Syllabus Index
4.	Syllabus – Semester 1
5.	Syllabus – Semester 2
6.	Syllabus – Semester 3
7.	Syllabus – Semester 4
8.	Syllabus – Semester 5
9.	Syllabus – Semester 6
10.	Syllabus – Semester 7
11.	Syllabus – Semester 8
12.	Summer Internship
13.	Internship Evaluation
14.	Project Evaluation
15.	Syllabus Revision Workshop Participants

#### PREFACE

In response to the transformative shift in higher education, universities across the state have embarked on a comprehensive endeavor to conceive the structural framework and devise the regulatory framework for the novel undergraduate curriculum. In adherence to a sequence of academic dialogues, focused workshops, and comprehensive deliberations, Mahatma Gandhi University has undertaken a rigorous process of curriculum design and has meticulously devised the new framework and regulatory guidelines, for imminent implementation.

Mahatma Gandhi University as per the U. O No.11327/AC A9/2023 dated 09.11.2023 entrusted the task of BoS members of Home Science UG and PG combined under the leadership of chairperson and a team of members from affiliated colleges to design the curriculum for Under Graduate Programmes (Honours) 2024. The newly designed course content was designed to take effect from academic year 2024-25 onwards.

The members of the BoS met several times and worked out the format for the proposed design of the UG programme in Home Science as per the guidelines envisaged by the University. The members decided to organize a five-day workshop in connection with the designing of the curriculum. The five-day workshop was conducted from 13.11.2023 to17.11.2023 at St. Teresa's College, Ernakulam; 20 faculty members from different Colleges of Mahatma Gandhi University were attended the workshop.

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

The Curriculum incorporates Major, Minor, Multi-Disciplinary Courses (MDC), Skill Enhancement Courses (SEC), Ability Enhancement Courses (AEC), Value Added Courses (VAC), summer internship/field based learning, research project/ dissertation of various disciplines with Graduate Attributes (GAs) such as disciplinary knowledge, laboratory/field driven practical's, the art of writing & communication, self-learning, critical thinking, analytical & problem solving abilities, use of ICT, application of knowledge, lifelong learning, research-related skills, team spirit, multicultural competencies, leadership qualities, global vision, professional commitment and sensitizing with Sustainable Development Goals (SDGs) of United Nations. It also aims to build future ready professionals who would be socially responsible global citizens contributing to the overall development of the country.

I Specially thank the Vice Chancellor, Syndicate members, Curriculum Committee Members of Mahatma Gandhi University for their instinct encouragement, support and constant guidance during this Syllabus designing processes.

I thank the external experts and all the BoS members for their valuable services during the scrutiny and workshop. I am very grateful to the members of the workshop who have willingly co-operated with me in this venture. I am Thankful to Dr. Sr. Vinitha CSST, Provincial Superior and Manager and Principal, Prof. Dr. Alphonsa Vijaya Joseph of St. Teresa's College, Ernakulam for the assistance given to make this effort a success.

I believe that the newly designed syllabus will greatly contribute to our academic success and foster a more conducive learning environment.

I am glad to present this syllabus to the Mahatma Gandhi University on behalf of BoS Home Science who has whole-heartedly devoted their valuable services.

Splladus

Mrs. Manjulin Jacob Chairperson, BoS Home Science, UG and PG combined

### **BOARD OF STUDIES & EXTERNAL EXPERTS**

- Mrs. Manjulin Jacob, Associate Professor, Assumption College, Changanassery. (Chairperson)
- 2. Dr. Betty Rani Isaac, Associate Professor, St Teresa's College, Ernakulam. (Member)
- Mrs. Rose Mary Francis, Associate Professor, St Teresa's College, Ernakulam. (Member)
- 4. Mrs. Sajitha Suseelan S, Assistant Professor, Morning Star Home Science College Angamaly (Member)
- Mrs. Sherin Abraham, Assistant Professor, Morning Star Home Science College, Angamaly (Member)
- Dr. Anooja Thomas. K. Rtd., Associate Professor, CMS College, Kottayam. (Member)
- 7. Dr. Sheeja P.R, Associate Professor, HHMSPB NSS College for women, Thiruvananthapuram (Member)
- Dr. Seena Gopinathan, Associate Professor, S N College for women, Kollam. (Member)

#### **External Expert for Scrutiny**

1. Dr. Mini Joseph, Associate Professor in Home Science, Government College for Women, Thiruvananthapuram.

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2. Dr. Miriam Mani, Associate Professor (Rtd), CMS College, Kottayam.

### Syllabus Index

### Name of the Major: **Home Science**

Course Code	Title of the Course	Type of	Credit	Hours/	Но	ur Dis /w	stribu eek	tion
		the Course		W COK	L	Т	Р	0
MG1DSCHSC100	Perspectives of Home Science - I	DSC A	4	5	3	-	2	-
MG1MDCHSC100	Creative Arts and Crafts	MDC	3	4	2	-	2	-

### Semester: 1

Course Code	Title of the Course	Type of Credit		Hours/	Но	ur Di /w	stribu eek	ition	
		the Course		week	L	Т	Р	0	
MG2DSCHSC100	Perspectives of Home Science - II GU-UG	DSC A	urs)	5	3	-	2	-	
MG2MDCHSC100	Fashion Fundamentals	MDC	3	4	2	-	2	-	
Syllabus									

Course Code	Title of the Course	Type of the Course	Credit	Hours/ week	Но	ur Dis /w	stribu eek	tion
					L	Т	Р	0
MG3DSCHSC200	Human Nutrition and Biochemistry	DSC A	4	5	3	-	2	-
MG3DSCHSC201	Child Development	DSC A	4	4	4	-	-	-
MG3DSCHSC202	Mental Well-Being of Adolescents	DSC B	4	5	3	-	2	-
MG3DSEHSC200 MG3DSEHSC201	<ol> <li>Fashion Concepts         <ul> <li>(Specialization-Textiles and Apparel designing</li> </ul> </li> <li>Landscaping and Gardening</li> </ol>		INERS/1					
MG3DSEHSC202	3. Sports Nutrition (Specialization-Food Nutrition and Dietetics)	DSE	4	5	3	-	2	-
	4. Early Childhood Education (Specialization-Human	गम्तसञ्च	д <b>а</b>					
MG3DSEHSC203	Development)							
MG3MDCHSC200	Surface Embellishment Techniques	MDC	3	3	3	-	-	-
MG3VACHSC200	Basics of Counselling	VAC	2 3	3	3	-	-	-

C

V A

Course Code	Title of the Course	Type of Credi	Credit	Hours/	Ηοι	ır Dis /we	tributi ek	ion		
		the Course		week	L	Т	Р	0		
MG4DSCHSC200	Interior Decoration	DSC A	4	5	3	-	2	-		
MG4DSCHSC201	Dynamics of Extension and Communication	DSC A	4	4	4	-	-	-		
MG4DSCHSC202	Food Science and Food Safety	DSC B	4	5	3	-	2			
MG4DSEHSC200	<ol> <li>Food Science and Quality Control (Specialization-Food Nutrition and Dietetics)</li> <li>Participatory Programme</li> </ol>		NER							
MG4DSEHSC201	Management	DSE	S	5	3		2			
MG4DSEHSC202	3. Apparel Designing (Specialization-Textiles and Apparel Designing)	YAM	4		5	5		2	2	-
	4. Learning Disabilities (Specialization-Human	तमञ्ज	ç <b>a</b>							
MG4DSEHSC203	Development)									
MG4SECHSC200	Interior Decoration - UGP	SEC		3	3	-	-	-		
MG4VACHSC200	Women Empowerment and Gender Equity	VAC	3	3	3	-	-	-		
MG4INTHSC200	Internship South	aous	2							

Course	Title of the Course	Type of the	Credi	i Hours/ week	Hour Distribution /week				
Code		Course.	t	week	L	Т	Р	0	
MG5DSCHSC300	Clinical Nutrition and Dietetics	DSC A	4	5	3	-	2	-	
MG5DSCHSC301	Resource Management and Consumer Studies	DSC A	4	5	3	-	2	-	
MG5DSCHSC302	Textile Science	DSC A	4	4	4	-	-	-	
MG5DSEHSC300	1. Family Studies (Specialization-Human		E						
MG3D3EI ISC300	2 April a Extension Education		R						
MG5DSEHSC301	2. Applied Extension Education		5//						
MG5DSEHSC302	3. Human Physiology and Microbiology (Specialization-Food Nutrition and Dietetics)	DSE (Any two)	4	4	4	-	-	-	
MODDELLOCOUZ	4. Fashion Marketing (Specialization-Textiles and	ासञ्चतुः							
MG5DSEHSC303	Apparel Designing)								
MG5DSEHSC304	5. Product Development and Marketing	ONOU	RS)						
MG5DSEHSC305	6. Development Communication								
MG5SECHSC300	1. Surface Ornamentation	hug							
MG5SECHSC301	2. Bakery Skills	SEC	3	3	3	-	-	-	
MG5SECHSC302	3. Event Management								

Course Code	Title of the Course	Type of the Cours	Credit	Hours/	Ho	ur Dis /w	stribu eek	tion
		e		week	L	Т	Р	0
MG6DSCHSC300	Fundamentals of Garment Construction	DSC	4	5	3	-	2	-
MG6DSCHSC301	Nutrition Through Life Cycle	DSC	4	4	4	-	-	-
MG6DSEHSC300	1. Designing Interior Spaces							
MG6DSEHSC301	2. NGO Management		B					
	3. Developmental Psychology (Specialization-Human	DSE	2/					
MG6DSEHSC302	Development)	(Any	4	5	3	-	2	-
MG6DSEHSC303	4. Traditional Textiles and Costumes of India (Specialization-Textiles and Apparel Designing)	two)	<b>,</b> 7					
MG6DSEHSC304	5. Child Health and Nutrition (Specialization-Food Nutrition and Dietetics)	ONO	URS)					
MG6SECHSC300	1. Clothing Care	Υ	,					
MG6SECHSC301	2. Creative Applied Arts	DUS						
MG6SECHSC302	3. Women Entrepreneurship Development	SEC	3	3	3	-	-	-
MG6SECHSC303	4. Techniques of Food Preservation							
MG6SECHSC304	5. Food Service Management							
MG6VACHSC300	1. Communication for Development	VAC	3	3	3	_	-	_
MG6VACHSC301	2. Guidance and Counselling							

Course Code	Title of the Course	Type of the Course	Credit	Hours/ week		outio eek		
					L	Т	Р	0
MG7DCCHSC400	Advanced Fashion Designing	DCC	4	5	3	-	2	-
MG7DCCHSC401	Advanced Nutrition - 1	DCC	4	4	4	-	-	-
MG7DCCHSC402	Quantity Food Preparation and Food Service Technique	DCC	4	4	4	-	-	-
MG7DCEHSC400	1. Public Health Nutrition		E					
MG7DCEHSC401	2. Apparel Manufacturing Technology		ISIN A	Δ	4	_		_
MG7DCEHSC402	3. Inclusive Education	DCE	4	4	4	-	-	-
MG7DCEHSC403	4. Research Methodology and Statistics	तमञ	4	4	4	-	-	-
MG7DCEHSC404	5. Community Development							
MG7DCEHSC405	6. Sustainable Resource UGP Management	HONO	URS)					

		Туре			Hour Distribution /week					
Course Code	Title of the Course	of the Course	Credit	Hours/ week	L	Т	Р	0		
MG8DCCHSC400	Early Developmental Stimulation	DCC	4	5	3	-	2	-		
MG8DCCHSC401	Hospitality Management	DCC	4	5	3	-	2	-		
MG8DCEHSC400	1. Commercial and Residential Space Designing									
MG8DCEHSC401	2. Applied Ergonomics	1410								
MG8DCEHSC402	3. Advanced Nutrition – II		4	5	3	-	2	-		
MG8DCEHSC403	4. Environment and Human Resource Management	DCE	4	5 5	3 3	-	2 2	-		
MG8DCEHSC404	5. Functional foods and Nutraceuticals		5							
MG8DCEHSC405	6. Food Chemistry	VAM								
MG8PRJHSC400	Dissertation/ Internship Project	PRJ	12	-	-	-	-	-		

## **MGU-UGP (HONOURS)**



# **MGU-UGP (HONOURS)**

	ľ	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Se	cience					
Course Name	Perspectives of Hom	ne Science	- I				
Type of Course	DSC A						
Course Code	MG1DSCHSC100	AG1DSCHSC100					
Course Level	100-199						
Course Summary	"Perspectives of Hor intersection of desig Additionally, delve classification, cookin exposure in design de techniques.	"Perspectives of Home Science I " is a comprehensive course exploring the intersection of design principles, fashion cycles, and essential life skills. Additionally, delve into nutrition with a focus on balanced diets, food classification, cooking methods, and culinary terms. Students can gain practical exposure in design development, surface ornamentation, and food preservation techniques.					
Semester	Ι	07-	Credits		4	T- 4-1 II	
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	101a1 Hours	
Pre-requisites, if any	Interest in design con	icepts	IONO	URS)	-	43+30=/3	

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No			
After the successful completion of the course the student should be able to:						
1	Apply design concepts, principles, aesthetic sensibilities effectively.	А	3,4,5			
2	Explain fashion concepts, fashion fabrics, surface ornamentation techniques and the dress styles suitable for different body types.	U	1,2,3,			
3	Summarize the Fundamental aspects of food science and nutrition.	An	2,4,5,			

4	Explain the principles of food preservation, packaging and labeling of foods.	U	3,6.7			
5	Exhibit different skills in illustration, surface ornamentation, cooking and preservation techniques	А	8,9			

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.		
Design Aesthetics and Principles of Design						
1	1.1	Design-Concept Definition, Classification- types of design Good Taste – Requirements for good design	15	CO1		
I	1.2	Elements of design- Line, shape/form, colour, texture, Pattern, space and light	15	CO1		
	1.3	Principles of design– Harmony, proportion, balance, rhythm, and Emphasis		CO1		
Fashion Basics	and Fabri	cs in Fashion				
	2.1	Basic body types-Hour glass, Triangle, Inverted, rectangle, slim rectangle, wide rectangle		CO2		
	2.2	Stages of Fashion Cycle		CO2		
	2.3	Factors influencing fashion		CO2		
2	2.5	Fashion Fabrics- Crepe, Flannel, Denim, Damask, Knitted, Terry Cloth, Velvet, Muslin, Chiffon, Dupion, Mutka Silk, Satin, Leather and suede, Georgette, Organza, Lace, Net, Non wovens,	15	CO2		
	2.6	Surface Ornamentation techniques - Printing on fabrics, basic hand and embroidery stitches.		CO2		
Nutrition and N	Methods of	Cooking				
3	3.1	Definition and terms used in nutrition- Health, Food, Nutrients, Nutrition, Malnutrition, Balanced Diet	15	CO3		

	3.2	Classification and Functions of food- Physiological, Psychological and Social Functions.		CO3			
	3.3	Basic Four Food Groups and its Significance and My Healthy Plate for the day.		CO3			
	3.4	An overview of culinary terms. Different modes of heat transfer.		CO3			
	3.5	Moist Heat Methods- Boiling Simmering, Poaching, Stewing, Pressure Cooking, Blanching and Steaming. Dry heat methods - Baking, Grilling, Roasting, Sauteing, Frying and air frying method. Combination Methods- Braising and Other methods- Microwave and solar cooking. Merits and Demerits.		CO3			
	3.6	Steps In Minimizing Loss of Nutrients During Cooking.		CO3			
	3.7	Food preservation- Principles, objectives and methods. Functions of packaging and materials used Food Labelling-Requisites for labelling, Front -of -pack (FOP)labelling.		CO4			
Practical		ावद्यंशा अस्तसञ्जत					
	4.1	Illustration of design elements,		CO5			
	4.2	Principles of design- illustration /application		CO5			
	4.3	Prang Colour System, and colour harmonies		CO5			
4	4.4	Printing on fabrics: Block printing, Vegetable block printing, Stencil printing. Basic Embroidery Stitches: Minimum 6 stitches.	30	CO5			
	4.5	Grouping of foods based on nutritive value.		CO5			
	4.6	Methods of cooking- Moist, dry, combined and other methods.		CO5			
	4.7	Development of a preserved food product and labelling according to FSSAI norms.		CO5			
	Teacher s	pecific content					
5	(This cont	ent will be evaluated internally)					
	Practical session, Class room Teaching, Field visits etc.						

## Mode of Assessment

		CLASSROO	M PROCEDURE			
	Module		Mode of Transaction			
	1,2,3,4		Lecture, Demonstration and practical Assignments			
	Mode of assess	sment				
	A. Continu	ous Comprehensive	Assessment (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations	TT RS			
		Viva- voce/Interview				
		OTTAN	Test paper- I			
		राया अमृत	Test paper- II/open book test/any other			
Total				25		
	Practical	Observation of practical skills	NOURS)			
		Viva-voce/Oral Presentation				
		Spliat	Record			
Total		2		15		
	B. End Semeste	er Examination				
	Written Exami	50				
	Practical Exam	Practical Examination				

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any 1 question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10marks)

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विद्यया अमूतमञ्जूते

# **MGU-UGP (HONOURS)**

Transi Signitury	Mahatma Gandhi University Kottayam					
Programme						
Course Name	Creative Art	s and Crafts	5			
Type of Course	MDC					
<b>Course Code</b>	MG1MDCH	SC100				
Course Level	100-199					
Course Summary	Introducing st need to dive enjoyable exc opportunity to crafts, a viable	Introducing students to the discipline of Creative Arts and Crafts is a dire need to divert young minds from too much of academics to lighter enjoyable exercises. It would prove an attempt to initiate in them an opportunity to develop and kindle their senses in fine and applied arts and crafts a viable avenue for lifelong learning and entrepreneurship				
Semester	I		Credits	T S	3	Total Hours
Course	Learning	Lecture	Tutorial	Practical	Others	
Details	Approach	2		1	-	30+30=60
Prerequisites, if any	Aptitude towa Basic knowle	urds sketchin dge of design	g and draw 1 elements.	ing, artistic	and creative	e mind and a
			-2,1-316	1000	4	

COUI	RSE OUTCOMES (CO)	3)		
CO No.	Expected Course Outcome	Learning Domains *	PO No.	
After th	ne successful completion of the course the student should b	be able to:		
1	Appreciate aesthetics of arts and crafts	Ар	3	
2	Develop nuances of creative arts and crafts	С	10	
3	Inculcate skills through hands-on experience in applied arts for an enjoyable stress-free life experience	S	4, 8	
4	Analyse the significance of art concepts as an integral component of man's living styles from bygone days	An	3, 6	
5	Customize the use of visual and applied arts, accessories and antiques for designing interiors and other aspects	С	1, 2, 7	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)				

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.	
Introduct	ion to Art, Vi	sual Art & Design			
	1.1	Meaning and philosophy of Art, Types of Art forms related to Interior design - visual, plastic, decorative, applied arts.		CO1	
1	1.2	Design- Basic Concept and Types. Significance of Creativity and Aesthetics in Design development.	15	CO1	
	1.3	Drawings - Methods and Techniques, Ornamentation techniques on drawings	10	CO2	
	1.4	Applied Art and Crafts- Medium and Materials – Paper, Canvas, Cloth, wood, earthenware, ceramics, glass, plastics, metal, etc.		CO3	
Applied A	rts for Funct	ional/ Aesthetic Design			
	2.1	2D Art: Madhubani, Worli, Kalamkari, Tanjore etc.		CO2	
2	2.2	3D Art forms: Sculpting, Pottery, Bottle art, Jewellery making etc.	15	CO2	
	2.3	Creative Art for Accessory design – Collage, Macrame, Pottery, Crotchet, Papier Mache, etc.		CO2	
Practical	in Creative A	rts and Crafts			
	3.1	Basic drawing techniques- Pencil drawing, Charcoal drawing, Cartoon drawing / Caricature, Portrait drawing, Doodling, Rendering, Zentangle (Any 4)		CO2	
	3.2	Basic Painting Techniques - water colour, crayons, oil pastels, oil painting, glass painting, fabric painting (Any 3)		CO2	
3	3.3	Developing designs from 2D and 3D art forms (Any 2)	30	CO3	
	3.4	Creative Art for Accessory design (Any 1)		CO5	
	3.5	Collection and analysis of paintings/ work of art of famous artists, Collection and display of antiques.		CO4	
	3.6	Study and Evaluation of Ancient Design and Art forms and Scrapbook preparation.		CO4	
	Teacher spe	cific content			
4	(This conten	t will be evaluated internally)			
	Practical session, Class room teaching, Field visits, Exhibition etc.				

### Mode of Assessment

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3		Lecture, Demonstration and practical Assignments	l	
	Mode of Asse	ssment			
	A. Contin	uous Comprehensive Assessmen	nt (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total		<b>VITAYP</b>		15	
	Practical	Observation of practical skills	इन्,ते		
		Viva-voce/Oral Presentation			
		MGILLIGP (HON	Record		
Total			10013)	15	
	B. End Se	emester Examination			
	Written Exam	ination SPILAU	15	35	
	Practical Exan	nination		35	

#### **End Semester Examination**

#### **Theory: 35 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x1=10)
- ii) Short essay type questions: answer any 3 questions out of 5 (3x5=15)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35Marks

i) Laboratory Evaluation (25 marks)

ii) Record (10 marks)

#### REFERENCES

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## **MGU-UGP (HONOURS)**

# **SEMESTER-II**



# **MGU-UGP (HONOURS)**

Ангин эндинанд	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home	Science				
Course Name	Perspectives of Ho	me Scienc	e- II			
Type of Course	DSC A	DSC A				
Course Code	MG2DSCHSC100					
Course Level	100 -199	CN	IDL			
Course Summary	This course provid covering the mean relationship betwee physical, cognitive, a focus on needs as	es a comp ning, scope en heredit and socio- sessments	rehensive u e, and stag y and env -emotional. and particip	understandin ges of grow ironment, e Extension E patory approa	g of huma th. It exp mphasizin aducation i aches.	an development, plores the inter- og domains like is discussed with
Semester	П		Credits		4	Total Hours
Course	Learning	Lecture	Tutorial	Practical	Others	
Details	Approach	3	AYAY	1	-	45+30=75
Pre- requisites, if any	Basic knowledge at development	oout growtl	h & develoj	oment of hur	nan beings	s and rural

# COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No					
After	After the successful completion of the course the student should be able to:							
1	Explain the need, principles and processes underlying growth and development	K	1, 2, 10					
2	Describe the methods of child study in research	U	1, 2, 8					
3	Understand the definition, importance, objectives and elements of Extension	U	1,6					
4	Recognize the multidisciplinary approach of Home Science and relevance in national development.	U	3, 6					
5	Demonstrate Proficiency in Child Development Assessment	An	2, 10					
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)								

#### **COURSE CONTENT**

Module	Units	Course description	Hours	CO No.			
Overview of Hu	ıman Devel	opment	L	I			
	1.1	Meaning, definition, scope, domains and their interrelation		CO1			
	1.2	Principles of growth and development, factors affecting growth and development		CO1			
	1.3	Heredity and environment – Interaction		CO1			
1	Stages of Development – Infancy, Childhood,1.4Adolescence, Adulthood and Ageing – developmental tasks and characteristics		15	CO1			
	1.5	Domains of development: Physical, motor, language, cognitive, socio-emotional.		CO1			
	1.6	Methods of Child Study – Anthropometry, Observation, Interview, Questionnaire, Case study, Projective techniques, Experimental method, Psychological tests, Sociometry, Longitudinal and Cross-Sectional Approach.		CO2			
Extension Educ	ation	TAYP					
	2.1	Definition, importance and objectives of extension.		CO3			
	2.2	Conducting needs assessments in extension education. Elements of extension education.		CO3			
2	2.3	Steps in extension teaching. Formal, informal & non-formal education and difference between formal and Extension education process	15	CO3			
	2.4	Participatory approach in extension education.		CO3			
Multi-disciplina	Multi-disciplinary approach of Home Science						
	3.1	Multidisciplinary approach of Home Science, Disciplines of Home Science		CO4			
	3.2	3.2Scope (Educational and Vocational), Careers and Opportunities. Self employment and entrepreneurship through home science.15		CO4			
	3.3	Relevance of Home Science Extension Activities for Community Development		CO4			

Practical					
	4.1	Preparation of a portfolio on developmental milestones of children (0-12 years).		CO5	
4	4.2	Observe children and map their growth and development and interpret the findings.	30	CO5	
	4.3	Workshop on practical application of various projective techniques	50	CO5	
	Teacher s	pecific content			
5	(This content will be evaluated internally)				
5	Practical session, Class room Teaching, Field visits etc.				

# Mode of Assessment GANDA

		CLASSROOM	PROCEDURE			
	Module		Mode of Transaction			
	1,2,3,4		Lecture, Demonstration and practical Assignments			
	Mode of ass	essment				
	A. Cont	tinuous Comprehensive Assess	ment (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lastura	In-class discussion/Group tutorial work	रन्,ते			
	Lecture	Assignment/oral presentations	-11			
		Viva-voce/Interview	OURS)			
			Test paper- I			
		Syllabi	Test paper- II/open book test/any other			
Total				25		
	Practical	Observation of practical skills				
		Viva-voce/Oral Presentation				
			Record			
Total				15		
	B. End Sem	ester Examination				
	Written Exa	50				
	Practical Ex	Practical Examination				

#### **End Semester Examination**

#### **Theory: 50 Marks**

- iv) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- v) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- vi) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

1. Berk, L. E. (2015). Child Development (9th ed.). New Delhi: Prentice Hall Pvt. Ltd.

ANDA

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- Chandrasekhar U. (2002), Food Science and its Applications in Indian Cookery, Phoenix Publishing House, New Delhi
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## MGU-UGP (HONOURS)



Perere sugarante	Mahatma Gandhi University Kottayam					
Programme						
Course Name	Fashion Fundamenta	ls				
Type of Course	MDC					
Course Code	MG2MDCHSC100					
Course Level	100-199					
Course Summary	This course covers the basic concepts of fashion design, figure types, and the role of fashion professionals, providing students with a comprehensive understanding of the fashion design components. Students can explore the concepts of fibers, fabrics, dves, and marketing principles.					
Semester	пŞГ		Credits	<b>F</b>	3	
Course Details	Learning Approach	Lecture 2	Tutorial	Practical	Others	Total Hours
Pre-requisites, if any	Higher Secondary leve	l knowled	ge			00100 00

/ावद्यथा अमूतसञ्चन,त

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No			
After th	After the successful completion of the course the student should be able to:					
1	Explain fashion terminologies and stages of fashion	U	1, 4, 5, 8			
2	Describe the types of fibres, yarns, fabrics, dyes and printing styles	An	1, 6, 7, 10			
3	Explain the design concepts	U	1, 3, 4, 10			
4	Determine the dress designs suitable for different figure types	А	1, 2, 5, 9			
5	Discover the role of fashion professionals	K	1, 3, 4, 6			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

#### **COURSE CONTENT**

Module	Units	Course description		CO No.		
Fashion Dy	Fashion Dynamics, Textiles and Materials					
1	1.1	Fashion Terminologies- Fashion, Style, Fad, Classic, Trend, Haute Couture.		CO1		
	1.2	Stages of Fashion Cycle- Introduction, Rise in popularity, Peak of popularity, Decline, Obsolescence.		CO1		
1	<ul> <li>Fibres-Natural and Manmade</li> <li>Yarns-Simple and complex yarns</li> <li>1.3 Fabrics - Woven, knitted, Lace, Felts, Non-wovens</li> <li>Dyes - Natural and Artificial</li> <li>Printing styles- Direct and resist</li> </ul>		14	CO2		
Design Co	ncepts an	d Figure types				
	2.1	Introduction to Design, motif, pattern; Design - Structural and Decorative; Types of motifs -geometric, stylized, natural, abstract, types of pattern repeats - full drop, half drop, diamond, random, block, brick, ogee		CO3		
2	2.2	<ul> <li>Elements of Art in dress design -line, form, colour, texture. Colour harmonies - Monochromatic, Analogous,</li> <li>Complementary</li> <li>Principles of design in dress - Balance, Rhythm, Emphasis, Proportion, Harmony</li> </ul>		CO3		
	2.3	Basic body shapes - Hour glass, Triangle, Inverted triangle, Slim rectangle, Wide rectangle. Common figure problems: large bust, small bust, broad shoulders, narrow shoulders, thick waist, hollow back (for skirts), large stomach	16	CO4		
	2.4	2.4 Fashion marketing: Definition, 4 P's of marketing Role of fashion professionals - Designer, Merchandiser, Fashion Illustrator, Fashion stylist, Fashion Photographer, Pattern maker, Quality inspector		CO5		
Practical						
	3.1	Collection of Natural and Man-made Fibers		CO2		
	3.2	Collection of woven, knitted, lace. non-woven Fabrics		CO2		
3	3.3	Structural and decorative designs Motives – geometric, natural and abstract	30	CO3		
	3.4	Line – different types		CO3		

	3.5	Colour – monochromatic, analogous and complementary		CO3	
	3.6	Principles of design – balance, emphasis and rhythm		CO3	
	Teacher specific content				
4	(This content will be evaluated internally)				
	Practical	session, Class room Teaching, Field visits etc.			

## Mode of Assessment

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3	GANDH	Lecture, Demonstration and practical Assignments		
	Mode of Asses	sment			
	A. Continuous	Comprehensive Assessment (C	CA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	11		
		Viva-voce/Interview	उत्त.ते		
			Test paper- I		
		MGU-UGP (HON	Test paper- II/open book test/any other		
Total				15	
	Practical	Observation of practical skills	15		
		Viva-voce/Oral Presentation			
			Record		
Total				15	
	B. End Sen	nester Examination		1	
	Written Examin	nation		35	
	Practical Exam	ination		35	

#### **End Semester Examination**

#### Theory: 35 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x1=10)
- ii) Short essay type questions: answer any 3 questions out of 5 (3x5=15)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Kadolph, S. (2013). Textiles: Pearson New International Edition. United Kingdom: Pearson Education.
- 2. Sumathi, G. J. (2007). Elements of Fashion and Apparel Design. India: New Age International.
- 3. Marshall, S. G. (2000). Individuality in Clothing Selection and Personal Appearance. United Kingdom: Prentice Hall.
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## SUGGESTED READINGS GU-UGP (HONOURS)

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- 2. Stone, E., Farnan, S. A. (2022). The Dynamics of Fashion: with STUDIO. United States: Bloomsbury Publishing.
- 3. Pizzuto, J. J., Price, A., Cohen, A. C. (1987). Fabric Science: A Complete Textile Textbook/workbook with Accompanying Fabric Samples to Illustrate the Text Material. United States: Fairchild Publications.
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- 5. McKelvey, K., Munslow, J. (2011). Fashion Design: Process, Innovation and Practice. Germany: Wiley.
- 6. Bohlinger, M. S. (1990). Merchandise Buying. United States: Allyn and Bacon.



# **MGU-UGP (HONOURS)**

Rear Agreet	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Scien	ce				
Course Name	Human Nutrition and B	Biochemist	ry			
Type of Course	DSC A					
Course Code	MG3DSCHSC200					
Course Level	200 - 299					
Course Summary	The course 'Human Nutrition' aims at developing the basic understanding of food and nutrition and its effect on human health. This course encompasses the physiological and biochemical aspects of food and discusses the relationship between metabolites and human health. Moreover, the Course is focused on the advances in the most emerging area of Human nutrition and provides a detailed insight into understanding the composition, sources and deficiency of nutrients. The knowledge and skills acquired help the student to utilize food and nutrients as the powerful tools for physical, mental and social well-being					
Semester	ш	TTA	Credits		4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3	-	1		45+30=75
Pre-requisites, if any	Basic understanding of fo	ood and nu	trition	JRS)		

# course outcomes (co) Syllabus

CO No.	Expected Course Outcome	Learning Domains *	PO No
After the	successful completion of the course the student should be able	e to:	
1	Recall the functions, sources and role of nutrients in the maintenance of good health	K	1
2	Explain the biological processes and systems as applicable to human nutrition.	U	1
3	Comprehend the significance of vitamins and minerals in maintenance of human health.	U	1
4	Summarize how dietary components, macronutrients (carbohydrates, proteins and fats) and micronutrients	U	2

	(vitamins and minerals), influence health and disease.				
5	Classify nutritional status based on BMI	An	10		
6	Estimate qualitative and quantitative analysis of macro and micro nutrients	Е	10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.		
Introduction (	Introduction to Human Nutrition and Energy					
	1.1	Dietary guidelines for Indians. My plate for the day. Concept of RDA/EAR. Factors affecting nutrient intake of various age groups, Indian reference man and woman.		CO 1		
	1.2	Body Composition definition and important terms used. Methods of body composition assessment – BMI, Skinfold, BIA, WHR.		CO 1		
1	1.3	Units of energy, determining energy content of foods using Bomb Calorimeter, Gross Calorific Value and Physiological Fuel value of Foods.	15	CO 2		
	1.4	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.		CO 2		
Carbohydrate	es, Protein	is and Lipids				
	2.1	Carbohydrates- Composition, classification, functions and food sources. Metabolic pathways of carbohydrates. Dietary and functional fiber and potential health benefits.		CO 3		
2	2.2	Proteins-Amino Acids – Essential and Non- Essential, Classification and functions of proteins, Metabolism (Deamination, Transamination and Decarboxylation, Urea cycle), Requirements and sources. Methods of evaluating protein quality of foods (BV, PER, NPU, DIAAS). Protein Energy Malnutrition.	15	CO 3		
	2.3	Lipids-Fats and oils, Visible and invisible fats. Composition, functions, Types of fatty acids, Significance of Essential Fatty Acids classification, fat metabolism (Beta oxidation), ketone body formation, Food sources and requirements.		CO 3		
---------------	---	--	---------------------------------------	------	--	--
Vitamins, Mir	Vitamins, Minerals and Water					
	3.1	Vitamins- Functions, food sources, requirements, deficiency and toxicity of Fat soluble vitamins- A, D, E and K.		CO 4		
2	3.2	Functions, food sources, requirements and deficiency of Water soluble vitamins–Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, B12 and C.	15	CO 4		
3	3.3	Functions, food sources, requirements and deficiency/Toxicity of Minerals-Calcium, Phosphorous, Iron, Iodine.	requirements and Minerals-Calcium,			
	3.4	Water- Distribution and functions in human body. Water balance from intake and output. Water imbalance (Dehydration) and Intoxication (oedema).		CO 4		
Practical	Practical					
	4.1	Height weight measurements and classification by BMI		CO5		
4	4.2	Food Analysis 1. Qualitative tests for a) Carbohydrates b) Protein c) Calcium d) Phosphorus e) Iron	30	CO6		
	4.3	<ul><li>Quantitative tests for</li><li>a) Lactose in milk</li><li>b) Vitamin C in food stuffs</li><li>c) Calcium in foods</li></ul>		CO6		
	Teacher	specific content				
5	(This cor	ntent will be evaluated internally)				
5	Practical session, Class room Teaching, Field visits etc.					

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	sment					
	A.Cont	inuous Comprehensi	ve Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work	Elen a				
		Assignment/oral presentations					
		Viva- voce/Interview	T B				
			Test paper- I				
		TOTTAN	Test paper- II/open book test/any other				
Total				25			
	Practical	Observation of practical skills	मञ्चनुत				
	MG	Viva-voce/Oral Presentation	NOURS)				
			Record				
Total		a		15			
	B.End Semeste	B.End Semester Examination					
	Written Exami	nation		50			
	Practical Exam	35					

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2012)Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
- 2. Satyanarayana, U. and Chakrapani, U.(2018)Biochemistry.7th edition. Elsivier/ Books and Allied.
- 3. Srilakshmi, B. (2017) Nutrition Science, New Age International (P) Ltd., New Delhi.
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- Paul Insel, R. Elaine Turner, Don Ross (2004), Nutrition, 7<sup>th</sup> Edition, Jones & Bartlett Pub; 2nd Pkg edition

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- Gibney, M.J., Lanham- New, S.A., Cassidey, A. and Vorster H.H. (2009). Introduction to Human Nutrition, Second Edition, The Nutrition Society Textbook Series, Blackwell Publishing.
- 2. Raghuramulu N., Madhavan Nair K and Kalyanasundaram S (2003), A manual of laboratory techniques, NIN, Hyderabad.

# **MGU-UGP (HONOURS)**

# Syllabus

मिलामा अमुलमपन्त्र	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) Home Scie	ence					
Course Name	Child Development						
Type of Course	DSC A	DSC A					
Course Code	MG3DSCHSC201	MG3DSCHSC201					
Course Level	200 - 299	200 - 299					
Course Summary	This course envisions t individual from birth to and detect delays and in	o acquaint adolescend itervene for	the learner the through a the same.	s with the cl an understan	hanges evo ding of the	lving in an milestones	
Semester	ш	III Credits 4 Total					
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others	Hours	
	5 11	4		- // -	-	60	
Pre-requisites, if any	A basic knowledge of h	uman deve	lopment				

# 

CO No.	Expected Course Outcome	Learning Domains *	PO No			
After the s	successful completion of the course the student should be able to	):				
1	Examine the various aspects of prenatal development	А	1, 2, 10			
2	Illustrate proficiency in the milestones of development during infancy and toddlerhood	An	2. 5, 10			
3	Chart developmental delays in children	А	1, 7			
4	Integrate play and education in programme planning for preschoolers	An	3, 10			
5	Appraise the changes in various domains of development during adolescence	An	1, 10			
6	Develop skills in early intervention strategies, developing creative teaching methods, growth monitoring, and milestone mapping.	S	3, 6, 10			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Prenatal d	evelopmen	t to Infancy		
	1.1	Genes and Chromosomes, genetic inheritance, chromosomal abnormalities.		CO1
	1.2	Conception, stages of prenatal development, prenatal influences, stages of labour, types of birth, complications of pregnancy and child birth. Prenatal stimulation.		CO1
	1.3	Prenatal diagnostic techniques. Artificial insemination – IVF and GIFT, fraternal and identical twins.		CO1
1	1.4	Neonate – Definition, characteristics, reflexes, abilities and adjustments, APGAR.	16	CO2
	1.5	Infancy – Developmental milestones in all domains, Immediate care of the newborn, types of feeding – natural and artificial, Immunization, infant stimulation		CO2
	1.6	risk babies, SIDS, LBW babies, Baby friendly spitals		CO2
	1.7	Visit hospitals, observe and report neonatal characteristics and reflexes.		CO2
Developmo	ental delays	and Intervention Mabus		
	2.1	Developmental delay – meaning, definition, need and importance of early identification, techniques used for assessment		CO3
2	2.2	Early stimulation and early intervention – meaning, need and importance. Therapeutics of early intervention	12	CO3
	2.3	Visit early intervention units and get acquainted with the modes of intervention and assessment of children with developmental delays		CO3

Early and Late Childhood Years						
3	3.1	Early and late Childhood – Definition, milestones and domains of development, habit formation, discipline, importance and values of play, misdemeanours during late childhood		CO4		
	3.2	Early Childhood Education – Definition, significance and scope, objectives. Emergent literacy and school readiness, concept formation, programme planning, teaching learning materials for ECE	20	CO4		
	3.4	Compile activities that can be used to teach concepts to children.		CO4		
	3.5	Prepare an album displaying theme based creative activities.		CO4		
	3.6	Plot the anthropometric measurements and map the milestones of children using growth monitoring charts and interpret the findings.		CO4		
Adolescen	ce					
4	4.1	Physiological changes, needs and challenges – transition from childhood to adulthood – Puberty and its consequences, Gender differences, Sexuality, sexual needs and sex education, body image and its impact.	12	CO5		
	4.2	Psychological changes – identity formation, emotions and behaviour problems, sociological changes – peer and family relationships		CO5		
5	Teacher Specific Content (This content will be evaluated internally) Practical session, Class room Teaching, Field visits etc.					

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3,4		Lecture				
	Mode of Asse	essment					
	A. Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview					
			Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total			S.V	30			
	B. End Se	emester Examination					
	Written Examination						
L	1	्विद्यया अमूतः	मञ्चन्नत	1			

#### **End Semester Examination**

# Theory: 70 Marks MGU-UGP (HONOURS)

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

#### REFERENCES

- 1. Berk, L.E., (2007), Development through the Life Span, Pearson Education, New Delhi.
- Devadas, R.P; Jaya, N (2002), A Textbook on Child Development, Macmillan India Limited, Madras.
- Digumarti Bhaskara Rao (1997), Care of the Child, vol and II, Discovery Publication House, New Delhi.
- 4. Jegannath Mohanty and Bhagyadhar Mohanty (1994), Early Childhood Care and Education (ECCE), Deep and Deep pub, New Delhi.
- 5. Hurlock, E.B., (2004), Child Growth and Development, Tata Mc.Graw Hill Company.

#### SUGGESTED READINGS

- 1. Papalia, D.E., and Olds, S.W., (2005), Human Development, Tata Mc.Graw Hill Company, New York.
- 2. Rice Philip. K (2001) Human development, Prentice Hall, New Jersy.
- Santrock, J.W., (2006), Child Development, Tata Mc.Graw Hill Publishing Company, New Delhi.
- 4. Suriakanthi, A., (2005), Child Development, Kavitha Publications, Gandhigram, Tamil Nadu.

# **MGU-UGP (HONOURS)**

Syllabus

Action of the second se	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Mental Well-Being	of Adolesce	ents			
Type of Course	DSC B					
Course Code	MG3DSCHSC202					
Course Level	200-299	NND				
Course Summary	This course aims to emotional, and cog domains and challen and life skills for hol	provide a t nitive aspe ges faced by istic develop	horough un ects of ado y adolescent pment.	derstanding lescence. It ts, emphasiz	of the ph t encompt ting coping	ysical, social, asses various g mechanisms
Semester	ш	沃	Credits		4	Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others	
		3	111-	1	-	45+30 = 75
Pre-requisites, if any	A foundational under education, and basic	rstanding of life skills.	stages in h	uman life, ai	natomy, he	ealth

### **COURSE OUTCOMES (CO)**

CO No.	Expected Course Outcome	Learning Domains *	PO No					
After the s	After the successful completion of the course the student should be able to:							
1	Comprehend the developments in various domains during adolescence	U	2, 6,10					
2	Summarise the physical and sociological problems of adolescents	U	6, 10					
3	Recognise the psychosocial issues and concerns of adolescents	K	1,7					
4	Cite various coping mechanisms to attain mental well being	U	3, 6,10					
5	Interpret the skills needed for life enhancement	U	4, 5, 10					
6	Develop skill in providing life skills training, analyzing adolescent issues, practice coping mechanisms through role plays, creating digital tools for adolescent concerns, and	S	6, 10					

	promoting a well-rounded understanding of adolescent development and developing effective intervention strategies.				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

Module Units		Course description	Hrs	CO No.			
Adolescent he	Adolescent health and development						
	1.1	Definition, Characteristics, Developmental tasks, stages		CO1			
1	1.2	Domains of development – physical, social, emotional, cognitive.	4	CO1			
	1.3	Emotional Intelligence		CO1			
Problems dur	Problems during adolescence						
	2.1	Physical problems - Body image, height, weight, skin, colour, acne, obesity, underweight, reproductive and sexual health issues, STDs		CO2			
	2.2	Sociological problems – Teenage pregnancy, juvenile delinquency		CO2			
	2.3	Educational and vocational problems		CO2			
2	2.4	Eating disorders, mental health issues (Anxiety, depression, suicidal tendencies), stress, adjustment and behaviour problems, risk behaviours	22	CO3			
	2.5	Social issues – Academic pressure, peer pressure, bullying, identity crisis, substance abuse, addiction, relationship issues, sexual abuse, delinquency, anti-social behaviour, adolescent labour, teen marriage, adolescent trafficking, media addiction		CO3			
	2.6	Emotional problems – Anger, aggression, fear, phobia		CO3			

Coping mechanisms and life skill education for adolescents					
	3.1	<ul> <li>Coping with stress – yoga, exercise, meditation, music therapy, art therapy,</li> <li>3.1 dance, bibliotherapy, horticultural therapy, drama therapy, hobbies, defence mechanisms</li> </ul>		CO4	
	3.2	Academic counselling, vocational/career counselling, socio-personal counselling, career talks		CO4	
3	3.3Life skills for self understanding and self management – self esteem, self awareness, assertiveness19		CO5		
5	3.4	Life skills for knowing and living with others – effective communication, interrelationships, empathy, conflict resolution		CO5	
	3.5	Life skills for dealing with issues and problems – critical thinking, creative thinking, decision making and problem solving		CO5	
	3.6	College study skills – time management, note taking, learning styles and effective studying, test taking skills, memory enhancing techniques		CO5	
Practical	ž	निधिश्रा अर्थरासर्वछप			
	4.1	Workshop on basic life skill training.		CO6	
	4.2	Visit to a counselling centres.		CO6	
4	4.3	Write a review article on any issue pertaining to adolescents	30	CO6	
	4.4	Conduct role plays on various coping mechanisms.		CO6	
	4.5 Develop a digital tool on adolescent concerns			CO6	
	4.6	Prepare a case profile of adolescents between 13-18 years of age.		CO6	
5	<b>Teacher</b> s (This cont Practical s	specific content tent will be evaluated internally) session, Class room Teaching, Field visits etc.			

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	sment					
	A.Cont	A.Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
	2	Viva- voce/Interview	78				
			Test paper- I				
		OTTAL	Test paper- II/open book test/any other				
Total		TAT		25			
	Practical	Observation of practical skills	मञ्चन्द्रते				
		Viva-voce/Oral Presentation					
	MC	0-06P (HC	Record				
Total				15			
	B.E	and Semester Examin	ation				
	Written Exami	nation	J U ZJ	50			
	Practical Exam		35				

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

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- Newman Barbara M, Laura Landry Meyer, Brenda J Lohman (2002), Life- Span Development: A Case Book, New Delhi, Wadsworth Publishing
- 5. Papalia, D.E. (2004). Human Development. 9th Edition, New Delhi: Tata McGraw Hill.

#### SUGGESTED READINGS

- 1. Craig, G. (1999); Human Development, N.J.; Prentice Hall.
- 2. Cole, M. & Cole, S. (1995); The Development of Children, NY Freeman & Co.
- 3. Eccles (2004), Contextual Influences on Life Span/Life Course: A Special Issue of Research in Human Development, US, Lawrence Erlbaum Assoc Inc.
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- Pestonjee, D. M. (1992). Stress and Coping. The Indian Experience (2<sup>nd</sup> ed.). New Delhi: SAGE Publication.

And a	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) Home Sc	BSc (Hons) Home Science					
Course Name	Fashion Concepts (S	Specializa	tion-Texti	les and App	oarel designi	ng)	
Type of Course	DSE	DSE					
Course Code	MG3DSEHSC200						
Course Level	200-299	200-299					
Course Summary	This comprehensive course delves into the multifaceted realm of fashion, covering a spectrum of topics from understanding the functions of clothing and factors influencing fashion trends to mastering advanced elements of dress design, wardrobe planning, fashion business intricacies, and illustration proficiency. Students will develop practical skills and theoretical insights essential for navigating the dynamic and evolving world of fashion						
Semester	III Credits 4					Total Hours	
Course Details	Learning Approach	Lecture 3	Tutorial	Practical	Others -	45+30=75	
Pre-requisites, if any	Students entering this art and design princip terminology is recomm	course she les. Famili mended	ould have a a start with	a foundation introductory	al understand	ding of basic cepts and	

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After t	he successful completion of the course the student should be able to	):	
1	Examine the functions of clothing, and theories guiding fashion movement.	U	1, 2, 8, 9
2	Develop a comprehensive understanding of advanced application of elements of art in dress design.	А	5, 9, 10
3	Understand the intricacies of fashion business and merchandising	U	1, 6, 7, 9
4	Understand the processes involved in boutique management	U	3, 4, 5, 8

5	Acquire proficiency in illustration fundamentals and applying elements and principles of design to enhance dress design.	А	2, 3, 6,10				
6	Illustrate human figures and develop fashion garments	А	1, 6, 7, 10				
*Reme Interes	*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Introductio	on to fashio	n and design		
1	1.1	Functions of Clothing- Protection and Comfort, Identity, Status and Prestige, Ornamental and Aesthetic, Sociability and Conformity, Self- .1 Expression and Actualisation Function. Maslow's Hierarchy of Human Needs, Theories of fashion- Downward flow theory, Horizontal flow theory, Upward flow theory. Principles of fashion movement		CO1
	1.2	Advanced Elements of Dress Design- Elements - Dot, line, Shape, Form, Space, Texture		CO2
Fashion B	usiness			
	2.1	Fashion seasons - Spring/Summer, Fall/Winter, Resort and pre-Fall Fashion forecasting -Long term and short term		CO3
	2.2	Fashion Consumers - Fashion Leaders/ Influencers, Fashion Followers, Laggards, Fashion Victims		CO3
2	<ul> <li>2.3 Merchandising- Introduction, Definition, Responsibilities of a merchandiser. Types of merchandising: Retail merchandising, Visual merchandising, Garment export merchandising.</li> <li>2.4 Sustainable fashion: Definition, Sustainable fashion brands</li> </ul>		20	CO3
				CO3
Boutique	Manageme	ent		
3	3.1	Types of Boutique, Factors to be considered before starting up a Boutique, Inventory management, fashion marketing	10	CO4
	3.2 Sales promotion- Social media, advertising. Customer relations, Branding.			CO4
Practical				
4	4.1	Handling different types of media, Practicing dot, line, shape. Practicing shading techniques Rendering techniques - Texturing of fabrics, objects	30	CO5

		Application of elements and principles of design in	
		dress design	
		Understanding human anatomy and practicing 8 head,	
	1 2	10 head figure	COG
	4.2	Creating any two styles of casual wear, formal wear,	000
		party wear	
	<b>Teacher</b> s	pecific content	
5	(This cont	ent will be evaluated internally)	
	Practical s	ession, Class room Teaching, Field visits etc.	



# MGU-UGP (HONOURS)

# Syllabus

		CLASSROO	M PROCEDURE		
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration and practical Assignments		
	Mode of assess	sment			
	A. Continu	ous Comprehensive	Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	7 RS		
		Viva- voce/Interview			
		OTTAN	Test paper- I		
	/6		Test paper- II/open book test/any other		
Total		1010110102.11	SIROSIT	25	
	Practical	Observation of practical skills	NOURS)		
		Viva-voce/Oral Presentation	NOORS)		
		Spla	Record		
Total		15			
	B. End Semest				
	Written Exami	50			
	Practical Exam	35			

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

1. Barnard, M. (2013). Fashion as Communication. United Kingdom: Taylor & Francis.

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- 2. Kumari K.P. & Rachel D. (2023)Fashion Business. . (n.p.): Abhishek Publications.
- 3. Kathryn Mckelvey & Janine Munslow, Illustrating Fashion Blacwell publication (2005)
- Kathryn Micklvey & Janine Munslow, Fashion source book, Blackwell publication (2006)
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- Brianna Stewart (2014), How to Open a Boutique: The Simple Guide to Boutique Success, Create Independent Publishing Platform, Newyork.

#### SUGGESTED READINGS

- 1. Bina Abling, Fashion sketch book, fair child publications, New York (1987)
- 2. Julian seaman, fashion illustration basic techniques, B.T. Batsfort Ltd,. London (1996)
- Sumathi, G. J. (2007). Elements of Fashion and Apparel Design. India: New Age International.
- 4. Introduction to Fashion Technology. (2007). India: Laxmi Publications Pvt Limited.

Action of the second se	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) H	lome Scienc	e			
Course Name	Landscaping	and Garder	ning			
Type of Course	DSE					
Course Code	MG3DSEHSC201					
Course Level	200-299					
Course Summary	The Course develops among the students the core principles, types and components of landscape gardens. It provides experiential learning by upgrading their skills in designing various residential and commercial landscape plans. It can further motivate them to develop and maintain indoor gardens and kitchen gardens for sustainability aspects.					
Semester	mZ		Credits	E I	4	
Course Details	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	3		-/1		45+30=75
Pre-requisites, if any	Aptitude towa Basic Interest	rds gardenin in plant cult	g and appredivation and r	ciation of gre naintenance.	enery.	

# COURSE OUTCOMES (CO) JUI 304 A 4 3 5

CO No.	Expected Course Outcome	Learning Domains *	PO No.				
After th	After the successful completion of the course the student should be able to:						
1	Design with the elements and principles and components of landscape gardening	S	3				
2	Acquire skills in cultivation and propagation of different garden plants and demonstrate Terrarium/ Dish garden/ Bottle garden	С	6, 7, 10				
3	Gain insight into layouts and types of garden	Е	3				
4	Familiarize and keep abreast with modern trends in gardening	Ap	10				
5	Attain the know how in the care and maintenance of garden	S	1, 2				
6	Create value added plant and floral products and acquire entrepreneurial skills in gardening	S	4, 5				
*Romo	*Remember (K) Understand (U) Apply (A) Analyse (An) Evaluate (E) Create (C) Skill (S)						

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.	
<b>Basics of</b>	Landsca	aping and Garden			
	1.1	Meaning and importance of landscaping, Elements and Principles of landscape gardening		1	
1 1.2		Components of landscape design, Garden Styles layout of formal, informal and small, medium, large gardens. English, Italian, French, Persian, Mughal and Japanese garden.	15	1	
	1.3Non Living Garden components: Structural features - pavements, borders, hedges / edges, topiary, pergola, gazebo and garden adornments etc.				
Garden c	ompone	nts- Living / Natural			
	2.1	Classification, Types and Application in Gardens.		1,3	
	2.2	Trees & Ornamental plants- Arboriculture, Importance and value of trees, Application.		1,3	
2	2.3	2.3 Ornamental plants: Herbs – annuals and biennials, ground covers; Lawns, Shrubs – climbers, creepers, perennials – bulbs, tubers, ferns, succulents, cacti, ornamental grass, bamboo and palms.			
	2.4	Trends in gardening- Indoor gardening – Bonsai; Terrarium/ Bottle garden/ Dish garden, Rooftop gardening, Vertical garden, Kitchen gardening, Water garden, Rockery etc.		4	
Propagat	ion, Car	e and Maintenance of Plants			
2	3.1	Types of Propagation - Seed propagation, vegetative propagation/ asexual propagation – layering, cutting, grafting, budding, Micro propagation/ tissue culturing.		2,5	
5	3.2	Garden tools and implements, Routine duties in a garden; Watering, Potting and repotting techniques, Pruning, disbudding, defoliation, staking and mulching.	15	2,5	
	3.3	Soil preparation, Organic manures and fertilizers, Natural pesticides; irrigation methods.		2,5	
Practical	-Applie	d Gardening			
	4.1	Propagation methods – layering, cutting, grafting, budding.		2,5,6	
4	4.2 Training in Bonsai, Terrarium/ bottle garden/ dish garde Aquaponics/ Hydroponics.		30	6	
	4.3	Kitchen gardening - Design, types of vegetables grown.		3,5,6	
	4.4	Preparation of Value added products from plant materials		6	

Teacher specific content					
(This content will be evaluated internally)					
Practical session, Class room Teaching, Field visits etc.					
Practical session, Class room teaching, Field visits, Exhibition etc.					

	CLASSRO	OM PROCEDURE			
Module		Mode of Transaction			
1,2,3,4		Lecture, Demonstration and practical Assignments			
Mode of assess	sment				
A. Co	A. Continuous Comprehensive Assessment (CCA)				
Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
Lecture	In-class discussion/Group tutorial work	RSS			
	Assignment/oral presentations	amit			
	Viva-				
/6	voce/Interview	EFEI			
	NEVEL INVECT	Test paper- I			
		Test paper- II/open book test/any other			
Total	GU-UGP (H	UNUUKS)	25		
Practical	Observation of practical skills	[			
	Viva-voce/Oral Presentation	uus			
		Record			
Total			15		
B. End	Semester Examinat	ion			
Written Exami	nation		50		
Practical Exam	Practical Examination				

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

 Aquaa, George. 2005, Horticulture: Principles and Practices, Pearson Prentice Hall, USA, ISBN: 20059780131144125

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- Bose & Chowdhary, 1991, Tropical Garden Plants in Colour, H &A Publishers, Calcutta.
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- 5. Laurie M., 1986. An Introduction to Landscape Architecture, Elsevier. ISBN-9780444009708
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- 7. Rohan Bhansali, 2022. A Complete Guide To Home Gardening, https://organicabiotech.com/category/gardening/

#### SUGGESTED READINGS

- Root, B. James, 1985. Fundamentals of Landscaping and Site Planning, Westport: AVI Pub. Co., ISBN 978-0870554773
- 2. Swarup, V. 1997, Ornamental Horticulture, Macmillan India Ltd., Chennai
- 3. Trisha Bora, 2021. 'How Not to Kill Houseplants', Times of India, Delhi
- 4. Better Homes and Gardens, https://www.bhg.com/gardening/plans/

	Mahatma Gandhi University Kottayam					
Programme	Home Science					
Course Name	Sports Nutrition (Specia	alization-F	ood Nutri	tion and Die	etetics)	
Type of Course	DSE	DSE				
Course Code	MG3DSEHSC202	MG3DSEHSC202				
Course Level	200 – 299	ND				
Course Summary	The course enables stude as it pertains to athletic p learn about the essential specific to various types students to develop indiv	The course enables students to have a comprehensive understanding of nutrition as it pertains to athletic performance, recovery, and overall health. Students will learn about the essential nutrients, dietary strategies, and nutritional requirements specific to various types of physical activity, Practical application will enable students to develop individualized nutrition plans for athletes.				
Semester	m		Credits		4	Total
Course	Learning Approach	Lecture	Tutorial	Practical	Others	- 110015
Details		3		1	-	75
Pre- requisites, if any	A strong understanding of macronutrients, micronut chemistry.	of fundament trients and	ntal princip metabolism	les of nutriti , exercise sc	on including ience, biolog	y and

### **MGU-UGP (HONOURS)**

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Understanding the different types of physical activities basic principles of sports nutrition.	K	1,3,7,10		
2	Identify the action and effect of various nutrients in fitness	А	1,2,6,10		
3	Critically evaluate the importance of exercise performances and the effects of metabolism of various nutrients.	U	1,2,4,10		
4	Categorize the different types of nutritional supplements and its functions for fitness.	An	1,2,7,10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	1.1 1.2 1.3	Introduction to Sports nutrition Definition of physical activity, exercise, physical fitness. Sports physiology. Benefits of physical activity and exercise. Classification of sports activities. Nutritional requirements in sports events- team power, endurance events. Pre event and post event meal	15	CO 1
2	2.1 2.2 2.3	Role of nutrition in sportsEffect of macronutrients during exercise- carbohydrate, protein, fat.Effect of micronutrients during exercise: Iron, Calcium and vitamins.Role of Water and Electrolytes – Requirements, Fluid Balance and Thermoregulation in Exercise. Effect of Dehydration in Exercise Performance.	20	CO 2
3	3.1 3.2 3.3	Exercise performance and nutrition Energy expenditure during physical activity Carbohydrate intake and performance Fat intake and performance Protein intake and performance Fluid and electrolyte loss and replacement in exercise Antioxidant requirements for exercise.	20	CO 3
4	4.1	Dietary supplements & Ergogenic Aids Dietary supplement: Definition and classifications; Ergogenic aids: Definitions and Classifications;	20	CO 4

	4.2 4.3	Regulations on Dietary supplements: FSSAI and NADA Anti doping agency - list of banned drugs/substances. Merits and demerits of ergogenic aids and supplements		
5	Teacher Writter Practic	r Specific content n Examination al session, Class room Teaching, Awareness sessio	ons, Lab vi	sits etc.

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4	GAND	Lecture, Demonstration and practical Assignments				
	Mode of assess	sment					
	A. Con	ntinuous Comprehen	sive Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work	MI I				
	/12	Assignment/oral presentations	HIRA				
		Viva- voce/Interview	and april				
			Test paper- I				
	M	SU-UGP (H	Test paper- II/open book test/any other				
Total		a	Yana w	25			
	Practical	Observation of practical skills	បារ				
		Viva-voce/Oral Presentation					
			Record				
Total				15			
	B.E	nd Semester Examin	ation				
	Written Examin	nation		50			
	Practical Exam	ination		35			

#### **Semester End Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 4 questions out of 6(5x4=20)
- iii) Essay type questions: Answer any 1 question out of 2(1x10=10)

#### Practical: 35 Marks

- i. Laboratory Evaluation (25 Marks)
- ii. Record (10 Marks)

#### REFERENCES

1. Antia. F.P. and Philip Abraham, Clinical dietetics and Nutrition, fourth edition, Oxford University Press.2002.

NDH

- 2. Don Benordot, Advanced sports nutrition, second edition, Human Kinetics, 2012
- 3. Bamji S.M.,Rao NP and Reddy V(1998).Text book of Human Nutrition.Oxford and IBH Publishing C. New Delhi.
- 4. Fink H.H., Mikesky E.A and Burgoon A.L. (2012). Practical Applications in Sports Nutrition.3 rd Ed. Jones and Barlett Learning. USA.
- 5. Nutrition for Health, Fitness and Sport, eighth edition, by Melvin Williams, 2007McGraw-Hill.

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- Melvin Williams. 2007. Nutrition for Health, Fitness and Sport, eighth edition, by McGraw-Hill.
- Poortmans, J. R. (Ed.). (2004). Principles of exercise biochemistry.Karger Publishers.
- 3. Cherie Moore .2004.Practical Nutrition for a Fit Life, by, Kendall-Hunt Publishers

Recent Segeneration	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) H	BSc (Hons) Home Science				
Course Name	Early Childho	ood Educa	tion (Specia	alization-Hu	man Develop	oment)
Type of Course	DSE	DSE				
Course Code	MG3DSEHSO	MG3DSEHSC203				
Course Level	200 -299	200 - 299				
Course Summary	This course no skills necessar Learners will positive develo	t only imp y for succo leave with opment and	arts theoreti ess in the dy a comprehe l education o	cal knowledg ynamic field ensive skill s of young min	te but also ho of early child et, ready to d ds in a presch	ones the practical lhood education. contribute to the nool setting.
Semester	III		Credits		4	Total Hours
Course Details	Learning Approach	Lecture 3	Tutorial	Practical	Others	45+30=75
Pre- requisites, if any	s, if Basic knowledge of child development, communication skills, technology literacy, a passion for early childhood education, and a commitment to continuous learning and collaboration.					technology ment to

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No				
After th	After the successful completion of the course the student should be able to:						
1	Describe the meaning and significance of early childhood education and planning, organizing and implementing programmes in a pre-school.	U	1,3,7,10				
2	Assess the significance of play materials and toys in child development.	An	1, 2, 4,10				
3	Analyse the administrational skills and management strategies in Early Childhood Education.	An	1, 2, 4,10				

4 Demonstrate skills in designing and implementing innovative and inclusive early childhood education curricula, theme-based weekly programs, learning materials for effective teaching. S 1, 2, 4,10
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\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

#### **COURSE CONTENT**

#### **Content for Classroom transaction (Units)**

Module	Units	Course description	Hrs	CO No.
Introductio	on to Early C	childhood Care and Education		
	1.1	Significance, Aims and Objectives of early childhood care and education.		CO1
1	1.2	Types of preschools, Methods of Early Childhood Education: Montessori, kindergarten, Curriculum approaches. (Project approach, Reggio Emilia approach, Head Start Program)	20	CO1
	1.3	Program Planning: Definition, Objectives, Importance, Key concepts, Process, Principles of programme planning. Planning for learning experiences – long term, short term, weekly, daily plan. Factors affecting curriculum planning		CO1
Importanc	e of play and	play materials		
2	2.1	<ul> <li>Play: Definition, concept, significance, types, characteristics and Values.</li> <li>Teacher's role in creating environment and promoting play.</li> <li>Use of play way approach in the curriculum for young children.</li> <li>Montessori materials and curriculum</li> <li>Characteristics of good play equipment and materials, Care and uses of play equipment, Indigenous play material</li> </ul>	15	CO2
	2.2	Toys: Definition, concepts, importance of toys in child development, types of children's toys, history of toy making.		CO2

		Toy Making: concept, importance, procedure, child ergonomics, Safety issues, developmental appropriateness.							
Administra	Administration and Management of Early Childhood Centre								
	3.1	Meaning, roles, responsibilities and skills of administrator. Administrative setup, infrastructure, records and registers- need, significance, types and maintenance, job profiles of personnels, Role and functions of organisations.		CO3					
3	3.2	<ul> <li>3.2 Designing early childhood facilities: Physical set up and building, choosing the site; General design principles, setting up early childhood classroom, Planning space allotment – designing and maintaining outdoor and indoor space, storage, need for play spaces</li> </ul>		CO3					
	3.3	Strategies to foster creativity in classroom- Visual, Auditory, tactile, Kinesthetic- (VATK) kits, music and movement, storytelling, puppets, field trips		CO4					
3.4 <sup>7</sup> H		Teaching-learning materials in Early Childhood Education		CO4					
Practical / 1 and Resour	Related Expo ces	erience-Exploring Early Childhood Education:	Curriculu	m, Creativity,					
	4.1	Visit to various ECE centers. Develop a checklist to compare and contrast on the type of curriculum followed and write a report.		CO1					
	4.2	Theme based weekly progarmme - plan a curriculum and execute for preschool school children.	25	CO2					
4	4.3	Developing learning materials for early childhood education.		CO2					
	4.4	Developing prototype designs for toys		CO4					
	4.5	Market survey – early childhood education resource materials		CO4					
_	Teacher s	pecific content							
5	(This cont	ent will be evaluated internally)							
	Practical session, Class room Teaching, Field visits etc.								

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	Iode of assessment					
	A. Continue	ous Comprehensive	Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva- voce/Interview	IS I				
			Test paper- I				
		POTTAY	Test paper- II/open book test/any other				
Total	ि	राशा समत	मउत्तरो	25			
	Practical	Observation of practical skills					
	MG	Viva-voce/Oral Presentation	)NOURS)				
		~ ~ ~ ~	Record				
Total		Splia	1115	15			
	B. End Semeste	er Examination					
	Written Examination			50			
	Practical Exam	ination		35			

#### End Semester Examination

#### Theory: 50 Marks

- i. Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii. Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii. Essay type questions: Answer any I question out of 2 (1x10=10)

#### **Practical: 35 Marks**

- i. Laboratory Evaluation (25 marks)
- ii. Record (10 marks)

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And a segment	Mahatma Gandhi University Kottayam					
Programme						
Course Name	Surface Embellishment	Techniqu	es			
Type of Course	MDC	MDC				
Course Code	MG3MDCHSC200	MG3MDCHSC200				
Course Level	200-299	200-299				
Course Summary	This course in surface en techniques, stitches, and knotted stitches and cour Indian embroidery styles	bellishmer specializented thread	nts encompa ed methods techniques	sses fundam . Students le , and delve i	ental hand en earn flat, loo nto various t	nbroidery oped, and traditional
Semester	m	X	Credits	Z	3	Total
Course	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
Details		3	ANI A	-	-	45
Pre- requisites, if any	Students should possess	fundament	al sewing sl	cills, knowle	dge of basic	stitches.

COURSE OUTCOMES (CO)					
CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Comprehend tools and techniques for surface embellishments.	U	1, 9, 10		
2	Demonstrate proficiency in executing various hand embroidery stitches.	A	1, 3, 10		
3	Create samples showcasing diverse embroidery techniques with proficiency.	A	1, 2, 3		
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

Module	Units	Course description		CO No.			
Embroidery essentials							
1	1.1	Introduction to surface embellishments. Tools used for embroidery. Selection of needles, threads and fabric	10	CO1			
	1.2 Tracing methods: carbon paper, tissue paper, tracing paper			CO1			
Basic han	d embroic	lery stitches					
	2.1	Flat Stitches: Running, stem, satin, back, shade work, hemming bone.		CO2			
2	2.2	2.2 Looped Stitches: Chain, lazy-daisy, fly, feather blanket, button hole.		CO2			
2	2.3	Knotted Stitches: French knot, coral knot, bullion, pistil stitch (Palestrina stitch)	15	CO2			
	2.4		CO2				
Practical on selected Traditional Techniques							
	3.1	Counted thread embroidery: Assisi work, Counted cross stitch, Black work, drawn thread work.		CO3			
3	3.2 Indian traditional embroidery: Kantha of Bengal, kasuti of Karnataka, chikankari of Luckhnow		20	CO3			
5	3.3	3.3 Prepare samples for counted thread embroidery and traditional embroidery		CO3			
	3.4	3.4 Other techniques: Applique work, Ribbon work, Mirror work		CO4			
	Teacher specific content						
4	(This content will be evaluated internally)						
	Practical session, Class room Teaching, Field visits etc.						

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3		Lecture			
	Mode of Assessment					
	A. Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations				
		Viva-voce/Interview				
			Test paper- I			
			Test paper- II/open book test/any other			
Total				25		
	B. End Semester Examination					
	Written Examination					
विद्यया अस्तमइनुते						

#### **End Semester Examination**

# Theory: 50 Marks MGU-UGP (HONOURS)

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- 1. Cerier A.B. (2005) Start to Sew, Creative Publishing international Creative Publishing International, Chanhassen, Minnesota
- Brown, P. (2003). The Encyclopedia of Embroidery Techniques: A Comprehensive Visual Guide to Traditional and Contemporary Techniques. United States: Sterling Publishing Company.
- The Royal School of Needlework (2018). The Royal School of Needlework Book of Embroidery: A Guide to Essential Stitches, Techniques and Projects. United Kingdom: Search Press.
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And a	Mahatma Gandhi University Kottayam					
Programme						
Course Name	<b>Basics of Counselling</b>					
Type of Course	VAC					
<b>Course Code</b>	MG3VACHSC200					
Course Level	200-299					
Course Summary	The course acquaints the learner with the basic theoretical perspectives of counselling and guidance and also its application,					
Semester	mą		Credits	JT.	3	Total
Course	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
Details	5 H	3		7// -	-	45
Pre- requisites, if any	A foundational knowledg Familiarity with basic concultural and social contex	ge in psych unselling c xt.	ology and i oncepts as	nterpersonal well as an av	communicat vareness of th	ion. ne

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	PO No			
After the successful completion of the course the student should be able to:					
1	Classify the various components and types of guidance and counselling	U	1, 2		
2	Describe the observational instruments utilized in the field of counselling.	U	1, 10		
3	Analyse the array of techniques and tools employed in counselling and guidance practices.	An	1,2		
4	Employ counselling therapies effectively in real-life scenarios.	А	4, 6		
5	Develop skill required for effective guidance and counselling.	S	4, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					
#### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
Concept of g	uidance and	counselling	1	
1	1.1	Basic assumption and principles of counselling, Importance of understanding the individual, barriers to understanding. Types of counselling- Educational, Vocational and Personal. Difference between guidance and counselling.		CO1
	1.2	Counsellor skills, Probing skill- through questioning and organising facts		CO1
	1.3	Visit to a counselling centre and reporting on its functioning		CO1
Observation	al Instrumen	ts		
	2.1	Rating scale, checklist and anecdotal records		CO2
	2.2	Self-reporting techniques: Self-expression, essays, self-description, self-awareness exercises, diaries and daily schedule.	15	CO2
2	2.3	Case study, Interview – types and formulation		CO2
	2.4	Psychological tests, Personality assessment, career related assessment		CO3
	2.5		CO5	
Therapies us	ed in Counse	elling		
	3.1	Behaviour modification techniques –systematic desensitization, flooding, relaxation training (Yoga and meditation) Social skills training, exposure therapy, aversion therapy, modelling15Cognitive behaviour therapy, humanistic/client centered therapy, family and group psychology, transaction analysis, play therapy15		C04
	3.2			C04
	3.3	Observe application of various therapies and write a report		CO5
4		Teacher Specific Content (This will be evaluated internally) Practical session, Class room Teaching, Field visits etc.		

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3		Lecture				
	Mode of Assessment						
	A.Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview	III				
			Test paper- I				
			Test paper- II/open book test/any other				
Total				25			
	B.End Semes	ster Examination					
	Written Exar	nination computer an an and an	aa a	50			
L	1	्राजधाः अर्जराका	2074				

#### **End Semester Examination**

Theory: 50 Marks

### MGU-UGP (HONOURS)

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

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- Bhatia, K.K. (2000). Principles of Guidance & Counseling. New Delhi: Kalyani Publications.
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- 7. Hardman M L, Drew C I and Egan m W. (1999). Human Exceptionality. Boston: Allyn and Bacon.
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# SEMESTER-IV

SAN

## विद्यया अमूतमञ्जुते MGU-UGP (HONOURS)

# Syllabus

Paran angeneret	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons)	Home Scie	nce				
Course Name	Interior De	coration					
Type of Course	DSC A	DSC A					
Course Code	MG4DSCH	MG4DSCHSC200					
Course Level	200-299	200-299					
Course Summary	The Course i of functional make them facilitates ex	is a launch p l as well as more liveab periential lo	bad for the aesthetic a ble and cont earning on	students to u spects of in nfortable fo designing sp	inderstand t terior space r occupants paces.	the rudiments and how to the course	
Semester	IV		Credits		4	Total	
<b>Course Details</b>	Learning	Lecture	Tutorial	Practical	Others	Hours	
	Approach	3		12		45+30=75	
Pre-requisites, if any	The student who has taken Home Science as a Major component at the foundation level.						
COURSE OUTCOMES (CO)							

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No.
After th	ne successful completion of the course the student should b	be able to:	
1	Judiciously select lighting type and light fixtures for interiors.	An	1,2
2	Evaluate Colour schemes for interiors.	Е	1,2
3	Select and arrange furniture, furnishings and accessories in interiors to improve functionality and aesthetics of contemporary interiors.	А	2,8
4	Design furniture, furnishings and accessories appropriate for different interior spaces.	С	6,7
5	Propose window, wall and floor treatments for trendy interiors	S	2,10
6	Compose sustainable accessories, floral decor and indoor garden for different theme based settings.	С	7, 10
*Reme	mber (K), Understand (U), Apply (A), Analyse (An), Eva	luate (E), Crea	te (C), Skill

(S), Interest (I) and Appreciation (Ap) iys (Л),  $(\mathbf{U})$ 

Module	Units	Course description	Hrs	CO No.
Colour a	nd Light	ing in Interior Decor		
	1.1	Colour as a design element, Colour -Theory, Harmonies		2
	1.2	Use of colour in interiors, Colour psychology		2
1	1.3	Light as a major design element, Importance and sources, Lighting requirements in interiors	15	1
	1.4	Types of lighting- Selection of lighting arrangements Type of lamps and luminaires.		1
Furniture	e and Fu	rnishings	I	
	2.1	Styles and types of furniture, Furniture requirements in homes, Selection and care of furniture, Guidelines for arranging furniture.		3,4
2	2.2	Construction- understanding joinery, materials and finishes used for furniture making, Modular furniture.	15	3
2	2.3	Classification of Furnishings, Factors in selection of furnishings for home	13	3, 4
	2.4	Window treatments-hard and soft treatments. Curtains and Draperies, Floor and Wall coverings- Rugs, Carpets, Tapestries- Types, selection, use and care.		5
Interior I	Enrichm	ent with Accessories		
	3.1	Accessories – Uses, Classification, Selection & Arrangement. Sustainability concerns in accessorizing homes.		4
	3.2	Artifacts and Antiques, Crafts of India used as interior decor.		4
3	3.3	Floral Decorations- types and applications, Flower arrangements- Principles, Styles and Basic Shapes, Dry and Artificial floral settings, Indoorscaping and Indoor plants.	15	6
	3.4	Contemporary trends in Interior design -in relation with Lighting, furniture, furnishings and accessories		3
Practical	in Interi	or Decoration		
	4.1	Preparation of portfolio based on market survey on lighting	30	1

	4.2	Preparation of portfolio on colour schemes and application in interiors		2			
	4.3	Report on market review of furniture and furnishings		3,4			
	4.4	Illustrations/ model making of different curtain styles		4,5			
4	4.5	Demonstration of basic shapes in flower arrangements with Fresh/ Dry / Artificial flowers and plant materials, Bouquet making.		6			
	4.6	Flower and Plant drying techniques for home and commercial purposes.		6			
	4.7	Creation of art objects, Wealth from Waste- any decorative/ functional accessories with discarded materials.		3,4			
	Teache	r specific content					
5	(This co	(This content will be evaluated internally)					
	Practical session, Class room teaching, Field visits, Exhibition etc.						



### **MGU-UGP (HONOURS)**

# Syllabus

		CLASSROOM PRO	CEDURE		
	Module		Mode of Transaction	l	
	1,2,3,4	1,2,3,4		Lecture, Demonstration and practical Assignments	
	Mode of asses	ssment			
	A.Continuous	A.Continuous Comprehensive Assessment (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
		In-class discussion/Group tutorial work			
	- Lecture	Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total			S	25	
	Practical	Observation of practical skills			
	15	Viva-voce/Oral Presentation			
	2	वहां आक्र प्रभाव क	Record		
Total				15	
	B.End Sem	nester Examination			
	Written Exam	ination	UKS)	50	
	Practical Evan	mination		35	

#### **End Semester Examination**

#### **Theory: 50 Marks**

- Short answer type questions: Answer any 10 questions out of 12 (10x2=20) i)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

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- 2. Anna H. Rutt 1961. Home furnishing, John Wiley eastern Pvt. Ltd New York.
- 3. Ball V.K. 1960. The Art of Interior Design; The Macmillan and Co., New York
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- 2. Alexander, M.J., 1972. Designing Interior Environment, Harcourt Brace, New York
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Aleren argenerarie	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Dynamics of Extens	ion and C	communic <i>a</i>	ntion		
Type of Course	DSC A					
Course Code	MG4DSCHSC201	MG4DSCHSC201				
Course Level	200-299	AND	HI			
Course Summary	This course covers encompassing topics teaching methods, co extension.	the fund such as the ommunity of	damentals e meaning a developmei	of extensic and objective nt, leadershij	on educations of extension, and com	ion in India, sion, extension imunication in
Semester	IV		Credits	25	4	– Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		4	-		-	60
Pre-requisites, if any	Basic knowledge in I	Extension.	भञ्चनुत			

# COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcomes 2011 abus	Learning Domains *	PO No			
After the successful completion of the course the student should be able to:						
1	Develop an understanding about the meaning, functions and characteristics of Extension Education	U	1,6			
2	Describe the different community and its developmental set up in India	U	1,6,7			
3	Understand the importance of rural Leadership in bringing about planned change in human behaviour for developing community	U	1,6			
4	Formulate communication methods to approach people effectively.	K	1,2,5,10			

5	Plan an extension program by evaluating its effectiveness.	С	5,6,8
*Reme Interes	mber (K), Understand (U), Apply (A), Analyse (An), Evali t (I) and Appreciation (Ap)	ıate (E), Crea	te (C), Skill (S),

Module	Units	Course description	Hrs	CO No.
Concepts	of extension			
	1.1	Meaning and objectives of extension in India		CO1
	1.2	Concepts, need, functions of extension.		CO1
	1.3	Steps in extension teaching		CO1
1	1.4	Extension system and Concept of extension educational process	15	CO1
	1.5	Role of Extension worker. Qualities of an extension worker.		CO1
	Practical/ Related experience	<b>Extension Education</b> Interact with extension workers and understand their nature of work and their commitment towards the society.		CO1
Commun	ity Developm	lent		1
	2.1	Basics of community development. Objectives and principles of community development.		CO2
	2.2	Types of communities in India, and its special features- rural, urban and tribal.		CO2
	2.3	Community development programmes for women and children in rural areasSGSY, ICDS and Indira Mahila Yojana, STEP		CO2
2		Community Development	15	
	Practical/ Related experience	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.		CO3
Program	ne Planning	in Extension		

	3.1	Objectives, principles, and steps involved in extension programme planning.		CO3	
3	3.2	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 leadership for community development.	15	CO4	
	Со	mmunication and methods of approaching peo	ople		
	4.1	Definition, importance and elements and problems in communication.		CO4	
4	4.2	Classification of extension teaching methods individual ( personal visits, letters) group ( meetings, discussions, demonstrations, folksongs, drama, role play, seminar, field trip, exhibitions ) and mass( print-newspaper , magazine , books) and electronic media.	15	CO 4	
	4.3	Audio-visual aids Definition, importance, classification (audio,visual and audio -visual), cone of experience.Factors to be considered in selection, preparation and use of audio-visual aids.		CO4	
	Practical/ Related experience	Community Development Programme Planning Prepare a plan of work for any one community development programme related to home science.		CO 4	
5	Teacher specific content   (This content will be evaluated internally)   Practical session, Class room Teaching, Field visits etc.				

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3,4		Lecture				
	Mode of Ass	essment					
	A.Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview					
			Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total		OTTN	am	30			
	B.End Semes	ster Examination					
	Written Exar	nination III 3 de Ca	मञ्चनुत	70			

# MGU-UGP (HONOURS) End Semester Examination

Theory: 70 Marks



- Short answer type questions: Answer any 10 questions out of 12 (10x2=20) i)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

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- 2. Indian Journal of extension, The Indian Extension Education, Division of Agricultural Extension IARI,New Delhi-110012.
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विद्यया अमूतमञ्जूते

### **MGU-UGP (HONOURS)**

Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Ho	ome Science				
Course Name	Food Science a	and Food Sa	afety			
Type of Course	DSC B					
Course Code	MG4DSCHSC	MG4DSCHSC202				
Course Level	200 - 299					
Course Summary	A course in Fo comprehensive measures taker course will prep and research in	A course in Food Science and Food Safety will provide students with a comprehensive understanding the science of food production and the measures taken to ensure the safety and quality of the food supply. This course will prepare students for careers in food production, quality assurance and research in the food industry				
Semester	IV		Credits	RS	4	- Total Hours
Course Details	Learning Approach	Lecture 3	Tutorial -	Practical 1	Others -	45+30=75
Pre-requisites, if any	All arts and sci are eligible for	All arts and science students except BSc Family and Community students are eligible for the course.				

# COURSE OUTCOMES (CO) UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the	successful completion of the course the student should be able	to:			
1	Summarize the fundamentals of Food Science.	U	1,2		
2	Identify the structure, composition and nutritional quality of Foods in group I& II.	А	2,3,7		
3	Explain the structure, composition and nutritional quality of Foods in Group III &IV	U	2,3,7		
4	Apply the food preservation techniques.	А	1,2,7		
5	Discuss the principles of quality assurance and safe food handling methods.	U	1,2,3,6		
6	Evaluate the changes of food in various cooking conditions.	Е	1,2,7		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course Description	Hours	CO No.
Introduct	ion to Foo	od Science and Food Groups		
	1.1	Definition, Classification of foods and Terms used in Food Science. Health, Food, Nutrition, Nutrients: Macronutrients (Carbohydrates, Proteins and lipids) and Micronutrients (Vitamins and Minerals).		CO 1
	1.2	Food groups: Functions of foods, food groups (Basic food group system – (ICMR), My Healthy Plate, Balanced diet.		CO 1
	1.3	Functions of foods – Physiological, Psychological and Social Functions.		CO 1
	1.4	Study of Food Groups I - Classification, Nutritive Composition and Health benefits.	15	CO 2
1	1.5	Study of Food Groups II- Fruits, Vegetables, Classification, Nutritive Composition and Health benefits.		CO 2
	1.6	Study of Food Groups III- Milk and Milk Products, Eggs, Meat, Fish Classification and Nutritive Composition.		CO 3
	1.7	Study of Food Groups IV- Nuts, oil seeds, Spices and condiments Classification and Nutritive Composition.		CO 3
Fundame	ntals of F	ood Preservation		
2	2.1	Food Preservation - Definition, Importance of Food Preservation, Basic Principles of Food Preservation		CO 4
2	2.2	Food preservation methods. Preservation by use of High Temperature. Preservation by Low Temperature, Preservation by Osmosis	15	CO 4
Quality A	ssurance	and Food Safety		
3	3.1	Quality assurance- Current concepts of quality control, Quality control parameters.	15	CO 5

	3.2		CO 5				
Practical							
	4.1	Classify foods on the basis of nutrients -Protein, Iron, Calcium, Vitamin A, Vitamin C		CO 6			
4	4.2	Stages of sugar cookery		CO 6			
	4.3	Stages of egg white foam formation		CO 6			
	4.4	Effect of cooking on vegetable pigments	30	CO 6			
	Enzymatic browning, Methods to prevent browning in 4.5 fruits			CO 6			
	Teacher specific content						
5	(This content will be evaluated internally)						
	Practical session, Class room Teaching, Field visits etc.						

### **MGU-UGP (HONOURS)**

# Syllabus

	CLASSROOM PROCEDURE				
Modu	le		Mode of Transaction		
1,2,3,4	4		Lecture, Demonstration and practical Assignments		
Mode	of assess	ment			
A	Continu	ous Comprehensive	Assessment (CCA)		
Learn	ing ach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
Lectur	re	In-class discussion/Group tutorial work			
	ŝ	Assignment/oral presentations	A R		
		Viva- voce/Interview	E A		
		10-	Test paper- I		
			Test paper- II/open book test/any other		
Total	10	छिन्ना अर्थे प	নারন্যন	25	
Practi	cal	Observation of practical skills			
		Viva-voce/Oral Presentation	NOORS/		
		Spllat	Record		
Total	6				
B. End	B. End Semester Examination				
Writte	Written Examination				
Practi	cal Exam	ination		35	

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

1. Mudambi, S.R and Rajagopal, M.V. (2001), Fundamentals of Foods and Nutrition, New Age International Publishers, New Delhi

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- 3. Frazier, W.C. and Westhoff, D.C., (2008), Food Microbiology, Fourth Edn., Tata McGraw-Hill Publishing Co. Ltd, New Delhi

#### SUGGESTED READINGS

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- Potter,N.N and Hotchkiss, J.H,(1996), Food Science, Fifth Edn, CBS Publishers, New Delhi.
- 3. Marwaha, K (2007), Food Hygiene, Gene-Tech Books, New Delhi.
- 4. Journal of Food Science and Technology, Association of Food Scientists and Technologists CFTRI, Mysore.
- 5. Marwaha, K (2007), Food Hygiene, Gene-Tech Books, New Delhi.
- 6. Kalia M. (2002), Food Analysis and Quality Control, Kalyani Publishers, New Delhi.

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Food Science and Q	uality Co	ntrol			
Type of Course	DSE					
Course Code	MG4DSEHSC200					
Course Level	200 – 299					
Course Summary	To impart knowledge of structure, composition, products, nutritional contribution, selection and changes during cooking of the various food groups, new trends in food technology and to gain knowledge about foods through experiments, with the goal of ensuring the availability of safe and nutritious food					
Semester	IV	X	Credits	RS	4	Total
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
	5 11	3		1	-	45+30=75
Pre-requisites, if any	Basic understanding	of food gr	oups			

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome URS	Learning Domains *	PO No	
After the	e successful completion of the course the student should be able to	•		
1	Identify the nutritive value of plant based foods.	U	1,2, 4	
2	Analyze the composition, nutritive value and applications of animal foods	An	1,2, 4	
3	Explain the new emerging trends in food science and its various applications in food processing sector.	U	1,2, 4,9	
4	Analyze the various sources and factors responsible for food safety, quality concepts and safe practices in food companies.	An	1,2,4,9	
5	Identify the different laws and standards pertaining to foods	U	2,6,8	
6	Analyze the effect of cooking on various food, availability and cost of food items in the market and the common adulterants used in various food items.	An	1,2,8,10	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)				

Module	Units	Course description	Hrs	CO No.		
Study of F	Plant and	Animal Foods				
	1.1	(Basic Concepts, Classification, Nutritive value) Cereals and Millets– Basic Structure, Cereal Products, Processing -parboiling - merits and demerits. Cereal cookery- cereal protein - gluten formation, cereal starch - structure, effect of cooking – dry and moist heat. Common millets in India and its health benefits.		CO1		
	1.2	Pulses and Legumes - germination and fermentation, advantages, ant nutritional factors (trypsin inhibitors, lathyrogens), Micro greens and its health benefits.		CO1		
	1.3	Vegetables - loss of nutrients during cooking, conservation of nutrients, Pigments, effect of acid and alkali in pigments.		CO1		
	1.4	Fruits- antioxidant value, pigments, flavour components, changes in fruits during ripening Enzymatic Browning.		CO1		
1	1.5	Nuts and Oil seeds - rancidity in oils - types, factors leading to rancidity, prevention, hydrogenation of fats.		CO1		
	1.6	Sugars and related products - Stages of sugar cookery and its applications, artificial sweeteners. Spices and condiments - Major spices and condiments of India, Health benefits		CO1		
	1.7	Milk and Milk Products: Types of milk, Fortified milk, composition and nutritive value, pasteurization and homogenization – advantages		CO2		
	1.8	Eggs- Structure, composition and nutritive value, evaluation of egg quality, deterioration in egg quality, egg white foam -stages, factors affecting foam formation, culinary role of eggs, designer eggs.		CO2		
	1.9	Meat, poultry and fish – classification, composition and nutritive value, Structure of meat, Rigor mortis, Selection of fish, Fish spoilage		CO2		
Emerging Trends in Food Science						
2	2.1	Food biotechnology: Genetically modified foods, Applications of biotechnology in food processing		CO3		
2	2.2	Functional foods and Nutraceuticals: Prebiotics, probiotics, symbiotic, phytochemicals Antioxidants, Nutraceuticals, Nutrigenomics.	10	CO3		

	2.3	Alternative Proteins: Plant based proteins, Alga based proteins, Cultivated Meat, Fermentation based proteins		CO3
	2.4	Artificial intelligence in food science and internet of Things (IoT) applications in the food industry		CO3
Food Safe	ety - Haza	rd Analysis, Risk Assessment, Food Laws and Regulations		
	3.1	Food contamination: definition Sources of contamination, Difference between food poisoning and food infection, Factors affecting food safety and food spoilage.		CO4
	3.2	Food adulteration - definition, types of adulteration in various foods- intentional, incidental and metallic contaminants		CO4
	3.3	Physical hazards (metals, glass, etc), Chemical hazards (food additive toxicology, natural toxins, pesticides, antibiotics, hormones, heavy metals and packaging components), Biological hazards (epidemiology of biological pathogens: virus, bacteria and fungi, parasites),	15	CO4
3	3.4	Food Safety Management System (FSMS) Good Practices/ PRPs - GMP, GHP Management Element / System Statutory and regulatory requirements, Hazard Analysis Critical Control Point (HACCP): principles of HAACP, applications of HACCP Food Safety and Standards Bill 2005, FSSAI.		CO5
	3.5	International Laws and Agreements - FAO, WHO, Codex Alimentarious, WTO, JEFA, APEDA, ISO 22000 series.,		CO5
Practical		MGU-UGP (HONOURS)		
	4.1	Market survey of locally available food items like cereals, pulses, fruits and vegetables, milk and milk products, fats and oils, nuts and oilseeds, sugar and jaggery, meat, fish, and poultry and miscellaneous food items like biscuits, jams, jellies, ketchup etc. types and their cost.		CO6
	4.2	Stages of sugar cookery.		CO6
4	4.3	Components of an egg by weight, Stages of egg white foam formation.	30	CO6
	4.4	Effect of cooking on vegetable pigments.		CO6
	4.5	Methods to prevent enzymatic browning in fruits Non enzymatic browning.		CO6
	4.6	Detection of adulteration in various foods-Milk, fat and oil, Sugar, Honey, Chilly powder, Turmeric.		CO6

	Teacher specific content	
5	(This content will be evaluated internally)	
	Practical session, Class room Teaching, Field visits etc.	

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	ment					
	A. Continu	ous Comprehensive	Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations	Alte				
		Viva- voce/Interview	मञ्चनुते				
			Test paper- I				
	MG	U-UGP (HC	Test paper- II/open book test/any other				
Total		Sulla	ing	25			
	Practical	Observation of practical skills	11.4				
		Viva-voce/Oral Presentation					
			Record				
Total	Total						
	B. End Semeste	er Examination					
	Written Examin	nation		50			
	Practical Exam	ination		35			

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

Srilakshmi B. (2018), Food Science, 7th Edition, New Age International (P) Ltd, New Delhi.

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- 2. Benion M (1995) Introductory Foods, 10th Ed, USA.: Prentice Hall.
- 3. ICMR (2017), Indian Food Composition Tables Published by National Institute of Nutrition, Hyderabad.
- 4. Swaminathan.M. (2003). Advanced Textbook on Food and Nutrition, The Bangalore Printing and Publishing Co., Ltd., 2ndEdn.
- 5. Sunetra Roday, Food Science & Nutrition, 3<sup>rd</sup> Ed. New Delhi,2022.

#### SUGGESTED READINGS

- Chandrasekhar U. (2002), Food Science and its Applications in Indian Cookery, Phoenix Publishing House, New Delhi
- Bryan, F.L. (1992): Hazard Analysis Critical Control Point Evaluations A Guide to Identifying Hazards and Assessing Risks Associated with Food Preparation and Storage. World Health Organisation, Geneva.
- Philip A.C. Re-conceptualizing quality. New Age International Publishers, Bangalore. 2001.
- 4. Bhatia, R. and Ichhpujan, R.L. Quality assurance in Microbiology. CBS Publishers and Distributors, New Delhi. 2004.

ARTERI STORING	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	BSc (Hons) Home Science				
Course Name	Participatory Progr	amme Ma	inagement			
Type of Course	DSE					
Course Code	MG4DSEHSC201	MG4DSEHSC201				
Course Level	200-299	200-299				
Course Summary	The course on Pa participants with the programs in a str stakeholders throug inclusivity for more r	articipatory e expertise rategic ma hout the responsive,	Y Program to plan, in anner, acti entire pro sustainable	me Manage nplement, a vely engag cess, foster e, and effecti	ement (P) nd evalua ing bene ring colla ive outcon	PM) imparts te projects or ficiaries and boration and nes.
Semester	IV	X	Credits		4	T ( 111
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	1 otal Hours
	10	3	11-	1	-	45+30=75
Pre-requisites,	A foundational under	rstanding o	f project m	anagement p	orinciples a	and
if any	commitment to inclu	sive and co	ollaborative	approaches	to develop	oment work.

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No					
After th	After the successful completion of the course the student should be able to:							
1	Understand programme planning and related models	U	1,2					
2	Apply project management techniques, incorporating SWOC analysis and utilizing network analysis.	K	3,4, 6					
3	Examine assessment of programmes and documentation.	An	2, 6					
4	Analyze techniques of implementing and evaluating programme.	Е	2,3					
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)								

Module	Units	Course description	Hrs	CO No.
Concept of Ex	tension Pro	gramme Planning and Participatory Planning		
	1.1	Meaning, nature, scope and principle of programme planning.		CO1
	1.2	Elements, functions and criteria for developing a plan, Importance of planned change		CO1
	1.3	Programme development cycle and its components		CO1
	1.4	Principles, methods, tools and techniques of PRA and application of PRA methods in field studies.		CO1
1	1.5	Supportive techniques – secondary sources, direct observation, and semi structured interviews, case studies and stories, drama, games, role play, scenario, workshops, triangulation, continuous analysis and reporting		CO1
	1.6	<sup>5</sup> Presentation techniques – Ranking, scoring and diagrammatic.		CO1
Project Manag	gement Tec	hniques		
	2.1	Project management techniques		CO2
	2.2	Strength, weakness, opportunity and challenges (SWOC)		CO2
	2.3	Network analysis –critical path method (CPM), Programme (project) Management and Review Technique (PERT)		CO2
2		Technical and monitory support fromGovernmentandnon-governmentalorganizations availability and access	15	
	2.5	Project management and evaluation and Documentation		CO2
	2.6	Training personnel in PRA techniques		CO2
Extension Eva	luation and	Follow up and Documentation		
3	3.1	Definition, nature, types, purpose and characteristics of evaluation	15	CO3
5	3.2	Phases, tools and techniques of evaluation, uses of evaluation	13	CO3

	3.3	Need and methods of follow up		CO3			
	3.4	Analysis of existing extension programmes, prospects for improvement		CO3			
	3.5	Need for reporting and recording		CO3			
	3.6	Types of records		CO3			
	3.7	Analysis and document preparation		CO3			
	3.8	Procedures for recording – records and registers to be maintained		CO3			
	3.9	Training personnel in PRA techniques, project management, evaluation and documentation.		CO3			
Practical	Practical G						
	4.1	Application of PRA methods in the real-life situations.		CO4			
	4.2	Critical review of evaluation studies on women and rural development programmes.		CO4			
	4.3	Analysis of monitoring and evaluation of developmental programmes.		CO4			
4	4.4	Preparation and implementation of home improvement work plan	30	CO4			
	4.5	Evaluation of work plan using evaluation techniques.		CO5			
	4.6	Organizing and evaluating programmes for women and children at village level.		CO5			
	Teacher s	pecific content DP (HONOUKS)					
5	(This content will be evaluated internally)						
Practical session, Class room Teaching, Field visits etc.							
		a yuuvuv					

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	lode of assessment					
	A. Continuous	Comprehensive Asso	essment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
	TT I	Viva- voce/Interview	78				
			Test paper- I				
		10THAN	Test paper- II/open book test/any other				
Total		TAT		25			
	Practical	Observation of practical skills	मञ्चन्द्रते				
		Viva-voce/Oral Presentation					
	MG	U-UGP (HU	Record				
Total				15			
	B.End Semeste	r Examination	1110				
	Written Examin	nation	JUD	50			
	Practical Exam	ination		35			
Total Marks				125			

#### End Semester Examination

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- Doe, J., Johnson, M., & Williams, S. (2015). Engaging Communities: A Handbook for Participatory Programme Management. Springer.
- 2. Andrea Cornwall & Garett Pratt, (2003), Pathways to Participation
- 3. Reflections on PRA, London Intermediate Technology Publications.
- Robert Chambers, (1997) Who's Reality Counts Putting the First Last, London, Intermediate Technology Publications.
- 5. Robert Chambers, (1997) Participatory Rural Appraisal (PRA) Challenges, Potential and Paradigms, Sussex, Institute of Development Studies.
- 6. Ian Scoones & John Thompson, (2004), Beyond Farmer's First, London, ITDG.
- 7. Andrea Cornwall & Garett Pratt, (2003) Pathways to Participation
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- 10. Methodology & Applications, NewDelhi, Concept Publishing Company.
- 11. Jules Pretty, Irene Guijit, John Thompson & Ian Scoons, (1995) PLA

### SUGGESTED READINGSGU-UGP (HONOURS)

- 1. Narayanaswamy, N. (2009). Participatory Rural Appraisal: Principles, Methods and Applications. New Delhi: Saga Publications
- 2. Neeta Mekherjee. (1997). Participatory Rural Appraisal: Methodology and Applications. New Delhi: Concept Publishing Company
- Prasanna, C. (1980). Project Planning, Appraisal, Budgeting and implementation. NewDelhi: Tata Megow Hill Publishing Company Ltd
- 4. "Participatory Learning and Action: A Trainer's Guide" by Jules N. Pretty, Ian Scoones, and Paul C. Slaymaker.
- 5. "Documentation Handbook for Social Workers: A Guide to Writing, Planning, and Using Documentation" by Shannon Ruff Dirksen.

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Apparel Designing (	Specialization-Texti	les and App	arel Desig	gning)	
Type of Course	DSE					
Course Code	MG4DSEHSC202	MG4DSEHSC202				
Course Level	200-299					
Course Summary	This course covers diverse aspects, including fashion illustration, detailing techniques for collars, sleeves, and pockets, fabric and accessory selection considerations, wardrobe planning, and clothing budgeting. Practical sessions involve illustrating fashion details and designing apparel styles for different occasions, enhancing students' creative and technical skills					
Semester	IV	Credits	DC	4	Total Hours	
<b>Course Details</b>	Learning Approach	Lecture Tutorial	Practical	Others		
		3 -	1	-	45+30=75	
Pre-requisites, if any	Students should poss	ess fundamental knov	vledge regard	ling fashic	on concepts	

### COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcomes Dilaburg	Learning Domains *	PO No				
After the successful completion of the course the student should be able to:							
1	Explain fashion drawing and figure proportions.	R	1, 2, 10				
2	Explain the fashion details used in fashion illustration	U	1, 2, 10				
3	Describe the process of selection of fabrics and accessories in apparel designing	U	1, 2, 6				
4	Suggest factors to be considered in wardrobe planning and factors affecting the clothing budget	U	1, 6, 7				
5	Illustrate the fashion details	А	1, 4, 7				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)							

Module	Units	Course description	Hrs	CO No.
Fashion Draw	ing and Fig	ure Proportions		
	1.1	Types of fashion drawing- fashion illustration, fashion sketch, stylisation and technical drawing.	Q	CO1
1	1.2	Basic body shapes - Hour glass, Triangle, Inverted triangle, Slim rectangle, Wide rectangle.	ð	CO1
Fashion Details				
	2.1	Collars definition - flat collar, rolled collar, shirt collar, Stand collar		CO2
	2.2	Sleeves definition: Set -in-sleeve- plain sleeve, puff sleeve, bell sleeve. Sleeve and bodice combined: Raglan, Kimono Sleeveless style: Magyar and cap sleeve		CO2
2	2.3	Pockets definition: Patch pocket, pocket in a seam, front hip pocket	22	CO2
	2.4	Yokes definition: Simple yoke, yoke releasing fullness, yoke supporting fullness		
	2.5	Skirts definition: Plain skirt, pleated skirt, gathered skirt, Circular skirt.		
Selection of fa	bric & acce	essories and wardrobe planning		
	3.1	Factors influencing selection of clothing: climate, age, occassion, activity and occupation, fashion, income. Calculating the fabric requirement for basic children's and women's garments.		CO3
3	3.2	Types of garment accessories: Basic accessories, Decorative accessories, Finishing accessories	15	CO3
	3.3	Wardrobe planning: Factors to be considered while selecting clothes for different age group, Basic guidelines for building a useful wardrobe		CO4
	3.4	Clothing budget- Factors affecting the clothing budget- Family factors, Social factors and Individual factors.		CO4
Practical	1		r	
4	4.1	Illustration of fashion details - Necklines, skirt, yoke, collars, sleeves		CO5
т 	4.2	Design two styles of salwar each for casual and party wear.	30	CO5

	4.3	Design two styles of Kameeze each for casual and party wear.		CO5	
	4.4	Design two styles of nightie each with yoke and without yoke.		CO5	
	Teacher specific content				
5	(This content will be evaluated internally)				
	Practical session, Class room Teaching, Field visits etc.				

	CLASSROOM PROCEDURE					
	Module	ANIDIA	Mode of Transaction			
	1,2,3,4	GANDH	Lecture, Demonstration and practical Assignments			
	Mode of assess	ment				
	A. Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work	S)			
	ि	Assignment/oral presentations	T A			
		Viva-voce/Interview	- <b>5</b>			
			Test paper- I			
	MG	U-UGP (HONO	Test paper- II/open book test/any other			
Total				25		
	Practical	Observation of practical skills	3			
		Viva-voce/Oral Presentation				
			Record			
Total				15		
	B.End Semeste	r Examination		-		
	Written Examin	nation		50		
	Practical Exam	Practical Examination				

#### **End Semester Examination**

#### **Theory: 50 Marks**

- iv) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- v) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- vi) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- iii) Laboratory Evaluation (25 marks)
- iv) Record (10 marks)

#### REFERENCES

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### **MGU-UGP (HONOURS)**

## Syllabus

Talana and the second	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Hon	ie Science				
Course Name	Learning Disabi	lities (Spe	cialization-	Human Dev	elopment)	
Type of Course	DSE					
Course Code	MG4DSEHSC2	03				
Course Level	200 – 299	GA	DH			
Course Summary	This comprehensive course is designed to provide students with an in-depth understanding of the world of special needs children, particularly focusing on learning disabilities. It addresses key aspects from identification and classification to intervention strategies and inclusive education practices. Participants will gain insights into the Indian context, legal provisions, and contemporary issues surrounding learning disabilities.					
Semester	IV		Credits	$\mathbf{x}$	4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
	विंग	3	RAHS	a al	-	45+30=75
Pre-requisites, if any	A foundational up psychological con	nderstandi ncepts.	ng of child o	development,	and some ba	sic

# MGU-UGP (HONOURS) COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No			
After th	After the successful completion of the course the student should be able to:					
1	Describe the various the elements under special education category.	U	1,7,10			
2	Assess individual differences in learning disability.	An	1,2,7,10			
3	Examine the assessment methods and interventions.	An	1,2,7,10			
4	Create inclusive and supportive learning environments for students.	С	1,2,7,10			

5	Develop skill in remediating children with learning disabilities	S	1,2,7,10				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S),							
Interest (I) and Appreciation (Ap)							

#### **Content for Classroom transaction (Units)**

Module	Units	Course description	Hrs	CO No.				
Introduction to Learning Disability								
1	1.1	Incidence and prevalence of learning disability, provisions and concessions for the learning disabled, Assistive technology for the learning disabled	15	CO1				
	1.2	Slow learners or educationally backward children. Characteristics of students with learning disabilities.		CO1				
Variances of learning difficulties								
	2.1	Types and classification of learning disabilities – dyslexia, dysgraphia Dyspraxia, dyscalculia, nonverbal learning disability,		CO2				
2	2.2	Auditory Processing disorder, Visual processing disorder, Developmental coordination disorder (DCD) Developmental language disorder (DLD)	15	CO2				
	2.3	Academic assessment – Commonly used tests, classroom and playground observations, time-on- task assessment, language assessment, health assessment, behaviour assessment.		CO3				
Intervention and remediation for learning disability								
3	3.1	Focused intervention strategies for reading, writing, mathematics, visual perception deficits, auditory processing deficits, spatial awareness deficits, conceptual deficits, memory deficits, students with poor work habits		CO3				
	3.2	Intervention for other LD classroom problems like poor social relationships, ADD/ADHD.	15	CO3				
	3.3	IEP – definition, process of writing an IEP		CO4				
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	3.4	Accommodations and modifications needed in fine motor skills, reading, writing, spelling and maths.		CO4				
Practical -	Practical - Approaches to Inclusive Education							
4	4.1	Case study of children identified with learning disability.						
	4.2	Develop and display strategies/aids that will help in accommodations in the classroom for children having difficulty with (a) fine motor skills/penmanship (b) reading (c) spelling (d) maths	30	CO2				
	4.3	Identify the learning styles of 20 children in different age group and make them aware of the strategies that will help them learn with interest.		CO3				
	4.4	Prepare IEP and remedial strategies for children having problems with reading, spelling, mathematics, writing, comprehension. (Select any two and do for different age groups).		CO6				
5	5 <b>Teacher specific content</b> 5 (This content will be evaluated internally) Practical session, Class room Teaching, Field visits etc.							

## **MGU-UGP (HONOURS)**

# Syllabus

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4		Lecture, Demonstration and practical Assignments			
	Mode of assess	sment				
	A. Continu	ous Comprehensive	Assessment (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
	A	Assignment/oral presentations	<b>E</b>			
		Viva- voce/Interview				
			Test paper- I			
		TAY	Test paper- II/open book test/any other			
Total		ाद्यथा असूत	मञ्जुत्रा	25		
	Practical	Observation of practical skills				
	MG	Viva-voce/Oral Presentation	)NOURS)			
		Gull-I	Record			
Total		2 yua	1112	15		
	B. End Semest	er Examination				
	Written Exami	nation		50		
	Practical Exam	ination		35		

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

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- 2. Pohlman, C., & Robinson.M. (2010). Schools for all kinds of minds. USA: Wiley publications.

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- 3. Mangal, S.K. (2009) Educating Exceptional Children: An Introduction to Special Education, Phi Learning.
- 4. Rebecca B. Evers, Spencer.S.S. (2011). Planning effective instruction. New Jersey: Pearson Education.
- 5. Ramaswamy.B.(2013). Learning Disability. New Delhi: Kanishka publishers.

## SUGGESTED READINGSGU-UGP (HONOURS)

- 1. What Every Special Educators Must know: Ethics, Standards, and Guidelines for Special Educators, (2009) Council for Exceptional children.
- 2. Accommodations, modifications and interventions –Jersey public schools.
- Pierangelo and Giuiliani. (2014). Understanding, developing and writing effective IEPS. Corwin press.
- 4. Calvin and Luker. Roadmap to success. IEP. (2004). Ontario: Ministry of Education.

Recent Segentre	Mahatma Gandhi University Kottayam						
Programme							
Course Name	Creative Ar	ts in Interior	Decoration				
Type of Course	SEC	SEC					
Course Code	MG4SECHS	MG4SECHSC200					
Course Level	200-299	200-299					
Course Summary	This course interior deco infuse artisti theoretical co into various a design.	This course is designed to explore the intersection of creative arts and interior decoration, providing students with the knowledge and skills to infuse artistic elements into interior spaces. Through a combination of theoretical concepts and practical applications, students will gain insights into various artistic disciplines and their integration into the field of interior design					
Semester	IV		Credits	S	3	Total	
Course Details	Learning	Lecture	Tutorial	Practical	Others	Hours	
	Approach	3	AV Part	-	-	45	
Pre-requisites, if any	A fundament passion for c interior space	al understand reative arts an es.	ing of interio d a desire to	r design princ explore their	ciples coupl integration	ed with a into	

## COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After the s	to:		
1	Acquire in-depth knowledge in design fundamentals to achieve creative temper to appreciate the aesthetic elements involved in the art process.	U	1
2	Gain expertise in the selection and care of furniture, furnishings and accessories.	S	1, 3
3	Create various art and craft items for decorating home through the ability to appreciate recycling and up-cycling.	С	6,7
4	Apply theoretical knowledge to promote eco friendly decor for sustainable living.	А	7,10

5	Examine the selection of lighting, colour and other fittings and incorporate these proficiently into interiors.	Е	1,2			
6	Develop skills for taking up professional practice and freelancing as interior design consultants.	S	4,9			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

Module	Units	Course description	Hrs	CO No.		
Art in Int	Art in Interior Design					
	1.1	Definition and classification of design, Basic Design types – i) structural (functional) ii) ornamental (decorative) – Types / Sources for Decorative Ideas- Naturalistic, Stylized, Geometrical, Historical, Traditional, Modern, and Abstract, Development of Motifs and patterns based on various types of design and possible application in interiors.		1		
1	1.2	Design Fundamentals: Elements of design - Line, form, colour, texture – characteristics and artistic application of elements in interiors. Principles of design – Harmony, Proportion, Rhythm, Balance and Emphasis, Artistic application of the principles in interior.	15	1		
	1.3	Role of the element of Colour in Interior- Characteristics of colour, Effects of Colour in Space - Shades, Tones and Tints, Cool and warm colours. Prang colour system, Psychological effect of colours and its use in the interior. Colour Schemes / Harmonies and choosing colour harmonies for room interiors.		1,5		
	1.4	Lighting in Interior: Types and classification; Adequate lighting in various rooms – living room, dining room, bed room, study room, kitchen etc., indoor and outdoor lighting, sustainable lighting		2,5		
Furnitur	e, Furnisł	ings, Accessories for Aesthetic and functional Interio	ors			
2	2.1	Materials for interior finishing - use, properties, selection and care- wall and floor finishes, furniture finishes.	15	3,5		

	2.2	Furniture, Furnishings and Accessories - Selection, and Care, Factors influencing the selection - Climate, family needs and preferences, materials availability, design, principles, cost, durability etc.		2,5	
	2.3	Accessories in Interior - Definition, classification, selection and placement of accessories; pictures, art, crafts, sculptures, antiques, indoor plants and flower arrangements.		3, 4	
Artistic P	lanning a	nd designing of the Interior Spaces			
	3.1	Functional and aesthetic planning Personal and Group spaces in Interiors- Factors influencing, Vaastu Sastra and its uses in interior design.		2,4	
	3.2	Efficient space utilization and Space saving techniques Illusions for creative space enhancement		2,4	
3	3.3	Choice of Style and Theme – modern, traditional, eclectic look; the positive effect of good interior design.	15	4	
	3.4	Related Experience- Trash to Treasures - Recycling/ Up-cycling waste materials (paper, fabrics, glass bottles, plastics etc.) into artistic objects for interior beautification.		5, 6	
	3.5	Port-folio making -Methods and Tips for creating effective port-folio, Content of Portfolio. Create a simple portfolio of the craft items/ photography done by the student. Digital Portfolio Presentation.		5,6	
	Teacher specific content				
	(This con	ntent will be evaluated internally)			
4	Practical	session, Class room teaching, Field visits, Exhibition et	с.		

		CLASSROOM PRO	OCEDURE		
	Module		Mode of Transaction		
	1,2,3		Lecture		
	Mode of Ass	sessment			
	A. Continuo	us Comprehensive Assessment (	(CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total				25	
	B. End Sem	nester Examination	IS I		
	Written Exam	nination		50	
Total Marks		TOTTAVAN		75	

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### REFERENCES

 Prathap Rao M, (2015) Interior Designing – Principles and Practice Standard Publishers Distributors, Mumbai

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- 2. Punmia B.C. (1993) Building Construction, Laxmi Publications, N. Delhi.
- 3. Kasu Ahmed A (2004) Interior Design (6thEdn.) Sunrise Publishers, Mumbai
- 4. Khanna G, Art of Interior Design, Indica Publishers, Delhi
- 5. Craig H.T and Rush C.D, Homes with Character, DC Heath and Company, Boston
- 6. Goldstein H and Goldstein V, Art In Everyday Life, Macmillan Company New York

There agains	Mahatma Gandhi University Kottayam					
Programme						
Course Name	Women Em	powermen	t and Gend	er Equity		
Type of Course	VAC	VAC				
Course Code	MG4VACH	MG4VACHSC200				
Course Level	200-299	200-299				
Course Summary	The course understand t insight into them. It also equip them equip learne and identify	The course focuses on women empowerment and enables students to understand the skills and the intricacies involved in the process by giving better insight into the issues and problems of women and imparts legal awareness to them. It also motivates students to be empowered in all walks of their life and equip them by enhancing entrepreneurial spirit in students. This course will equip learners with the knowledge and skills to engage in gender equity work and identify and address gender equality issues in the workplace.				
Semester	IV	10	Credits		3	
Course	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	વદરગ	असूतर	ਸ਼ਫ਼ੑਜ਼ੑੑੑੑੑੑੑੑੑੑੑੑਜ਼	- 1	45
Pre- requisites, if any	A genuine ir awareness ar	genuine interest in women's empowerment and gender equity, legal vareness and an entrepreneurial mindset.				

# course outcomes (co) Spllabus

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Develop an awareness about the status and role of women	U	1,3,6		
2	Familiarize with the issues, disparities and concerns of the marginalized especially, women.	An	3,6		
3	Understand the relevance of developing effective skills for empowerment.	Ι	2,6		
4	Get acquainted with the Human rights and laws pertaining to women and the services available to them.	U	3,6,7		

5	Get motivated to work for the betterment of the marginalized, especially women.	Ap	5, 7, 8			
6	Get equipped with the knowledge and skills to engage in gender equity work and identify and address gender equality issues in the society.	S	7,9			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

Module	Units	Course description	Hrs	CO No.	
An intro	luction int	to the Status of Women from a Global perspective			
1	1.1	A brief introduction into the status of women in Ancient, Medieval and Modern India, Social Reform Movements in India.		1	
	1.2	Demographic profile of women with reference to health, education, employment, socio-economic and political aspects.		1	
	1.3	Special issues and problems concerning women - Female foeticide and infanticide, child marriage, Dowry, Domestic violence, Sexual harassment, Gender discrimination and exploitation by media.	10	2	
	1.4	1.4 Women in distress - Problems of single, widowed, divorced women, unmarried mothers and elderly women.			
Women	Women Empowerment and Protection				
	2.1	Women Empowerment- Concept and significance, Multiple Roles of Women, Role conflict and Role changes.		3,5	
2	2.2	National efforts for women empowerment - National policy on women, National and State Commission for Women, Organizations for Women. NGOs and women development, Self Help Groups and other Micro- economic programme for empowerment.18		3, 4	
	2.3	Human Rights as Women's Rights, Indian constitution and provisions relating to women. Dealing with Disability- State policy.		4, 5	
	2.4	Health Policies in India: Rights of Women regarding their bodies (Surrogacy – Reproductive Health, etc).		4, 5	

	2.5	Women and Law- Need for legal literacy, Awareness on the Laws pertaining to Marriage, Divorce, Dowry, Succession/ Property rights, Immoral Traffic and Abortion, Indecent Representation of Women, Domestic Violence, Sexual Harassment/ Vishaka Guidelines (Sexual Harassment at Workplace Laws), Family courts.		4, 5
Gender	• Equality	and Equity		
	3.1	Issues and Debates on the participation of Women in Politics, Labour / Work Force- Wage disparity, Women in Science & Technology, Gender Representation in Arts, Literature and Media.		5, 6
3	3.2	Significance of Gender Studies, Gender bias, Gender Mainstreaming: Issues and Debates, Gender Equity, Gender Justice, Section 377 and the Supreme Court Judgement: Decriminalising Sexuality.	17	5,6
	3.3	Impact of Globalization on Women, Eco-Feminism. Transition of women towards the new millennium.		1,6
4	Teacher (This con Practical	<b>specific content</b> tent will be evaluated internally) session, Class room teaching, Field visits, Exhibition etc.		

		CLASSROOM PRO	OCEDURE	
	Module	्रावद्यशा अमूतमः	Mode of Transaction	
	1,2,3		Lecture	
	Mode of Asses	sment		
	A. Continuous	Comprehensive Assessment (CC	CA)	
	Learning	Formative Assessment	Summative Assessment	Marks
	approach	(FA)	(SA)	
	Lecture	In-class discussion/Group tutorial work	.5	
		Assignment/oral presentations		
		Viva-voce/Interview		
			Test paper- I	
			Test paper- II/open book test/any other	
Total				25
	B.End Semeste	er Examination		
	Written Exami	nation		50

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- Ashok S. Kolaskaer and Motilal Dash (2012). Women and Society; The road to change. Oxford University Press.
- 2. Akhauri M.M.P. (1990). Entrepreneurship for Women in India. NIESBUD. New Delhi.
- Charu Gupta. (2012). Gendering Colonial India. Reforms, Caste and Communalism, Orient Blackswan, Delhi
- 4. Dhanalaxmi Dash, (2005). Women, Environment and Health, Mangal Deep Publications, Jaipur.
- 5. Diane Richardson and Victoria Robinson (Editor) (1993) Introducing Women's Studies Feminist theory and Practice, Macmillan, Delhi.
- Jane Pilcher and Imelda Whelehan (2004) 50 Key Concepts in Gender Studies, Sage Publications, Delhi
- 7. Krishna Ahooja-Patel, (1995) Women and Sustainable Development: An International dimension, Ashish Publishing House, New Delhi.
- Manjari Biswas (Ed.), (2010) The Status of Women in India from Antiquity to Modernity, Abhijeet Publications, New Delhi. JGP (HONOURS)
- Mary E. John ed. (2008).Women's Studies in India: A Reader. New Delhi: Penguin Books, India.
- 10. Meenakshi Malhotra (Editor), (2004). Dimensions of Women Exploitation, Isha Books, Delhi.
- Prof Meenakshi Malhotra (Editor), Empowerment of Women (in 3 volumes), Isha Books, Delhi.
- 12. Raj Kumar Pruthi, Rameshwari Devi, Romila Pruthi (Editors) (2001), Women in law and Politics, Jaipur, Mangal Deep Publications.
- 13. Uma Shankar Jha (Ed.), Status of Indian Women Crisis and Conflict in Gender Issues-Volume 2
- Utpal Kumar De and Bhola Nath Ghosh (2004), Issues on Empowerment of Women. Mohit Publication, New Delhi.

#### **SUGGESTED READINGS:**

- 1. Social Welfare, Central Social Welfare Board, Qutab Institutional Area, New Delhi.
- 2. Yojana, published by Ministry of Information and Broadcasting, Yojana Bhavan, New Delhi
- Indian Journal of Gender Studies, Centre for Women's Development Studies, New Delhi, Sage Publications, New Delhi.
- 4. Vijay Kumar S. (Editor), Indian Journal of Social Development- An International Journal Serial Publication, New Delhi



## **MGU-UGP (HONOURS)**

## Syllabus



## **MGU-UGP (HONOURS)**

## Syllabus

ARTIN APPENDIX	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Ho	BSc (Hons) Home Science				
Course Name	<b>Clinical Nutrit</b>	ion and Die	etetics			
Type of Course	DSC A					
Course Code	MG5DSCHSC300					
Course Level	300-399	300-399				
Course Summary	The course prepares students to use advanced knowledge about food and nutrition for prevention as well as treatment of diseases and also maintain human health. Dietetics focuses on food management through proper planning, preparation, monitoring, implementation and supervision of a patient's modified diet and to develop basic counselling skills as dietitian and gain an insight into prevailing public health nutrition problems.					
Semester	V		Credits		4	Total
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
Pre-requisites, if any	Basic awareness	s on nutritio	<b>भ उ</b> त्त n		-	45+30=75

## COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Integrate knowledge of principles and methods associated with nutrition and dietetics.	U	1,7,10
2	Collect, organize and assess data relating to the health and nutritional status of individuals, groups and populations.	An	1, 2, 6, 7, 10
3	Evaluate different nutritional interventions for managing symptoms and supporting immune function in fever and HIV/AIDS conditions.	Е	1, 2, 3, 6,10
4	Design a community-based nutrition program aimed at preventing and managing lifestyle diseases, incorporating education, behavior change strategies, and access to healthy food options.	С	2, 6, 10
5	Describe the impact of specific nutrients and dietary factors on gastro intestinal and renal health.	U	2, 6, 7, 10

6	Develop skill to plan and prepare therapeutic diets for prevention of disease conditions	С	2, 6, 7, 10
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\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

Module	Units	Course description	Hrs	CO No.
Concepts	in Diet 🛛	Therapy & Medical Nutrition Therapy in Fever and HIV	//Aids	·
1	1.1	Growth and Scope of Dietetics Modifications of Normal Diets, Classification of Therapeutic Diets Routine Hospital Diets		CO1
	1.2	Dietician- Classification and responsibilities Nutrition Care Process (NCP)		CO1
	1.3	Assessment of Nutritional status, Diet therapy and Diet Counseling Critical Care Nutrition-Oral, Enteral and Parenteral Feeding Gut Micro biome -Role of Pre and Probiotics	12	CO2
	1.4	Classification and Aetiology of acute and chronic fevers- Medical Nutrition Therapy in Typhoid and Tuberculosis		CO3
	1.5	Aetiology, Symptoms and Dietary Management in HIV/AIDS Role of Diet and Immunity		CO3
Medical	Nutrition	n Therapy in Lifestyle Diseases		
	2.1	Nutrition Transition in India Weight management- Etiology, Pathophysiology, Clinical symptoms, metabolic alterations, Assessment/Indicators, Lifestyle & Dietary guidelines		CO4
2	2.2	Diabetes Mellitus - Prevalence, Classification and Etiology, Symptoms and Diagnosis Acute and Chronic Complications of Diabetes Die Modifications, Use of Food Exchange Lists, Insulin Types and Use, Oral Hypoglycaemic Agents, Glycaemic Index, Glycaemic Load)	t - c 15	CO4
	2.3	Coronary Artery Diseases (CAD)- Atherosclerosis-Phases, Aetiology, Symptoms, Complications, dietary and Medical Management Hypertension- Classification, Aetiology, Complications, Dietary Management -DASH Diet Metabolic Syndrome	y	CO4
	2.4	Cancer-Aetiology, Risk Factors-Dietary and Non- Dietary Nutritional Requirements in cancer, Dietary and Medical Management in cancer, Functional Foods		CO4

Medical N	utrition Th	erapy in Renal Disorders & Gastro Intestinal		
Disorders				
	3.1	Aetiology, Pathophysiology, Clinical Symptoms, Assessment/Indicators, Lifestyle & Dietary guidelines for the following conditions- Glomerulonephritis		CO5
	3.2	Nephrotic Syndrome		C05
	3.3	Acute and Chronic Renal Failure		C05
3	3.4	Aetiology, risk factors, clinical symptoms and dietary management in NAFLD-Non-Alcoholic Fatty Liver Disease MAFLD-Metabolism Associated Fatty Liver Disease	18	CO5
	3.5	Aetiology, risk factors, clinical symptoms and dietary management in-Hepatitis, Cirrhosis and hepatic Coma		CO5
	3.6	Aetiology, risk factors, clinical symptoms and dietary management in-Diarrhoea, Constipation, Peptic Ulcer and GERD Inflammatory Bowel Disorders		CO5
Practical				
	4.1	Visit/Virtual tour to Hospital Dietary Department Preparation of Hospital Diets- Modification of diet with respect to texture, consistency and nutrients		CO6
	4.2	Modification of Diets in Obesity		CO6
	4.3	Modification of Diets in Underweight	30	CO6
	4.4	Modification of Diets in Diabetes Mellitus		CO6
	4.5	Diets for Febrile Conditions – TB, Typhoid		CO6
4	4.6	Modification of Diets in Peptic Ulcer, Constipation and Diarrhoea		CO6
	4.7	Modifications of Diets in Liver Diseases – Jaundice, Hepatitis and Cirrhosis		CO6
	4.8	Diets for Nephritis, renal Failure - Protein Restricted Diets		CO6
	4.9	Diets for Cardiovascular diseases – Sodium Restricted, Fat Restricted		CO6
	4.10	Modification of Diet for Cancer Patients and HIV Infected Person		CO6
	4.11	An Overview/desk review on DASH diet, Mediterranean diet, Paleo diet, FODMAP diet, Keto diet VLCD		CO6
	Teacher s	pecific content		
5	(This cont	tent will be evaluated internally)		
	Practical s	session, Class room Teaching, Field visits etc.		

	CLASSROC	OM PROCEDURE			
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration practical Assignments	on and	
	Mode of ass	essment			
	Continuous	Continuous Comprehensive Assessment (CCA)			
	Learning approach	Formative Assessment	Summative Assessment	Marks	
		(FA)	Assessment Marks ) (SA) lass ussion/Group rial work ignment/oral sentations		
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	<u> </u>		
		Viva- voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total				25	
	Practical	Observation of practical skills	MI!		
	14	Viva-voce/Oral Presentation			
		वदाञा अमूतः	Record		
Total	L L			15	
	End Semeste	er Examination			
	Written Exa	mination CD (110		50	
	Practical Ex	amination	NUORS)	35	

#### **End Semester Examination**

#### Theory: 50 Marks

i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)

Syllabus

- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

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- Joshi SA.( 2010). Nutrition & Dietetics. 3rd Edition.: Tata McGraw-Hill Education Pvt. Ltd.

#### SUGGESTED READING

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- Brown, J (2014). Nutrition now (7thed). Wadsworth, USA, ISBN- 13:978-1-133-93653-4, ISBN 10:1-133-93653-9
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- 4. Clinical Dietetics Manual (2018). Indian Dietetic Association, Elite Publishing House
- 5. Garg, M. Diet, Nutrition and Health, ABD Publishers, 2006.



Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Resource Managem	ent and C	onsumer S	Studies		
Type of Course	DSC A					
Course Code	MG5DSCHSC301					
Course Level	300-399	AND				
Course Summary	Resources and their management is the ultimate goal of all families. The Course introduces the conceptual and contextual meaning of resources and their management in micro level family settings in the changing world in a simple format with experiential learning to the learners. Consumer is the king in the consumer market. Consumers' behaviour and attitude reflects their living styles which <i>per se</i> will be the delineation of their family finance management practices. The Course exposes students to real life situations for realizing their role as consumers as well as financial managers in family settings.					
Semester	v	TAY	Credits	-938-5	4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	45+30+75
Pre-requisites, if any	Interest in resource n	nanagemen	RNOUI	RS)		

# course outcomes (co) Syllabus

CO No.	Expected Course Outcomes	Learning Domains *	PO No
After th	e successful completion of the course the student should be	e able to:	
1	Understand on the concepts related to family resource management	U	3,4,5
2	Evaluate the significance of decision making and management process in efficient use of resources	U	1,2,3,

3	Analyse on management of human energy, time, and money as a family resource.	An	2,4,5,		
4	Understand the type of natural resources and the impact of human activities on natural resources Create awareness to Emerge as informed consumers	U	3,6.7		
5	Evaluate resource and event management skills	Е	8,9		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course description	Hrs	CO No.
Home N	lanageme	ent: Management of resources and decision making		
	1.1	Introduction to home management- meaning, definitions, scope of family resource management essential qualities for manager.		CO1
	1.2	Motivating factors in management – Values, Standards and Goals – meaning, types. Theories of Motivation- Maslow's hierarchy of needs theory.		CO1
1	1.3	Family Resources- Concept, classification- Human and non-human resources, characteristics of family resources. Factors affecting utilization of family resources, Maximizing use of resources and resource conservation.	15	CO1
	1.4	Decision Making- the crux of management, Types of decisions; Steps in decision making.		CO2
	1.5	Management process: Definitions and steps in management process: Planning,Controlling, Controlling, Organizing and Evaluation Significance of managing resources of the family, Application of Management Processes in: Event Planning & Execution		CO2
Optimiz	ing and <b>F</b>	Effective Management of Life Resources		
	2.1	Money- sources of income, types of income, steps in money management, Budgeting- budget items, methods of handling money		CO3
2	2.2	Time – concept of time schedule, time norms and peak loads	15	CO3
	2.3	Energy – Types of effort (Manual, pedal, visual etc)., Concept of body posture, classification of activities		CO3

		(sedentary, moderate and heavy), use of labour saving		
		devices in management of time and energy, causes of		
		fatigue, methods of alleviating fatigue		
		Methods of harnessing renewable resources for residential		
	2.4	use-solar water heater, photo voltaic cell, solar cooker,		CO4
		solar dryer.		
	2.5	Waste management: home level solid and liquid waste		004
	2.5	management practices		004
Consum	er studies			
		Consumer: definition and meaning, buying motives -		
		types; consumer buying process; Consumer problems -		
		types and solutions		
	3.1	Consumer education Consumer aids: classification -		CO4
		Labels, Trademarks, Brand Names, Patents, Warranty,		
		Guarantee, Unfair consumer practices: adulteration and		
		faulty weights and measures, Consumer redressal	15	
		Green Consumerism-Meaning and importance with		
		respect to consumerism, Consumer rights and		
	3.2	responsibilities in India Standardization and quality		CO4
		control measures: Role of ISI, FPO, AGMARK, ISO, Eco		
		mark, wool mark, Slik mark, Cotton mark, Handloom		
Draatiaa	1			
Fractica	1			
	4.1	Preparation of time plans for self and family		CO5
		Drafting family budget for different income groups		
	4.2	Assessment of working heights		CO5
		Market survey on labour saving devices		
		Visit to a renewable energy resource centre to		CO5
	4.3	experience solar energy/rain water harvesting/ waste	20	
4		management. Visit vermi compost centre/ waste	30	
		management initiatives		
		Event Management -Planning, organizing,		CO5
	4.4	implementing and evaluating a group event:		
		exhibition/cottage stay/ study tour		G 0 <b>7</b>
	4.5	Development and evaluation of Labels /		CO5
	4.5	Advertisements for consumer products		
		Duomono o congramon convertaint		
		Prepare a consumer complaint		
	Teacher s	Prepare a consumer complaint		
5	Teacher s (This cont	Prepare a consumer complaint specific content tent will be evaluated internally)		

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	sment	•				
	A. Continu	A. Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work	III.				
		Assignment/oral presentations					
		Viva- voce/Interview					
			Test paper- I				
			Test paper- II/open book test/any other				
Total		<b>VITAY</b>	PIL	25			
	Practical	Observation of practical skills	मञ्चनुते				
		Viva-voce/Oral Presentation					
	MG	U-UGP (HC	Record				
Total		·	·	15			
	B. End Semeste	er Examination	and all				
	Written Exami	nation	JUS	50			
	Practical Exam	ination		35			

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- Bhargava, B. (2005). Family Resource Management and Interior Decoration, Jaipur: Apple Printer and V. R. Printers
- 2. Deacon, R. F., and Firebaugh, F.M. (1975). *Home Management: Contexts and Concepts*.Boston: Houghton Mifflin Company.
- 3. Fitzsimmons, C. (1950).*The Management of Family Resources*. California: W. H. Freeman Co.
- Gandotra, V., and Jaiswal, N.(2008). *Management of Work in Home*, New Delhi: Dominant Publishers and Distributors.(ISBN No. 81-7888-526-3)
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- Koontz, H., and O'Donnel C. (2005), Management A Systems and Contingency Analysis of Managerial Functions. New York: McGraw-Hill Book Company

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- Rao V.S.P., and Narayana P.S. (2008). Principles and Practices of Management. New Delhi: Konark Publishers Pvt. Ltd.( ISBN 13: 9788122000283)

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- Singh, S. (2007). Ergonomics Integration for Health and Productivity. New Delhi/ Udaipur: Himanshu Publication.
- Swanson, B. (1983). *Introduction to Home Management*. New York: Macmillan Publishing Co. Inc.



## **MGU-UGP (HONOURS)**

Syllabus

Para sprange	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Hon	ne Science				
Course Name	Textile Science					
Type of Course	DSC A					
Course Code	MG5DSCHSC3	MG5DSCHSC302				
Course Level	300-399	300-399				
Course Summary	This course cover construction met students with a Complete knowle in fabrics and in t	ers the bas thods, prin comprehe edge of tex turn, to app	ic concepts ting, dyein nsive unde tiles will de reciate the	of textile f and fabric erstanding o evelop the all proper uses	ibres, textile ic finishes a f the science pility to distir for the differe	yarns, fabric nd providing e of textiles. nguish quality ent qualities.
Semester	V		Credits	S	4	- 1.22
Course Details	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	4	VAN.	-	-	60
Pre-requisites, if any	Basic understand fibre.	ing of texti	les - anythi	ng made of t	fabric, thread	, yarn and

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No			
After the successful completion of the course the student should be able to:						
1	Examine the properties, and uses of major and minor textile fibres.	An	2, 4, ,710			
2	Assess the processes of yarn making and characteristics of different types of yarns	An	1, 4, 5, 10			
3	Explain weaving with conventional and automated shuttle less loom and the characteristics of different weaving patterns.	U	1, 4, 5, 10			
4	Demonstrate different type of fabric construction techniques other than weaving.	U	1, 4, 5, 10			
5	Understand dyes and finishes suitable for different textiles.	U	1, 7, 10			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

Module	Units	Course description	Hrs	CO No.
Study of F	ibres an	d Yarns		1
1	1.1	Fibre-Definition, primary and secondary properties Classification of textile fibres. Properties and uses of major textile fibres -cotton, linen, silk, wool, rayon, nylon, and polyester, acrylic, lyocell, organic cotton, jute and spandex. Methods of identification of textile fibres -visual inspection, microscopic test and burning test.		CO1
	1.2	Definition, process of making fibre into yarn-hand, mechanical-conventional ring spinning, direct-open-end spinning and chemical. Classification of yarns: Types- spun and filament. Number of parts- simple, complex. Twist- Amount and direction. Yarn count – Indirect and indirect. Textured yarns, bi-component yarns, blends and mixtures.	15	CO2
	1.3	Collection of fibres, Identification of textile fibres		CO1
	1.4	Collection of simple and complex yarns		CO2
Study of F	abric st	ructure		
	2.1	Weaving- Loom- parts and basic weaving motions A brief introduction to shuttle less looms- projectile, rapier, and jet looms.		CO3
	2.2	Basic weaves- plain, twill, satin and its variations. Fancy Weaves-, pile, jacquard, dobby, lappet, clip spot, leno, crepe, and double cloth.		CO3
2	2.3	Characteristics of woven fabrics –warp and weft, grain, selvedge, thread count and balance	15	CO3
	2.4	Other methods of fabric construction-knitting, felting, nonwovens, lace making, netting, bonding, and braiding. Recent developments- Smart fabrics, Technical textiles, Nano-textiles		CO4
	2.5	Collection of fabrics- Basic weaves and novelty weaves and fabrics of different counts		CO3
Fabric Dy	eing and	Printing		
3	3.1	Classification of dyes: Natural and artificial- acid, basic, direct, disperse, vat, naphthol, pigment, sulphur, and mordant.	15	CO5
	3.2	Stages of dyeing-stock, top, yarn, piece - cross and union dyeing, product, solution dyeing.		CO5

	3.3	Printing: -Direct- roller, block, screen and stencil. Resist- tie & dye, batik, and Discharge printing.		CO5		
	3.4	Preparation of samples for Block, Stencil, Batik and Tie & Dye		CO5		
Fabric Fin	ishes					
	4.1	Finishes-Definition, purpose. Classification		CO5		
4	4.2	Types-singeing, bleaching, mercerization, tentering, stiffening, napping, calendaring-simple, glazed. embossed, moiré, schreiner, sanforising, beetling, sizing, weighting, shearing, fulling and crepe	15	CO5		
	4.3	Special finishes-water proofing, flame proofing, antibacterial finish, stain resistant finish, shrinkage control and crease resistant	-	CO5		
	Teacher specific content					
5	(This content will be evaluated internally)					
	Practical session, Class room Teaching, Field visits etc.					
Mode of Assessment						

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4	TAY	Lecture			
	Mode of Asse	ssment				
	A.Continuous	Comprehensive Assessment	(CCA)			
	Learning	Formative Assessment	Summative Assessment	Marks		
	approach	(FA)	(SA)			
	Lecture	In-class discussion/Group tutorial work	NOURS)			
		Assignment/oral presentations	1 4 4 M			
		Viva-voce/Interview	112			
			Test paper- I			
			Assignment/project/any other			
			Test paper- II/open book test/any other			
Total				30		
	B.End Semest	er Examination				
	Written Exam	ination		70		

#### **End Semester Examination**

#### Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any 2 question out of 4 (2x10=20)

#### REFERENCES

- 1. Corbman, B.P, (2005), Fibre to Fabric, Singapore., Mc. Graw Hills book.co.
- 2. Wingate, (1978), Textile Science and their Selection, Prentice Hall.
- 3. Dantyagi, S (2008), Fundamentals of Textiles and Their care, Orient Longman.
- 4. Kadolf. S.J (2008), Textiles, Anne Langford, Prentice Hall
- 5. Gokarneshan, U., (2005), Fabric Sturcture and Design, New Age International Publishers
- 6. Well's. K., (2002), Fabric Dyeing and Printing, Conran Octopus Smith J.L (2006) Textile Processing, Chandigarh, Abhishek Publications.

#### SUGGESTED READINGS

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- 2. Hall. A.J., (2004), "The standard hand book of Textiles", Wood head Publishing 8th edition
- 3. Vidyasagar. P.V., (2005), "Hand Book of Textiles", A. Mittal Publications.
- Cook. J.G., "Hand Book of Textile Fibres", Vol IT Man Made Fibers, Wood Head Publishing.
- 5. Gohl. E.P.G., Velensky, L.D., "Textile Science" CBS Publishers and Distributors, 2003

And a segmenting	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons)	BSc (Hons) Home Science				
Course Name	Family Stu	dies (Special	ization-Hum	an Developm	ent)	
Type of Course	DSE					
Course Code	MG5DSEH	MG5DSEHSC300				
Course Level	300-399					
Course Summary	This compression students wit functions of	ehensive cour th a deep und f families in c	rse on Family erstanding of t ontemporary s	Studies is des the dynamics, society	structures,	ovide and
Semester	V		Credits		4	Total
Course Details	Learning	Lecture	Tutorial	Practical	Others	Hours
	Approach	4		j	-	60
Pre-requisites, if any	A foundational understanding of human development, sociology, legal aspects related to marriage and family, public health or gerontology, and family studies.					
COURSE OUTCO	OMES (CO)	OTT	AYAM			

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No					
After th	After the successful completion of the course the student should be able to:							
1	Interpret the characteristics, responsibilities, changes, and adaptations in adulthood.	А	1,10					
2	Evaluate the effectiveness of interpersonal communication within different family structures and the parenting styles.	An	4,10					
3	Analyse the effects of family crises on the well-being of children, adolescents, and adults.	А	7, 6, 10					
4	Examine the effectiveness of communication styles and the agencies offering support in promoting family cohesion.	An	4, 10, 6					
5	Assess the role of geriatric care in addressing the specific needs of ageing individuals.	An	7,10					
6	Develop skills to apply the knowledge gathered in addressing the issues related to human development and family dynamics	S	10, 3					
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)								

Module	Units	Course description	Hrs	CO No.
Adulthoo	od and F	Family		
		Definition characteristics stages changes in various		
	1.1	domains of development, roles, responsibilities, adaptations and adjustments in work and family, changes in lifestyle, midlife crisis, approaching retirement, emotional maturity and subjective well being		CO1
1	1.2	Marriage – mate selection, Institution, traditional and modern marriages, laws pertaining to marriage, adjustments and adaptations, population education in the current scenario		
	1.3	Develop a questionnaire on any issue relating to the challenges in adulthood and conduct a survey on the same and report.		CO1
	1.4	Conduct an anthropological study on the different communities present in your locality in relation to family types and marriage customs.		CO1
Dynamic	s of Fan	nily		
	2.1	Family – definition, stages, family life cycle, interpersonal communication within families, managing expectations, self goals and adjustments		CO2
2	2.2	Parent child relationships – importance, parenting styles, parental attitudes, responsible parenthood, influence of parents on the personality and behaviour of children, modern families – challenges and solutions14Prepare a handbook on developmental milestones throughout the lifespan14		CO2
	2.3			CO2
		Family crisis		
	3.1	Divorce, death, separation, financial instability, illness, death, family violence, suicide, unemployment, natural disasters, epidemics		CO3
3	3.2	Maternal employment, globalisation, immigration and migration, single and lone parenthood, blended and reconstituted families, media addiction – influence and problems among children and adolescents	15	CO3
	3.3	Prepare review articles related to contemporary issues affecting families		CO3
Ageing in	n the ne	w millennium		
4	4.1	Definition, characteristics, adjustments - self, family, vocation, retirement, singlehood; needs and conditions contributing to happiness in old age	15	CO5

	4.2	Common problems and abuses among elderly, geriatric care, family caregiving – second parenting, social security and support services for the aged.	CO5
	4.3	Visit to an elderly care centre and make a case study presentation.	CO5
	4.4	Review newspaper articles related to incidents of different types of abuse in families.	CO5
5	5	Teacher Specific Content This content will be evaluated internally	

	CLASSROOM PROCEDURE				
	Module	GAND	Mode of Transaction		
	1,2,3,4		Lecture		
	Mode of Assessment				
	A.Continuous	s Comprehensive Assessment	(CCA)		
	Learning	Formative Assessment	Summative Assessment	Marks	
	approach	(FA)	(SA)		
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	100		
		Viva-voce/Interview			
		्रावधंशा अम्रतर	Test paper- I		
			Assignment/project/any other		
		MGU-UGP (HO	Test paper- II/open book test/any other		
Total				30	
	B.End Semes	ter Examination			
	Written Exam	nination Syllat	1115	70	

#### **End Semester Examination**

#### Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

#### REFERENCES

- Mc Kenry P, & Price S. (2005). Families and Change: Coping with Stressful Events. (3<sup>rd</sup> ed.). New York: Sage Publication.
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- 5. Gupta Sangeeta, [2008], The Joy of Parenting: a comprehensive parenting guide covering infancy to adolescence, Pustak Mahal, New Delhi.

#### **Suggested Readings**

- 1. Johnson Elle Olivia, [2012], The Parent's Guide to In-Home ABA Programs, Jessica Kingsley Publishers.
- Rajaratnam Aarti C., Brinda Jayaraman (2013), Parenting: Innocence to Innersense, Notion Press
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- 5. Lichtman Louis J (2011), A Practical Guide for Raising a Self-Directed and Caring Child: An Alternative to the Tiger Mother Parenting Style, iUniverse.
- 6. Keck Gregory C (2009), Parenting Adopted Adolescents: Understanding and Appreciating Their Journeys, NavPress Publishing Group
- Lavania, V. (2006). Childless Couples: Social Consequences of Sterility & Infertility, Jaipur: Rawat Publications.
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- Landis T. Fand Landis G.M. (1963), Building a Successful Marriage. (4<sup>th</sup> ed.). USA: Prentice Hall, Inc.
- 10. Rao, M. (2008). Law relating to Women & Children. Lucknow: Eastern Book Company.
- Rao N S, Counseling and Guidance, (2<sup>nd</sup> ed.). New Delhi: Tata McGraw Hill Publishing Company Ltd.
- 12. Uberoi, P. (1994). Family, Kinship and Marriage in India. New Delhi: Oxford University Press.

Real Segurary	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Science					
Course Name	Applied Extension Education					
Type of Course	DSE					
Course Code	MG5DSEHSC301					
Course Level	300-399					
Course Summary	Participants will be able to apply extension education principles to address real-world challenges, develop effective outreach programs, and assess the impact of extension activities.					
Semester	v		Credits		4	Total
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
		4		3	-	60
Pre-requisites, if any	Interest in Extension education					

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No	
After the successful completion of the course the student should be able to:				
1	Comprehend the foundations of Extension Education by identifying key principles and concepts.	U	1	
2	Demonstrate the capacity to align extension activities with predefined outcomes.	А	2	
3	Identify relevant stakeholders involved in extension activities.	U	2	
4	Design and plan extension activities using appropriate teaching methodologies.	K	2	
5	Apply analytical skills to assess the impact and effectiveness of extension activities, facilitate participatory approaches, and utilize learned concepts to develop a comprehensive extension project.	A	6,2	
* Domorphon (K) Understand (U) Apply (A) Analyse (An) Evaluate (E) Chaste (C) Shill				

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

Module	Units	Course description		CO No.	
Understanding	g Extension	Education			
	1.1	Overview of Extension Education		CO1	
1	1.2	Importance and relevance of extension activities.	10	CO1	
	1.3	Historical development and evolution		CO1	
Principles of C	)BE in Exte	ension Education			
2	2.1	Introduction to Outcome-Based Education (OBE)		CO2	
	2.2	Aligning extension activities with learning outcomes.	10	CO2	
	2.3	Developing measurable objectives.		CO2	
Program Planning and Design					
3	3.1	Stakeholder Analysis and Needs Assessment Identifying and analysing stakeholders		CO3	
	3.2	Conducting needs assessments in extension education		CO3	
	3.3	Case studies and practical exercises		CO3	
	3.4	Developing Extension Programs Formulating program goals and objectives Designing extension activities Selecting appropriate teaching methodologies	20	CO3	
	3.5	Budgeting for extension programs Efficient resource allocation.		CO3	
Communication and Outreach Strategies					
4	4.1	Effective Communication in Extension, Importance of effective communication Developing communication strategies, LFA and pitch deck ppt- Using technology in extension communication.	20	CO4	
	4.1	Techniques for community engagement Facilitating participatory approaches in extension Case studies on successful community participation	20	CO5	

	4.2	Effective Communication in Extension, Importance of effective communication Developing communication strategies,LFA and pitch deck ppt- Using technology in extension communication		CO5
	4.3	Techniques for community engagement Facilitating participatory approaches in extension Case studies on successful community participation		CO5
5	Teacher specific content(This content will be evaluated internally)Practical session, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE							
	Module		Mode of Transaction					
	1,2,3,4	3	Lecture					
	Mode of Asse	ssment						
	A.Continuous Comprehensive Assessment (CCA)							
	Learning	Formative Assessment	Summative Assessment	Marks				
	approach	(FA)	(SA)					
	Lecture	In-class discussion/Group tutorial work	навл					
		Assignment/oral presentations	NOURS)					
		Viva-voce/Interview						
		~	Test paper- I					
		Spliat	Assignment/project/any other					
			Test paper- II/open book test/any other					
Total				30				
	B.End Semester Examination							
	Written Examination							

#### **End Semester Examination**

#### **Theory: 70 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

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- "Agriculture Extension: The Training and Visit System" by A. W. Van den Ban and H. S. Hawkins
- 3. "Planning and Developing Programs and Services for Extension and Outreach" by Rama B. Radhakrishna and Charles A. Martin
- 4. "Extension Teaching Methods" by K. V. Shinde
- "Character Development in Schools and Beyond" by George E. Moore and Thomas Lickona
- 6. "Diffusion of Innovations" by Everett M. Rogers
- "Community Development and Education: A Shared Future" by Gary Tomek and Steven Hronec
- "Adult Education: A Practical Guide for Educators, Trainers, and Researchers" by Michael H. Boyd and Paul L. Martin
- 9. "Whose Reality Counts? Putting the First Last" by Robert Chambers
- "Planning Programs for Adult Learners: A Practical Guide for Educators, Trainers, and Staff Developers" by Rosemary S. Caffarella and Sandra Ratcliff Daffron

Altered Sugarumant	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Scien	ice				
Course Name	Human Physiology and and Dietetics)	Microbiol	ogy (Speci	alization-Fo	od Nutrition	I
Type of Course	DSE	DSE				
Course Code	MG5DSEHSC302					
<b>Course Level</b>	300 - 399	ND				
Course Summary	The students understand of integrated functions o absorption of nutrients a realize the economic microbiology and to und prevention and control of	the princip f the variou and the act importance derstand th f micro-org	les of Food as systems on of vario e of mict e principle anisms.	ls and Nutri of the huma ous hormone oorganisms; s of various	tion through n body; diges es. Students of basic con- methods use	the study stion and enable to cepts of ed in the
Semester	V		Credits		4	Total
Course	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
Details		4	-	-	-	60
Pre- requisites, if any	A strong understanding of basic biology is essential, familiarity with human anatomy provides the structural foundation for understanding physiological processes. knowledge of organs, tissues, and systems of the human body.					

# COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Recognizing the functioning of various systems in the human body.	K	1		
2	Understand the mechanism of the digestion and absorption of different nutrients in the body	U	2		
3	Explain the role of hormones and its effect during imbalances in the human body.	U	2		
4	Analyse the basic concepts of food microbiology, infections and defence mechanisms in the human body	А	10		
5	Analyse the marketability of new food products.	А	10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	1.1	Cardiovascular and Respiratory System Cell as a unit of the body, Cell organelles and their functions. Blood: Composition and its functions, Haemoglobin, Coagulation of blood, Blood groups Structure of heart, Circulation (Systemic, pulmonary, coronary and portal system) Cardiac cycle, Cardiac output, Blood pressure, Myocardial infarction. Structure of respiratory system, hypoxia, lung volume and capacities	10	CO 1
2	2.1	<b>Digestive and Excretory System</b> Structure and functions of stomach. Digestion and absorption of CHO, protein and fats. Liver, Gallbladder, Pancreas, function and regulation of gastric intestinal secretion. Structure and function of kidney, Nephron, Mechanism of Urine formation, role of kidneys in homeostasis.	10	CO 1
3	3.1	Endocrine and Reproductive System Endocrine glands and hormones in brief, Action and disorder of pituitary, thyroid, Adrenal and pancreatic hormones. Structure and functions of male and female reproductive system. Physiology of Menstruation and Menopause	20	CO 3
4	4.1	Basic concepts of Microbiology, Infection and ImmunityClassification of microorganisms, important microorganisms- Structure and economic importance of microorganism-bacteria, yeast.Factors affecting the growth of microorganisms, Culture media and culture techniques, Isolation and identification, grams staining.Sterilization and disinfection- definition and method.Sources of microorganisms, Transmission of infection, bacterial infections in man: typhoid, Pneumonia. Viral infections – Hepatitis, AIDS.	20	CO 2

		Natural defences of the body—primary and			
		secondary defence mechanisms. Immunity			
		types, Immunization followed for various			
		Diseases			
5	Teacher Sp	ecific content			
Written Ex	amination				
Practical session, Class room Teaching, Lab visits etc.					

	CLASSROOM PROCEDURE				
	Module	AND	Mode of Transaction		
	1,2,3,4	GAND	Lecture		
	Mode of Assessment				
	B. Contin	uous Comprehensive Assessn	nent (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	411		
		Viva-voce/Interview	Haaa		
			Test paper- I		
			Assignment/project/any other		
		MGU-UGP (HO	Test paper- II/open book test/any other		
Total		Anllal		30	
	C. End Se	emester Examination	1112		
	Written Exam	ination		70	

#### **End Semester Examination**

#### **Theory: 70 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

#### REFERENCES

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- Vidya Rattan,(2004),Handbook of Human Physiology,7 th edition, New Delhi.: Jaypee Brothers Medical Publishers(p) Ltd,.
- Ross and Wilson. (2006). Anatomy and Physiology in Health and Illness, 10 th edition. London. Elsevier limited.
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- Frazier, W.C, Food Microbiology, McGraw Hill Publication, New York, 10<sup>th</sup> Edition, 1998.

Hanner segmenter	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Hor	ne Scienc	e			
Course Name	Fashion Marke	ting (Spec	ialization-	Textiles and	l Apparel	Designing)
Type of Course	DSE					
<b>Course Code</b>	MG5DSEHSC3	603				
Course Level	300-399					
Course Summary	This course prov and strategies ta insights into reta	vides a con ailored spe ail manage	nprehensive ecifically to ment practi	e overview of the fashion ces.	of marketir n industry,	ng principles along with
Semester	V	X	Credits	I	4	Total
Course Details	Learning	Lecture	Tutorial	Practical	Others	Hours
	Approach	4		5	-	60
Pre-requisites, if any	Students should concepts	possess	the basic	understandi	ng about	the fashion

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No
After th	e successful completion of the course the student should be	e able to:	
1	Explain fashion market and consumer groups in fashion	U	1, 2, 7, 10
2	Comprehend the product development and pricing strategies	U	1,3,4, 10
3	Analyse the distribution channels and promotion mix	An	1, 2, 3, 4
4	Evaluate different types of retail stores	Е	1, 3, 4, 10
5	Apply visual merchandising concepts in store design	А	1, 2, 7, 10
*Reme	mber (K), Understand (U), Apply (A), Analyse (An), Evalu	uate (E), Crea	te (C), Skill

(S), Interest (I) and Appreciation (Ap)

Module	Units	Course description		CO No.
Marketing				
	1.1	Meaning and classification of Marketing, fashion Marketing, Marketing Calendar Marketing Mix – Product, Price, Place, and Promotion		CO1
1	1.2	Fashion Market – Size and structure, Marketing environment – Micro and macro marketing environment	20	CO1
	1.3	Consumer Groups - Demographic Trends & Psychographic Trends, Consumer spending – Personal Income, Disposable Income, Discretionary Income, Purchasing Power, Factors influencing consumer behaviour.		CO1
Product mix a	nd Pricing		L	
	2.1	Product Mix, Product Life Cycle, New Product Development		CO2
2	2.2	Concept and importance of pricing, Factors affecting pricing decisions, Pricing strategies, Methods of pricing	10	CO2
Distribution cl	hannels and	I Promotion mix		
	3.1	Distribution Channels: Types, Levels.		CO3
3	3.2	Promotion Mix- sales promotion, advertising, branding, public relation, special events	10	CO3
<b>Retail Stores</b>				
4	4.1	Retail stores– Definition – functions of retailing – Classification of Retailers– Types of Retail operations – (1) Specialty stores- Single brand or Private label retailers, Secondary spin-offs, (2) Department stores, (3) Mass Merchants – Discounters, Off-Price retailers, Outlet stores, Warehouse clubs, (4) Promotional stores, (5) Non store retailing – Mail order merchants, Party plan retailing, Electronic retailing, Television shopping, Online shopping. Retail store design - Importance of retail store design. Visual merchandising- Signage, Merchandise Presentation, Types of display, Lightings, Mannequins and props, Fixtures	20	CO4 CO5
5	Teacher s	<b>pecific content</b> ent will be evaluated internally)		
	Practical session, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4		Lecture		
	Mode of Assessment				
	A.Continuous	Comprehensive Assessment	(CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Assignment/project/any other		
			Test paper- II/open book test/any other		
Total				30	
	B.End Semest	er Examination	AN Y		
	Written Exam	ination		70	

#### **End Semester Examination**

#### Theory: 70 Marks

i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)

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- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any 2 question out of 4 (2x10=20)

#### REFERENCES

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- 2. Fringes G.S (1999)- Fashion From Concept To Consumer -Prentice Hall -New Jersey
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#### SUGGESTED READINGS

- 1. Elaine Stone, The Dynamics of Fashion, 2004, Fairchild.
- 2. Jay Diamond; Ellon Diamond, The World of Fashion, 2007, Fairchild.
- 3. Tony Hines, Fashion Marketing, 2006, Butter Worth Heinemann.
- 4. Rosemary Varley, Retail Product Management : Buying and Merchandising, 2005,
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- 6. John Giacobello, Careers in fashion Industry, 2000, Rosel Pub. Group
- 7. www.fashion merchandising.com

**MGU-UGP (HONOURS)** 

Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Scien	ice				
Course Name	Product Development a	nd Marke	ting			
Type of Course	DSE					
Course Code	MG5DSEHSC304					
Course Level	300 - 399	NDA				
Course Summary	The students are imparted theoretical and practical knowledge of preparing bakery related products; knowledge of the ingredients used and undertakes the costing part of it. Students also apply knowledge in hygiene and faults and remedial measures, major and minor equipments used, setting up of a bakery unit making this course a lucrative field of study.					
Semester	V		Credits		4	Total
Course	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
Details		4	-	-	-	60
Pre- requisites, if any	Prior knowledge in baker costing, hygiene, fault id required for this course.	ry product pentification	preparation, a, equipmen	, ingredient t t usage, and	understandin bakery unit	g, setup is

### MGU-UGP (HONOURS) COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Identify new marketable, nutritionally and economically viable food products .	K	1		
2	Develop entrepreneurship skills for setting up small scale food industries.	U	2		
3	Understand packaging of different food products.	U	2		
4	Conduct sensory evaluation of new products .	А	10		
5	Analyse the marketability of new food products.	А	10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

### Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.			
1	1.1	<b>Food Consumption Pattern</b> Trends in food consumption pattern. Economical, psychological and sociological dimensions of food. Trends in lifestyle changes as a base for new product	10	CO 1			
		development.					
2	2.1	Introduction to Food Processing and ProductDevelopmentFood componenets, Types of food processing.Status of food processing industry in India.Scope of growth in future. Principles andpurpose of new product development. Productdesign and specifications.	10	CO 1			
3	3.1	<b>Testing, evaluation and packaging of products</b> Standardisation, portion size, portion control, Quantity cooking, shelf life evaluation. Sensory and microbial testing of processed foods, Nutrient analysis, Packaging materials for foods, SWOT analysis.	20	CO 3			
4	4.1	Financial management and marketing of food productsInstitutional support(Training and finance) for Entrepreneurship Development, Financial Institutions(Central and State Govt.),Banks, Funding agencies, Financial accounting procedures, Book keeping, Market research, Marketting strategies, Cost calculation, Advertisisng methods, Product sales, Product license, Legal specifications, Consumer Behaviour, Food Acceptance.	20	CO 2			
5	Tea	cher Specific content	1	L			
Written Ex	xaminatic	n -					
Term Sub	Term Submission - (Swatch file/Record/Portfolio/Script/Video/e-content/Case study etc.)						

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4		Lecture			
	Mode of Assessment					
	C. Contin	uous Comprehensive Assessr	nent (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations				
		Viva-voce/Interview				
			Test paper- I			
			Assignment/project/any other			
			Test paper- II/open book test/any other			
Total				30		
	D. End Se	emester Examination				
	Written Exam	ination		70		

#### **End Semester Examination**

#### Theory: 70 Marks

- विद्यया अमूतमञ्जूते
- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

#### REFERENCES

- FERENCES
   Fuller, Gordon ,W(2015)New Food Product Development.2<sup>nd</sup> edition. CRC Press. Boca Raton, Florida.
- 2. Schaffner. D.J, Schroder, W.R(2010)Food Marketing and international perspectives, Mc Graw Hill Publications

#### SUGGESTED READINGS

- Suja R Nair (2014) Consumer Behaviour and Marketing Research, 1<sup>st</sup> edition,Himalaya Publishers.
- Hmacfie (2017) Consumer led food product development, Weedhead Publishing Limited, U.K

Received and and and and and and and and and an		Mahatma K	Gandhi U ottayam	niversity		
Programme	BSc (Hons) Home S	cience				
Course Name	Development Comm	nunication	l			
Type of Course	DSE					
Course Code	MG5DSEHSC305	MG5DSEHSC305				
Course Level	300-399					
Course Summary	This course on Development Communication explores fundamental concepts, media roles, and diverse approaches in fostering effective development. Participants gain practical skills in photography, video production, and reporting, enhancing their understanding of how communication contributes to sustainable development.					
Semester	V		Credits		4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
	(विद्यमा)	अर्थुत	मञ्चनुत		-	60
Pre-requisites, if any	Interest in Extension	education	DNOU	=#K RS)		

COURS	COURSE OUTCOMES (CO)						
CO No.	Expected Course Outcomes	Learning Domains *	PO No				
After th	ne successful completion of the course the student should be	e able to:					
1	Understand the concept and process of development	U	1,2				
2	Gain knowledge on development communication	K	3,5				
3	Learn the importance media in development communication	Ι	3,7				
4	Acquire skills on Information Education and Communication (IEC) technologies and media	А	4,5,6				

5	Develop the ability to critically analyze the intricate role of communication within development processes.	С	1,9,7			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S),						
Interest (I) and Appreciation (Ap)						

Module	Units	Course description	Hrs	CO No.
Development	Communic	ation	I	
1	1.1	Definition, basic concept, nature, significance and functions and dysfunctions, dynamics of development 15		CO1
	1.2	Philosophy of and principles of development communication.		CO1
	1.3	Methods of Communication.		CO1
Approaches to	Developm	ent Communication		
	2.1	Meaning, nature, role and characteristics of development communication		CO1
	2.2	Interrelationship between development and development communication	1.5	CO5
2	2.3	Diffusion / extension approach, Mass media approach, development support communication, approach, institution approach, integrated approach and localized approach	15	CO5
Media and De	velopment	Communication		
	3.1	Traditional media – types, characteristic role in development communication		CO3
3	3.2	Development reporting – roles and responsibilities of development reporter, ethics in reporting, required skills and issues in development reporting	15	CO2
	3.3	News reporting – definition of news, ingredients and qualities of news, news value, types of news reports, structure of news reports		CO4
	3.4	Radio news, features and commentaries, radio and development communication		CO4

	3.5	Television and cinema – role in development communication		CO5
	3.6	ICTS – scope in development communication		CO4
Skills for Deve	elopment C	ommunication		
4	4.1	Photography - basic principles, preplanning, scripting, shooting, recording of commentary or dialogue	15	CO1
	4.2	Video films – essential preliminaries, procedure, scripting and shooting		CO7
	Teacher s	pecific content		
5	(This cont	ent will be evaluated internally)		
Practical session, Class room Teaching, Field visits etc.				
Mode of Assessment				

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4	<b>VITAN</b>	Lecture		
	Mode of Asse	ssment			
	D. Contin	uous Comprehensive Assessn	nent (CCA)		
	Learning	Formative Assessment	Summative Assessment	Marks	
	approach	(FA)	(SA)		
	Lecture	In-class discussion/Group tutorial work	NOURS)		
		Assignment/oral presentations	IIIC		
		Viva-voce/Interview	112		
			Test paper- I		
			Assignment/project/any other		
			Test paper- II/open book test/any other		
Total				30	
	B. End Sei	mester Examination			
	Written Exam	ination		70	

#### **End Semester Examination**

#### Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii)Essay type questions: Answer any2 question out of 4 (2x10=20)

#### REFERENCES

- Capila.A. (2001). Images of Women in the Folk Songs of Garhwal Himalayass. New Delhi: Concept Publishers
- Communication for Development in the Third World Theory and Practices (1991). New Delhi: Sage Publications
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#### SUGGESTED READINGS

- Development Communication: Reframing the Role of the Media" by Thomas L. McPhail
- 2. "Communication for Development and Social Change" by Jan Servaes
- "Theories of Development Communication" by Srinivas R. Melkote and H. Leslie Steeves

PREVE SPECTRAL	Mahatma Gandhi University Kottayam				
Programme					
Course Name	Surface Ornamentation				
Type of Course	SEC				
Course Code	MG5SECHSC300				
Course Level	300-399				
Course Summary	This course in surface ornamentation encompasses fundament embroidery techniques, stitches, and specialized methods. Students looped, and knotted stitches, explore Aari embroidery and count techniques, and delve into various traditional Indian embroidery style	This course in surface ornamentation encompasses fundamental hand embroidery techniques, stitches, and specialized methods. Students learn flat, looped, and knotted stitches, explore Aari embroidery and counted thread techniques, and delve into various traditional Indian embroidery styles.			
Semester	V Credits 3	Total			
Course Details	Learning ApproachLectureTutorialPracticalOthers3	Hours 45			
Pre-requisites, if any	Students should possess fundamental sewing skills, knowledge of bas stitches.	sic			

#### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	e successful completion of the course the student should be	e able to:	
1	Describe the process involved in the preparation for fabric surface ornamentation process	U	1, 9, 10
2	Explain the process of working basic hand embroidery stitches	U	1, 3, 10
3	Comprehend the application of aari embroidery, counted thread embroidery, applique work and Indian traditional embroideries.	U	1, 2, 3
4	Create an embroidery folder containing different embroidery techniques	А	1, 3. 10
*Reme	mber (R), Understand (U), Apply (A), Analyse (An), Evalu	ate (E), Creat	te (C), Skill (S),

Interest (I) and Appreciation (Ap)

Module	Units	Course description	Hrs	CO No.	
Basics of s	Basics of surface ornamentation				
	1.1	Surface ornamentation techniques. Introduction to hand embroidery. Tools used for embroidery. Selection of needles, threads and fabric		CO1	
1	1.2	Enlargement & Reduction of Designs Preparation of fabric. Tracing methods: carbon paper, tissue paper, tracing paper, water soluble pen, tracing box (light box), hot pressing and wooden block method.	15	CO1	
	1.3	Basic hand embroidery stitches- Flat Stitches: Running, stem, satin, back, shade work, hemming bone. Looped Stitches: Chain, lazy-daisy, fly, Feather, blanket, button hole. Knotted Stitches: French knot, coral knot, bullion, pistil stitch (Palestrina stitch)		CO2	
Special en	nbroidery	techniques			
	2.1	Aari embroidery basic stitches and its variations using silk thread and metallic thread: Chain stitch, Zigzag stitch, Chain with zigzag stitch, Button hole stitch, Shade work. Application of Stone work, Metallic Thread, Embroidery, Beads & Sequins.		CO3	
2	2.2	Counted thread embroidery: Assisi work, Counted cross stitch, Black work, drawn thread work. Applique work, Cut work, Ribbon work, shadow work, smocking, French smocking.	15	CO3	
	2.3	Indian traditional embroidery: Phulkari of Punjab, kantha of Bengal, kasuti of Karnataka, chikankari of Luckhnow, kashida of Kashmir, chamba of Himachal, kutch of Karnataka		CO3	
Tradition	al embroi	dery techniques		-	
	3.1	Basic Hand Embroidery Stitches: Introduction to basic hand embroidery stitches. Overview of commonly used stitches such as backstitch, running stitch, satin stitch, etc.	15		

		Explanation of each stitch with step-by-step	
	3.2	Traditional Embroidery Techniques: Exploration of traditional embroidery techniques from different cultures and regions. Study of historical significance and cultural context behind traditional embroidery styles. Examination of key characteristics, motifs, and patterns in traditional embroidery.	CO4
3	3.3	Counted Thread Embroidery and Applique Variations: Introduction to counted thread embroidery techniques such as cross-stitch, blackwork, and drawn thread work. Explanation of applique techniques and its variations. Exploration of two specific variations of counted thread embroidery and applique, chosen from a range of options such as stump work, ( Raised,embossed, padded etc.)	CO4
	3.4	Aari Work and Smocking Variations: Overview of Aari work, a traditional Indian embroidery technique, including its history and cultural significance. Introduction to smocking, a decorative embroidery technique used for gathering fabric. Selection and exploration of two variations each in Aari work and smocking.	CO4
4	<b>Teacher</b> (This cor	specific content <b>CHONOURS</b> ) atent will be evaluated internally)	
	Practical	session, Class room Teaching, Field visits etc.	
		Zynavuz	 

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3,4		Lecture				
	Mode of Asse	essment					
	E. Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview					
			Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total		OTTN		25			
	B. End Se	emester Examination					
	Written Exam	nination and and and and and and and and and an	मञ्चत्र,ते	50			

### End Semester Examination GU-UGP (HONOURS)

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- Cerier A.B. (2005) Start to Sew, Creative Publishing international Creative Publishing International, Chanhassen, Minnesota
- Brown, P. (2003). The Encyclopedia of Embroidery Techniques: A Comprehensive Visual Guide to Traditional and Contemporary Techniques. United States: Sterling Publishing Company.
- The Royal School of Needlework (2018). The Royal School of Needlework Book of Embroidery: A Guide to Essential Stitches, Techniques and Projects. United Kingdom: Search Press.
- 4. Naik, S. D. (1996). Traditional Embroideries of India. India: A.P.H. Publishing Corporation.
- Brijbhushan, J. (n.d.). Indian Embroidery. India: Publications Division Ministry of Information & Broadcasting.

#### SUGGESTED READINGS

- 1. <u>https://www.bharatskills.gov.in/Home/StudyMaterial?var=vTpAb6LwzasV6zn4X5</u> <u>EZrg==&Default=No</u>
- 2. Singh, S. (2023). Traditional Indian Textiles. (n.p.): LWRN Studio.
- 3. Bumpkin, C. (2015). A-Z of Smocking: A Complete Manual for the Beginner Through to the Advanced Smocker. United Kingdom: Search Press.
- Singh, D.J. and Davidson, J. (2016). Learning Decorative Stitches: The Art of Shirring and Smocking. (n.p.): Mendon Cottage Books.

# Syllabus

All and a second s	Mahatma Gandhi University Kottayam					
Programme						
Course Name	<b>Bakery Skills</b>					
Type of Course	SEC					
<b>Course Code</b>	MG5SECHSC	301				
Course Level	300 - 399					
Course Summary	The students are imparted theoretical and practical knowledge of preparing bakery related products; knowledge of the ingredients used and undertakes the costing part of it. Students also apply knowledge in hygiene and faults and remedial measures, major and minor equipment used, setting up of a bakery unit making this course a lucrative field of study.					
Semester	V		Credits		3	<b>T</b> . 111
<b>Course Details</b>	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	3		<u></u>	-	45
Pre-requisites, if any			AYAW			

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Describe the basic principles of baking	K	PO1		
2	Compare bakery ingredients and its effect on sensory parameters of baked foods.	U	PO 2		
3	Develop different methods of bread, biscuit and cake manufacture	А	PO 2		
4	Conduct sensory evaluation of bakery products	А	PO 10		
5	Understand the layout of a bakery production unit.	U	PO 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course description	Hrs	CO No.
Principles	of Bakin	g and Bakery Ingredients	15	
	1.1	Basic Baking Principles. Mixing and Gluten development. Processes that occur during mixing; Controlling gluten development; Methods for adjusting gluten development; The baking process.	7	CO 1
1	1.2	<ul> <li>Wheat flour, Wheat varieties, Composition of wheat Flour, Grades.</li> <li>Sugars, Types, Syrups. Milk and milk products, Eggs, Leavening agents-yeast, chemical leaveners.</li> <li>Food Additives used in Baking - Gelling agents; Fruits and Nuts, Chocolate and Cocoa, Salt, Spices and Flavorings.</li> </ul>	8	CO 2
Principles	of Bread,	Biscuit and Cake manufacturing		
	2.1	Role of baking ingredients in improving the quality of bread.		CO 3
	2.2	Types of yeast, fermentation of dough. Leavening agents, types of leavenings. Bread improvers. Fillings and toppings.		CO 3
	2.3	Characteristics of flour used for making bread, biscuits and cakes.		CO 3
	2.4	Methods of mixing the ingredients, dough development methods - straight dough, sponge dough.	15	CO 3
2	2.5	Moulding, proofing, baking, packing.		CO 3
	2.6	Spoilage and bread staling, methods to reduce bread staling and spoilage.		CO 3
	2.7	Processing of biscuits and cakes- Ingredients, development of batter, baking and packing. Spoilage in cakes and biscuits. Basic faults in Bread, Biscuit and Cake Baking.		CO 3

Sensory E	Sensory Evaluation – Procedure			
	3.1	Appearance, Taste, Flavour, Texture & Consistency (Firm & Close, short & crumbly, spongy, light & even, flaky, coarse, tough, hard, roping, pouring, soft peak, medium peak, stiff peak).		CO 4
3		Prepare sensory evaluation proforma.		
	Related experie nce	Preparation of Various types of Breads, Cookies and Cakes		CO 5
		Visit to a production unit of a bakery		CO 5
	Teacher	specific content		
4	(This content will be evaluated internally)			
	Practical session, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4	<b>MATAN</b>	Lecture			
	Mode of Assessment					
	A. Contin	uous Comprehensive Assessn	nent (CCA)			
	Learning	Formative Assessment	Summative Assessment	Marks		
	approach	(FA)	(SA)			
	Lecture	In-class discussion/Group tutorial work	NOURS)			
		Assignment/oral presentations	1110			
		Viva-voce/Interview	11121			
			Test paper- I			
			Assignment/project/any other			
			Test paper- II/open book test/any other			
Total				25		
	B. End Sei	mester Examination				
	Written Exam	ination		50		

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- i) Srilakshmi, B. (2017) Nutrition Science, New Age International (P) Ltd., New Delhi.
- ii) Sunetra Roday (2017). Food Science and Nutrition, Oxford University Press, New Delhi.

#### SUGGESTED READING

- 1. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2012) Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
- 2. Satyanarayana, U. and Chakrapani, U.(2018)Biochemistry.7th edition. Elsivier/ Books and Allied.

विद्यया अमूतसञ्ब

# MGU-UGP (HONOURS)

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Syllabus

Parent Statement	Mahatma Gandhi University Kottayam				
Programme					
Course Name	Event Management				
Type of Course	SEC				
Course Code	MG5SECHSC302				
Course Level	300-399 GANDA				
Course Summary	This course structure provides a holistic vie incorporating theoretical knowledge, practica examples.	w of even al skills,	t management, and real-world		
Semester	V Credits	3	Total Hours		
Course Details	LearningLectureTutorialPracticalApproach3	Others	45		
Pre-requisites, if any	A basic understanding of events, strong communication and technology skills, critical thinking abilities, teamwork experience, marketing awareness, budgeting knowledge, environmental and social awareness, creative thinking, and an interest in analyzing case studies of successful events.				

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No	
After the successful completion of the course the student should be able to:				
1	Define the historical context, evolution, and scope of the event management industry.	K	1,4	
2	Differentiate between various types of events, analyzing their unique characteristics and requirements.	An	1,2	

3	Explain the key responsibilities and skills required for effective event management, citing case studies of successful event managers.	А	2,10
4	Develop a comprehensive event plan that includes specific objectives, target audience definition, and a detailed budget.	С	2,4,7,8
5	Formulate effective marketing strategies for events, utilizing both traditional and digital marketing techniques.	А	4,5,10

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.		
Introduct						
	1.1	Definition, importance, and scope of event management.		CO1		
1	1.2	Types of Events-Corporate events, social events, cultural events, sports events, etc. Understanding the unique characteristics of each type.	15	CO1		
	1.3	Emerging Trends in Event Management -Virtual and hybrid events.		CO1		
	1.4	Incorporating the latest technologies.				
	1.5	Role and Skills of an Event Manager-Key responsibilities and skills required.				
	1.6	Case studies of successful event managers.				
	1.7	Case Studies of Successful Events.				
Art of Ev	Art of Event Management: Concept					
	2.1	Planning - Defining Objectives, Identifying Target Audience, and Budgeting for the Event , Developing a Comprehensive Event Plan	15			
	2.2	Event Design and Theme Development, The Significance of Design in Events, Strategies for Creating a Cohesive Theme.				

	2.3	Venue Selection and Logistics Criteria for Choosing Suitable Venues, Managing Logistics, Permits, and Legal Considerations		
	2.4	Sustainable Event Management-Incorporating Sustainable Practices, Considerations for Green Event Certifications		
	2.5	Marketing and Promotion -Utilizing Traditional and Digital Marketing Techniques ,Social Media, Email Campaigns, and Partnerships		
	2.6	Sponsorship and Fundraising, Attracting Sponsors and Partners, Effective Budget Management and Fundraising Strategies		
Art of Eve	ent Manag	gement -Execution		
	3.1	Execution Phase-Building and Leading a Successful Event Team. Delegating Tasks and Ensuring Effective On-Site Management	15	
	3.2	Technology in Event Management - Incorporating Event Management Software Utilizing Technology for Registration, Ticketing, and Communication	13	
	3.3	Post-Event Evaluation ,Identifying Key Performance Indicators (KPIs) for Events, Gathering and Analyzing Feedback		
	3.4	Post-Event Reporting - Creating Comprehensive Post-Event Reports, Documenting Successes and Areas for Improvement		
	3.5	Final Project Presentation - Students Showcase Their Event Plans or Analyses, Receiving Feedback from Peers and Instructors		
	Teacher	specific content		
4	(This cor	ntent will be evaluated internally)		
	Practical	session, Class room Teaching, Field visits etc.		

		CLASSROOM I	PROCEDURE			
	Module		Mode of Transaction			
	1,2,3,4		Lecture			
	Mode of Assessment					
	A Continuous Comprehensive Assessment (CCA)					
	Learning	Formative Assessment	Summative Assessment	Marks		
	approach	(FA)	(SA)			
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations				
		Viva-voce/Interview				
			Test paper- I			
			Assignment/project/any other			
			Test paper- II/open book test/any other			
Total		<b>EXTAN</b>	-11.	25		
	B. End Se	emester Examination	нала	·		
	Written Exan	nination	and a start a	50		

#### **End Semester Examination**

#### Theory: 50 Marks

## **MGU-UGP (HONOURS)**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### REFERENCES

- Shone, A. & Parry, B. (2004). Successful event management: a practical handbook. London: Cengage Learning EMEA
- Lyons, T. (2012). Social entrepreneurship: how businesses can transform society. USA: ABC-CLIO.
- Allen, J. (2009). The executive's guide to corporate events and business entertaining. USA: John Wiley & Sons.
- Naylor, S. (2011). The smart guide to wedding weekend events. USA: SCB Distributors.
- Bowdin,G. Allen, J. Harris,R. McDonnell,I. & O'Toole, W. (2012). Events management. (3rd ed.). UK: Routledge.

#### SUGGESTED READING

- 1. "The Art of Event Planning: Pro Tips from an Industry Insider" by Judy Allen.
- "Into the Heart of Meetings: Basic Principles of Meeting Design" by Eric de Groot and Mike van der Vijver.
- "Event Planning: The Ultimate Guide to Successful Meetings, Corporate Events,
   Fundraising Galas, Conferences, Conventions, Incentives, and Other Special Events"
   by Judy Allen.
- 4. "Sustainable Event Management: A Practical Guide" by Meegan Jones.
- "The 5 Second Rule: Transform your Life, Work, and Confidence with Everyday Courage" by Mel Robbins.



# **MGU-UGP (HONOURS)**

# Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) l	BSc (Hons) Home Science				
Course Name	Fundamenta	ls of Garm	ent Constru	ction		
Type of Course	DSC					
Course Code	MG6DSCHS	SC300				
Course Level	300-399					
Course Summary	This compre understanding making and d	hensive cou g and praction lesign.	rse is desig	ned to equip cy in the vari	o students wi ous facets of	th an in-depth apparel pattern
Semester	VI	ĬK	Credits	IVE	4	Total Hours
Course Details	Learning	Lecture	Tutorial	Practical	Others	
	Approach	3		51	-	45+30=75
Pre-requisites, if any	Prior knowled comprehensio	dge of garmon and appli	ent construct cation of adv	ion concepts t anced pattern	to facilitate ef making.	fective

## COURSE OUTCOMES (CO) JUI JULAU 30

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Describe the sewing machine components and troubleshooting problems and other sewing tools	U	1, 2, 9, 10		
2	Discuss the application of different trimmings and decorations	А	1, 2, 3, 10		
3	Understand the techniques of taking accurate body measurements for different pattern making processes and pattern alteration	U	1, 2, 8, 10		
4	Explain the process of preparing fabric for cutting	U	1, 2, 10		
5	Develop samples for seams, fullness, neck finishes and fasteners and construct garments suitable for babies	С	1, 2, 10		

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

Module	odule Units Course description		Hrs	CO No.
Sewing Tools	and Trims			
	1.1	Parts of Sewing Machine and their functions, Minor troubles in machine and their causes.		CO1
	1.2	Cutting Tools, Hand sewing and embroidery tools, Measuring tools, Marking tools, General tools, Pressing tools	CO1	
1	1.3	Soft trims: Lace, Rickrack, Fringes, Tassels, Rope or cord, Bias trimmings, Twill tapes, Braids.17Hard trims: Fancy buttons, Beads, Sequins Decorations: Motifs, patch work, quilting, pompous, Applique Smocking, mirror work, ribbon work, crochet, macramé and tatting17		CO2
Pattern maki	ng, Grading	and Pattern Alterations		
	2.1	Body Measurements – Preparation for measuring, Method of taking body measurements of ladies and children		CO3
2	2.2	Pattern - definition. Methods of pattern Making- Drafting, Draping and Flat pattern methods. Advantages and disadvantages Drafting-Principles of drafting. Commercial patterns- advantages and disadvantages. Pattern grading.	18	CO3
	2.3	Pattern alteration- Standards for a good fit: Ease, Line, Grain, Set, Balance		CO3
	2.4	Principles of patten alteration, Fitting techniques		CO3
Fabric preparation and cutting				
3	3.1	Preparation of fabric for cutting: Straightening fabric ends, Straightening fabric grain and shrinking fabrics	10	CO4
	3.2	Importance of grain in fabric cutting, Marking, Pattern layout, Cutting.		CO4

Practical					
	4.1	<ul> <li>Seams: Plain seam, Single Top stitch, Double top stitch, French seam, Flat fell seam, Piped Seam</li> <li>Seam finishes: Double stitch finish, Pinked finish</li> </ul>		CO5	
4	4.2	Fullness: Darts – Single pointed dart, Double pointed dart Tucks- Pin tucks, Crossed tucks Pleats – Knife pleat, Box pleat, Inverted box pleat Gathers- Gathering by hand, Gathering by machine and Gathering by elastic.		CO5	
	4.3	Neck finishes – joining bias, bias binding, bias facing, fitted facing Fasteners- Hook and eye, press buttons	30	CO5	
	4.4	Drafting and construction of a frock with panties for a six-month-old girl baby		CO5	
	4.5	Drafting and construction of a romper for a six-month-old boy baby		CO5	
	Teacher specific content				
	(This content will be evaluated internally)				
	Practical session, Class room Teaching, Field visits etc.				

## **MGU-UGP (HONOURS)**

# Syllabus

	CLASSROOM PROCEDURE			
	Module		Mode of Transaction	
	1,2,3,4		Lecture, Demonstration and practical Assignments	
	Mode of assessment			
	A Continuous Comprehensive Assessment (CCA)			
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks
	Lecture	In-class discussion/Group tutorial work		
		Assignment/oral presentations		
		Viva- voce/Interview		
			Test paper- I	
	्रवि	धया अस्त	Test paper- II/open book test/any other	
Total				25
	Practical MG	Observation of practical skills	NOURS)	
		Viva-voce/Oral Presentation	9 * * <i>* *</i>	
		Zyna	Record	
Total				15
	B.End Semester Examination			
	Written Examination			50
	Practical Examination		35	

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- Mary Mathews, "Practical Clothing Construction Part I & II", Paprinpack, Chennai, 2000.
- 2. Joseph-Armstrong, H. (2013). Patternmaking for Fashion Design. India: Pearson.
- Stringer, P. C. (1992). Pattern Drafting for Dressmaking. United Kingdom: B.T. Batsford.
- 4. Amaden-Crawford, C. (2018). The Art of Fashion Draping. United Kingdom: Bloomsbury Publishing.
- 5. Amaden-Crawford, C. (2007). Patternmaking Made Easy. United States: Amaden-Crawford, Incorporated.

#### SUGGESTED READINGS

- 1. Erwin, M. D., Kinchen, L. A., Peters, K. A. (1979). Clothing for Moderns. United Kingdom: Macmillan.
- 2. Sharada Devi, A and Anitha, D. (2009) Fashion and Apparel Designing. State Institute of Vocational Education, Directorate of Intermediate Education, A.P.
| Receil Segments           | Mahatma Gandhi University<br>Kottayam               |   |   |                           |                           |                          |
|---------------------------|---|---|---|---------------------------|---------------------------|--------------------------|
| Programme                 | BSc (Hons) He                                       | ome Science                               |   |                           |                           |                          |
| Course Name               | Nutrition Thr                                       | ough Lifecyo                              | ele   |                           |                           |                          |
| Type of Course            | DSC   | DSC                                       |   |                           |                           |                          |
| Course Code               | MG6DSCHSC   | MG6DSCHSC301                              |   |                           |                           |                          |
| Course Level              | 300 - 399   |   |   |                           |                           |                          |
| Course Summary            | Course investi<br>throughout the<br>requirements in | gates how m<br>e human li<br>mpact on hun | utrition requ<br>fecycle and<br>nan health. | uirements a<br>1 how alte | nd challeng<br>eration in | es change<br>nutritional |
| Semester                  | VI  |   | Credits                                     |                           | 4                         | Total                    |
| Course Details            | Learning  | Lecture                                   | Tutorial                                    | Practical                 | Others                    | Hours                    |
| Course Details            | Approach  | 4   |   | ŏll-                      |                           | 60                       |
| Pre-requisites, if<br>any | Nil   |   |   |                           |                           |                          |

विवागा यसतम्प्रतत्वे								
CO No.	Expected Course Outcome	Learning Domains *	PO No					
After the	After the completion of the course the student could be able to :							
1	Summaries the basic concepts of RDA and EAR	U	PO 1					
2	Differentiate the nutritional needs and recommendations during adulthood and old age.	An	PO 1					
3	Evaluate the adequacy of diets and nutritional requirements during pregnancy and lactation	Е	PO 2					
4	Analyse the nutritional adequacy and growth of infants.	An	PO 1					
5	Categorize the dietary modifications and nutritional requirements during Childhood and Adolescence.	An	PO 2					
6	Design food plans and assess the adequacy of diets to meet the nutritional needs of humans at various stages of life cycle.	С	PO 2					
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)								

AYAY

7

## **COURSE CONTENT**

Module	Units Course description		Hrs	CO No.	
Concepts o	EAR, Nutrition for Adults and Elderly				
	1.1		CO 1		
	1.2	Factors Affecting Recommended Dietary Allowances. Dietary guidelines for Indians. Uses of ICMR- RDA in planning balanced diet.		CO 1	
1	1.3	Reference Man and Reference Woman, Food and Nutritional Requirements for Adults, Dietary modifications for adults.	10	CO 2	
	1.4	Physiological changes during old age. Nutritional Requirements of Elderly		CO 2	
	1.5		CO 2		
Nutrition i	Nutrition in Pregnancy and Lactation				
	2.1	Physiology of pregnancy, Nutritional requirements during pregnancy.		CO 3	
2	2.2	Dietary considerations, Nutritional Problems and Complications.	15	CO 3	
	2.3	Physiology and hormonal control of Lactation. Nutritional Requirements during lactation		CO 3	
Nutrition i	n Infancy,	childhood and Adolescence			
	3.1	Developmental milestones in Infancy.		CO 4	
3	3.2	Composition of Human Milk and Human Milk Substitutes Advantages of breast feeding, Bottle Feeding and related Problems.		CO 4	
	3.3	Weaning and Supplementary Feeding		CO 4	
	3.4	Use of growth charts and standards		CO 4	

	3.5	Growth and Development of Pre School, School Going Children and Adolescence		CO 5
	3.6	Food and Nutritional Requirements.		CO 5
	3.7	Factors to be considered while Planning Diet for Children and Adolescents,		CO 5
	3.8	Nutritional problems and Eating Disorders.		CO 5
Related Ex	perience			
4	4.1	Nutrient Requirements Analysis: Students will analyze dietary guidelines and nutrient requirements for different life stages (infancy, childhood, adolescence, adulthood, and elderly). They will compare and contrast nutrient needs at various life stages and identify specific nutrients of concern during each stage.	20	CO 4
	4.2	Field Trip to Community Programs or Healthcare Facilities: Students will visit community programs or healthcare facilities that focus on nutrition interventions for specific age groups.		CO 3
5	<b>Teacher s</b> (This cont Practical s	<b>pecific content</b> ent will be evaluated internally) ession, Class room Teaching, Field visits etc.		

# Syllabus

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4		Lecture		
	Mode of Asse	ssment			
	A.	Continuous Comprehensive	Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Assignment/project/any other		
			Test paper- II/open book test/any other		
Total		OTTN		30	
	B.	End Semester Examination			
	Written Exam	ination and a second	मञ्चत्र,ते	70	

## End Semester Examination MGU-UGP (HONOURS)

## Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any 2 question out of 4 (2x10=20)

### REFERENCES

- 1. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2012)Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
- 2. Srilakshmi, B. (2013), Dietetics, New Age International (P) Ltd., New Delhi.
- SunetraRoday (2017). Food Science and Nutrition, Oxford University Press, New Delhi.
- Swaminathan, M. (2012), Advanced Textbook on Food and Nutrition, Vol. 1, Second Edition, Bangalore Printing and Publishing Co. Ltd., Bangalore.

### **Suggested Readings**

1. Abraham. S (2016), Nutrition through Life Cycle, First Edition, New Age International

(P) Ltd. Publishers, New Delhi.

- Chadha R and Mathur P (2015), Nutrition : A Lifecycle Approach. Orient Blackswan, New Delhi.
- 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.
- 4. Longvah, T, Ananthan, R, Bhaskarachary, K, Venkaiah, K. (2017). Indian Food Composition Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
- 5. Shakuntala Manay, Shadaksharaswamy. M (2013) Foods, Facts and Principles, New Age International Pvt Ltd Publishers, 2nd Edition) Ltd., New Delhi.

Анги зараниче	Mahatma Gandhi University, Kottayam					
Programme	BSc (Hons) Home Science					
Course Name	Designing Interior Spaces					
Type of Course	DSE					
Course Code	MG6DSEHSC300					
Course Level	300-399					
Course Summary	The course serves as a foundation for students to grasp the fundamental principles of creating interior spaces that foster health, safety, and satisfaction. It focuses on both functional and aesthetic design aspects, empowering students to transform interiors into inviting and comfortable living environments. Through hands-on activities, students engage in experiential learning, gaining insights into space planning, furniture design, and finishes. This practical approach enables them to skilfully organize residential spaces and elevate them aesthetically, aligning furniture and finishes with chosen themes and styles.					
Semester	VI Credits 4 Total Hours					
<b>Course Details</b>	Learning Lecture Tutorial Practical Others					
	3 - 1 - 45+30=75					
Pre-requisites, if any Prior familiarity with design principles and elements is benefic students undertaking this course, providing a foundational underst that enriches their study of interior design in order to transact th acquired to appropriate furniture, furnishings and accessories for in use.						

CO No.	Expected Course Outcome	Learning Domains *	PO No.				
After th	After the completion of the course the student could be able to :						
1	Describe the concept and objectives of Interior design from the perspective of a client.	U	1,4				
2	Appraise the requirements and recommend suitable furniture, furnishings, home lighting and accessories in home interiors.	Ap	2, 7				
3	Analyse and develop interior designs based on space availability and ergonomics.	An	1, 2				
4	Design trendy, eco-friendly and functional home interiors with appropriate furniture, furnishing, lighting and colour schemes for interior spaces.	С	3, 6				
5	Learn to use an appropriate space saving techniques for maximum space utilization in each room.	А	4, 7				
6	Identify basic house plans and interior designs based on client requirements and judiciously recommend various finishing materials and fittings available in the market	Е	2, 7, 6				
*Reme (S), Int	mber (K), Understand (U), Apply (A), Analyse (An), Evalu erest (I) and Appreciation (Ap)	uate (E), Creat	te ( $\overline{C}$ ), Skill				

## COURSE CONTENT

## विद्यया अमूतमञ्जूते

Module	Units	Course description	Hrs	CO No.
	Overvi	ew of Interior Space Design		
		Concept and goals of Interior Design- Aesthetics, Functionalism and Expressiveness.		CO1
1.	1.1	planning- Biological needs, environmental concerns, cultural influences, psychological effects, utility, economy, beauty and character.	15	CO2
	1.2	Factors influencing the planning of interiors: People, lifestyle, Location, Orientation, Grouping, Lighting and Ventilation, Circulation, Spaciousness, Privacy, Flexibility, Services, Aesthetics, Economy and Cost.		CO2

	1.3	Importance and significance of Ergonomics in Space planning, Environmental factors in ergonomic designing- Thermal Comfort, Lighting, Colour, Noise etc.		CO3		
	1.4	Human measurements (Anthropometric data) required for space planning. Design consideration for Persons with special needs- PWD (People with disabilities), children, aged etc.		CO4		
	2.1	Housing for Family: Functions of a house; Principles of house planning. Introduction to Vaastu. Reading and understanding House plans – Symbols used in drafting plans, Types of plans – floor plan, elevation, sections.		СО		
	2.2	Building Components-Foundation, Wall, Floor, Ceiling, Roof, Structural openings- door, window, etc., stairs, ramps etc.	15	CO6		
2	2.3	Materials for interior use - wall finishes, floor finishes. Essential services in Interiors: Plumbing and Sanitary fittings, Electrical fittings etc.	wall finishes, floor finishes. ors: Plumbing and Sanitary c.			
	2.4	Residence designs for various lifestyles, Contemporary house design trends.		CO6		
	3.1	Designing Life Spaces: Interior Space Organisation- Classification of Activity zones – Group (Public) Space, Personal (Private) Space, Support spaces and Support systems.		CO3		
3	3.2	Interior layouts of various rooms of a residence- Living, Dining, Bedrooms, Toilet/ Bath, Kitchen, Utility - with finishes, furniture, storage, furnishings, accessories, lighting and colour.	15	CO3		
	3.3	Improving Functionality in Interiors- Space saving techniques such as Multi- use Rooms and Furniture, In- built, knock down furniture, One room apartment (Studio), Illusions for apparent Space creation.		CO5		
	3.4	Current Trends in Interior Design, Study of traditional and Modern interior design and decorations, Interior Design as a career option. Design Communication Techniques: Introduction to Design Software.		CO3		

Practical	Practical / Related Experience in Design Development and Drawing							
	4.1	Ergonomics- Learn to take Human measurements (anthropometric data) required for space planning.		CO6				
	4.2	Exercises in Space planning and organization- Draw the layout with furniture arrangement of : (Any 1 room) 1. Bed room/ 2. Dining Room/ 3. Drawing room 4. Kids room /5. A Multi use room		CO6				
	4.3	Design a multi purpose furniture or storage unit for a room: 1. Kitchen/ 2. Bed room / 3. Drawing room / 4. Dining room / 5. kids room (Any 1)		CO5				
4	4.4	<ul> <li>Design and draft ergonomic kitchen in different layouts with optimum working heights and work triangle:</li> <li>1. U-Shaped/ 2.L-shaped/ 3. Two wall or corridor Kitchen/ 4. One wall / 5.Galley Kitchen/ 6. Island Kitchen/ 7. Peninsular Kitchen (Any 1)</li> </ul>		CO4				
	4.5	Design a personal life space for you with furniture, furnishings and accessories. Justify the Design	30	CO4				
	4.6	Collection and documentation/ Case Study and Presentation (Any 1) -Figures and photographs of commendable interior works of designers. -Ancient Furniture, Furnishing, Accessories etc.		CO6				
	4.7	<ul> <li>Industry / Shop / Organisation Visit/ Market Study for familiarizing with :- (Any 1)</li> <li>Design materials and techniques</li> <li>Plumbing Fixtures</li> <li>Electrical Fixtures</li> <li>Finishing materials</li> </ul>		CO6				
F		Teacher specific content						
5		(This content will be evaluated internally) Practical session Class room teaching Field visits Exhibit	ion etc					
		raction session, class room waching, richt visits, Exilloit						

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of asse	essment					
	A. C	A. Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva- voce/Interview	Ĩ Ŝ				
			Test paper- I				
		OTTAN	Test paper- II/open book test/any other				
Total	4	Saran anara	TTTTT?	25			
	Practical	Observation of practical skills	12050				
	м	Viva-voce/Oral Presentation	)NOURS)				
			Record				
Total		Sulla	411.07	15			
	B. End Seme	B. End Semester Examination					
	Written Exar	nination		50			
	Practical Exa	mination		35			

## **End Semester Examination**

## Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

## Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

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# Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home	BSc (Hons) Home Science				
Course Name	NGO Management	t				
Type of Course	DSE					
Course Code	MG6DSEHSC301					
Course Level	300-399					
Course Summary	This course provide involved in managin explore key aspects and stakeholder eng	es an in-dep ng non-gove such as stra	oth understa ernmental o ttegic plann	anding of the rganizations ing, fundrais	principles (NGOs). Pa ing, projec	and practices articipants will t management,
Semester	VI	agement.	Credits		4	
		TAXP	Tratagial	Due etie el	Others	Total Hours
Course Details     Learning     Lecture     Tutorial     Practical     Others       Approach     0     0     0     0     0     0						
Pre-requisites, if any	Basic knowledge re	garding NC	iO NOLIR	s)		·

CO No.	Expected Course Outcomes	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Understand and apply concepts such as governance, legal compliance, and strategic planning to effectively manage an NGO.	U	1		
2	Develop and implement fundraising strategies to ensure financial sustainability for NGO activities.	С	2,3		
3	Apply project management principles in the context of NGO projects, fostering skills in defining, planning, and advocating for social change.	А	1,2,5		

4	Create and implement a communication strategy for effective stakeholder engagement, ensuring transparency and promoting the NGO's mission.	С	2,5			
5	Analyze successful advocacy campaigns through case studies, learning valuable insights for impactful social change.	An	4,2			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

## **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Understandi	ing of NGO	) Landscape		
	1.1	Define the concept and role of NGOs.		CO1
1	1.2	Identify different types of NGOs and their functions.	15	CO1
	1.3	3 Explain the historical and global context of NGOs.		CO1
Strategic Pla	nning for 1	NGOs anon ana ana ana a	I	
2.1 Develop a mi NGO.		Develop a mission and vision statement for an NGO.		CO2
2	2.2	Formulate SMART objectives.	15	CO2
2.3 Create a basic strategic plan for a		Create a basic strategic plan for an NGO.		CO2
Governance	and Legal	Compliance, Fundraising		
	3.1	Understand the legal framework for NGOs.		CO1
	3.2	Explain the role of governance in NGO management.	15	CO1
	3.3	Develop an awareness of ethical considerations in NGO operations.		CO3
3	3.4	Identify various sources of funding for NGOs.		CO1
	3.5	Develop a fundraising strategy.		CO3
	3.6	Understand financial management and budgeting for NGOs. CSR FUNDS (Corporate social responsibilities)		CO1

Practical-/Project Management in NGO					
	4.1	Define and plan NGO projects. Understand project life cycles. Develop basic monitoring and evaluation frameworks.		CO1	
4	4.2	<ul> <li>Apply project management principles to real-life scenarios.</li> <li>Activity: Provide students with a project scenario related to an NGO's activities. Ask them to create a project plan, identify potential risks, and develop a monitoring and evaluation framework. This can be followed by a discussion on the challenges faced during the simulation.</li> </ul>	30	CO3	
5	Teacher specific content         (This content will be evaluated internally)         Practical session       Class room Teaching, Field visits etc.				



## **MGU-UGP (HONOURS)**

# Syllabus

		CLASSROOM PROCEDURE				
	Module		Mode of Transaction			
	1,2,3,4		Lecture, Demonstration and practical Assignments			
	Mode of assess	ment				
	A.Continuous	Comprehensive Asse	ssment (CCA)			
	Learning approach Formative Sur Assessment (FA) (SA		Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations	78			
		Viva- voce/Interview				
		OTTAY	Test paper- I			
	fa	राया अमृत	Test paper- II/open book test/any other			
Total				25		
	Practical MG	Observation of practical skills	NOURS)			
		Viva-voce/Oral Presentation	ina			
		æynar	Record			
Total		15				
	B.End Semeste					
	Written Examin	50				
	Practical Exam	ination		35		

## **End Semester Examination**

## Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

## Practical: 35 Marks

- i. Laboratory Evaluation (25 marks)
- ii. Record (10 marks)

## REFERENCES

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### SUGGESTED READINGS

- Development Communication: Reframing the Role of the Media" by Thomas L. Mc Phail
- 2. "Communication for Development and Social Change" by Jan Servaes
- "Theories of Development Communication" by Srinivas R. Melkote and H. Leslie Steeves

Rimer angewert	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Ho	me Science				
Course Name	Developmental	Psychology	(Specializat	tion-Human	Developmen	nt)
Type of Course	DSE	DSE				
Course Code	MG6DSEHSC302					
Course Level	300-399					
Course Summary	This course exp from psycholog concepts and the	lores the fun ical perspect cories related	ndamental e ives. Studer to various a	lements that ts will gain a spects of hum	shape huma an understan an behaviou	n behaviour ding of key r.
Semester	VI		Credits	S	4	Total
Course Details	Learning	Lecture	Tutorial	Practical	Others	Hours
	Approach	4	THIN	-	-	60
Pre-requisites, if any	Prerequisites for psychology.	the course t	ypically incl	ude basic kno	wledge in bi	ology and

## MGU-UGP (HONOURS)

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
CO1	Analyse how sensory information shapes human experience and behaviour.	An	1, 2, 4, 10
CO2	Determine the cognitive skills, including various thinking approaches, reasoning abilities, and effective problem-solving techniques.	Е	1, 2, 4, 10
CO3	Evaluate the process of memory and forgetting and the effectiveness of different memory training methods.	Е	1, 2, 4, 10
CO4	Assess the theoretical insights, nature, types, and the factors that shape the learning process.	Е	1, 3, 4, 6, 10

CO5	Compare the various theories of intelligence and intelligence tests.	An	1, 2, 4, 10		
CO6	Develop practical skills to apply psychological principles to real-world scenarios.	S	1, 2, 4, 5, 6, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

## **COURSE CONTENT**

## Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.		
Sensation	Sensation, Perception and Attention					
	1.1	Sensation - Definition, Sensory organs and receptors, Types of sensation – Visual, Auditory, Tactile, Gustatory and olfactory.		CO1		
	1.2	Perception – Definition, Perceptual organization and perceptual constancies, Illusion. Sensory adaptation and its role in perception.		CO1		
	1.3Attention – Definition, Types, Factors of attention, Span of attention					
	1.4Experience different types of sensations. For example, visual illusions, sound illusions, and tactile experiences and prepare a report.1.5Illustrate a few perceptual illusions and write a brief report on illusions.			CO1		
				CO1		
	1.6	Conduct an attention span experiment and discuss factors that affect attention.		CO1		
Thinking,	, Reasoning	and Problem solving	-			
2	2.1	Thinking – Definition, Elements or tools of thinking, Types of thinking: concrete thinking, abstract thinking, reflective thinking, creative thinking, critical thinking and associative thinking.	15	CO2		
	2.2	Reasoning - Meaning, Definition, Types: inductive and deductive.		CO2		

	2.3	Problem solving: definition and steps.		CO2	
Memory a	Memory and Forgetting				
	3.1	Memory - Meaning, Types: Sensory, Short-term and Long-term memory Training in memory, mnemonics.		CO3	
3	3.2	Forgetting – Definition, Types, Factors influencing forgetting	15	CO3	
	3.3	3.3 Ebbinghaus's curve of forgetting		CO3	
	3.4	Practice memory enhancement techniques such as mnemonic devices and share the experiences in groups.		CO3	
	4.1	Concept of learning, Nature of learning, Types of learning, Factors affecting learning		CO4	
4	4.2	Motivation- Definition, Types, Maslow's Hierarchy of Needs, Factors Affecting Motivation	15	CO4	
	4.3	Select suitable intelligence tests and administer to a class of adolescents, score and evaluate.		CO4	
	4.4	4.4 Select suitable intelligence tests and administer to a class of adolescents, score and evaluate.		CO4	
5	5	Teacher Specific Content The content will be evaluated internally			

# Syllabus

		PROCEDURE			
	Module		Mode of Transaction		
	1,2,3,4		Lecture		
	Mode of Asse	essment			
	A. Continuou	as Comprehensive Assessment	t (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Assignment/project/any other		
			Test paper- II/open book test/any other		
Total		OTTAN		30	
	B.End Sei	mester Examination			
	Written Exam	ination नहाशा अस्तर	मञ्चनुते	70	

## End Semester Examination MGU-UGP (HONOURS)

## Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

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	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Scie	ence				
Course Name	Traditional Textiles an Nutrition and Dietetic	nd Costum s)	nes of India	(Specializa	tion-Food	
Type of Course	DSE	DSE				
<b>Course Code</b>	MG6DSEHSC303	MG6DSEHSC303				
<b>Course Level</b>	300-399	NDL				
Course Summary	This course delves into North, Central, and Sour Students will embark or of Indian states, gaining each attire.	the diverse th India, fo n a fascina g insights in	and intrica cusing on th ting journe nto the cult	te world of l ne unique att y through th ural and hist	nistorical cost ire of various e traditional orical signific	rumes in regions. clothing cance of
Semester	VI		Credits		4	Total
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
	107			-	-	60
Pre-requisites,	Basic knowledge of Ind	ian history	and cultura	al variation v	will facilitate	the
if any	understanding of the co	urse.	उत्तते			

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Analyze the male and female costumes of Northern Indian states	An	1, 3, 6, 10		
2	Develop a comprehensive knowledge of the regional male and female costumes of Central and Southern Indian states	U	1, 3, 7, 10		
3	Develop an understanding of the cultural contexts and regional variations of resist dyed textiles	U	1, 3, 7, 10		
4	Evaluate the aesthetic and artistic elements embedded in various traditional printed textiles	Е	1, 3, 4, 10		
5	Recognizing hand-woven textiles, including saris and shawls, from different regions of India	An	1, 3, 9, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

## **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Historical cost	tumes of nort	h India		
	1.1	Study of regional male and female costumes of Indian states: Northern- Jammu and Kashmir, Punjab, Himachal Pradesh,		CO1
1	1.2	Western - Gujarat, Rajasthan	12	CO1
	1.3	Eastern-Nagaland, Manipur, Meghalaya, Sikkim, West Bengal		CO1
Historical cost	tumes of cent	ral and south India		
2.1 Study of regional male and female costur Indian states: Central- Maharashtra, Ma Pradesh		Study of regional male and female costumes of Indian states: Central- Maharashtra, Madhya Pradesh	12	CO2
	2.2	Southern-Andhra Pradesh, Tamil Nadu, Karnataka, Kerala		CO2
Traditional re	sist dyed and	printed textiles		
	3.2	Bandhani of Gujarat Bandhej & Lehariya of Rajasthan		CO3
3	3.3	Patola of Gujarat, Bandhas of Odisha, Ikat Textiles of Andhra Pradesh- Telia Rumal, Pochampalli Ikats	20	CO3
	3.4 M	Bagru prints from Rajasthan, Sanganeri prints from Rajasthan, Kalamkari from Andhra Pradesh, Madhubani Painting, Calico prints of Samba		CO4
Traditional ha	ind-woven te	xtiles		
4	4.1	Saris- Banaras Brocades, Baluchari Saris,Buttedar, Dacca Muslins, Jamdani Saris, Paithani Saris, Pitamber, Kanjeevaram Saris, Chanderi Saris, Maheshwari Saris, Himrus and Amrus		CO5
	4.2	Shawls- Kashmir Shawls, Kullu & Kinnaur Shawls, Wraps of North-east		CO5
	Teacher sp	ecific content		
5	(This conter Practical ses	nt will be evaluated internally) ssion, Class room Teaching, Field visits etc.		

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4 Lecture					
	Mode of Asse	essment				
	A.Continuous	Comprehensive Assessment	(CCA)			
	Learning	Formative Assessment	Summative Assessment	Marks		
	approach	(FA)	(SA)			
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations				
		Viva-voce/Interview				
			Test paper- I			
			Assignment/project/any other			
			Test paper- II/open book test/any other			
Total				30		
	B.End Semest	ter Examination				
	Written Exam	nination	1.5	70		

## **End Semester Examination**

## Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

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### REFERENCES

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- 3. K N Lester, Historic Costumes, Chas A Benette and Co., New York.
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- 3. Roshen Alkazi, (2006). Ancient and Medieval Indian Costume, Vol. I and II Art Heritage



Syllabus

Page 206 of 337

Parm sugarant	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Hom	BSc (Hons) Home Science				
Course Name	Child Health and and Dietetics)	Child Health and Nutrition (Specialization-Food Nutrition and Dietetics)				
Type of Course	DSE					
Course Code	MG6DSEHSC30	4				
Course Level	300 - 399	AND	HI			
Course Summary	This course on Child Health and Nutrition provides a comprehensive understanding of the physical, mental and nutritional aspects crucial for children's well-being. It covers growth and developmental stages, emphasizing the vital role of nutrition in shaping a child's health trajectory. Students learn about essential nutrients, their sources and the impact on cognitive and physical development. The curriculum delves into preventative strategies for common childhood health issues, considering the influence of socio-economic and cultural factors. Through a combination of theoretical knowledge and practical skills, participants are equipped to foster a nurturing environment that supports optimal child health and nutrition.					
Semester	MVIJ-UG	6P (H(	Credits	RS)	4	Total Hours
Course Details	Learning Approach	Lecture 3	Tutorial -	Practical	Others -	45+ 30=75
Pre-requisites, if any	Basic understanding of nutrition and child development is recommended for this course on Child Health and Nutrition, covering growth stages, essential nutrients, preventative strategies, and socio-economic influences on child well-being.					

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	e completion of the course the student could be able to :		
1	Analyse the developmental phases of the child, the physical and physiological changes involved.	An	1, 6,10
2	Understand the nutritional requirements of the mother and child in relation to their growth and development	U	6,7,10
3	Learn to make dietary modifications to be made to meet the nutritional demands of the child.	U	3,5, 10
4	Analyse the nutritional and feeding concerns in the child at each stage of development	An	1,4,9,10
5	Apply suitable direct and indirect methods of nutritional assessment for the developmental phases and compare with appropriate standards for growth monitoring.	А	1,4, 8,10
6	Create nutritional awareness tools and conducting Education sessions	С	1,4,10
*Reme	mber (R), Understand (U), Apply (A), Analyse (An), Evaluate (I	E), Create (C),	Skill (S),

٠

Interest (I) and Appreciation (Ap)

## **COURSE CONTENT**

COURSE	CONTE	NT / विद्यया अमूतमइन्रुते		
Module	Units	Course description		CO No.
Nutrition				
1	1.1	Importance of Nutrition prior to and during Pregnancy, Pre requisites for successful outcome, Effect of under nutrition on mother-child dyad - Short term and long term.		CO 1
	1.2	Physiology and endocrinology of Pregnancy. Pregnancy weight gain.	20	CO 1
	1.3	Nutritional requirements during Pregnancy, Iron and Folic acid supplementation, Diet plan for a pregnant mother. Immunization during Pregnancy.		CO 1

Retardation (IUGR), Congenital mailformation, Foetal alcohol syndrome, Gestational Diabetes Mellitus. Common problems encountered in pregnancy.CO 11.4Foetal alcohol syndrome, Gestational Diabetes Mellitus. Common problems encountered in pregnancy.CO 21.5of milk, let down reflex, role of hormones, lactational amenorrheaCO 21.6Human milk composition. Value of colostrum. Advantages of Breast FeedingCO 21.6Nutritional requirements of lactation. Diet plan for a lactating motherCO 2Infant and Young Child FeedingYCF guidelines, Exclusive breastfeeding, and Baby Friendly Hospital Initiative. Steps and Policies, Common problems during breastfeeding.CO 32Operational guidelines for breast feeding. Artificial feeding-Adverse effects.CO 32.1Freindly Hospital Initiative. Steps and Policies, Common problems during breastfeeding.CO 32.2Operational guidelines for breast feeding. Artificial feeding-Adverse effects.CO 32.3HIV and Infant Feeding. Concept and need of Human milk bank in India.CO 32.4Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 333.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4			Adolescent Pregnancy, Intra Uterine Growth		
1.4       Focular accord syndrome, Cestational Diadetes         Mellitus. Common problems encountered in pregnancy.       Physiology and endoerinology of lactation-Synthesis         1.5       of milk, let down reflex, role of hormones, lactational amenorrhea       CO 2         1.6       Human milk composition. Value of colostrum.       CO 2         1.6       Advantages of Breast Feeding       CO 2         Infant and Young Child Feeding       Vuritional requirements of lactation. Diet plan for a lactating mother       CO 3         2       IYCF guidelines, Exclusive breastfeeding and Baby       CO 3         2.1       Friendly Hospital Initiative. Steps and Policies, Common problems during breastfeeding.       CO 3         2       Operational guidelines for breast feeding.       10         2.1       Freeding of low birth weight and preterm babics.       CO 3         2.3       HIV and Infant Feeding, Concept and need of Human milk bank in India.       CO 3         2.4       Infant Feeding in Maternal illness.       CO 3         3       3.1       Normal Pattern of Growth and Development, Standards for Growth in children       CO 4         3.2       Nutritional requirements of children and adolescents       CO 4		1 4	Retardation (IUGR), Congenital malformation,		CO 1
a       Normal Sector Normal Problems Encodulated in pregnancy.       Normal Pattern of Growth and Development, Standards for Growth in children       CO 2         1.5       of milk, let down reflex, role of hormones, lactational amenorrhea       CO 2         1.6       Human milk composition. Value of colostrum.       CO 2         1.6       Advantages of Breast Feeding       CO 2         Infant and Young Child Feeding       TYCF guidelines, Exclusive breastfeeding and Baby       CO 3         2.1       IYCF guidelines, Exclusive breastfeeding.       CO 3         2.1       Common problems during breastfeeding.       CO 3         2.1       Complementary feeding, Feeding related Problems.       10         2.2       Complementary feeding. Concept and need of Human milk bank in India.       CO 3         3       3.1       Normal Pattern of Growth and Development, Standards for Growth in children       CO 4		1.4	Foetal alconol syndrome, Gestational Diabetes		
Pregnately.Pregnately.Physiology and endocrinology of lactation-Synthesis of milk, let down reflex, role of hormones, lactational amenorrheaCO 21.5Human milk composition. Value of colostrum. Advantages of Breast FeedingCO 21.6Human milk composition. Value of colostrum. I.6CO 21.7Nutritional requirements of lactation. Diet plan for a lactating motherCO 2Infant and Young Child FeedingYURF guidelines, Exclusive breastfeeding and Baby Common problems during breastfeeding.22.1Friendly Hospital Initiative- Steps and Policies, Common problems during breastfeeding.CO 3Co 3Co 3Co 3Co 3Co 3Preding of low birth weight and pretern babies.Co 3Co 3Co 3Co 3Co 3Preding of low birth weight and pretern babies.Co 3Co 3Co 3Co 3INTertitional Feeding in Maternal illness. Growth monitoring and Promotion.Adolescence and Assessment of Nutritional StatusCo 4Adolescence and Assessment of Nutritional StatusCo 4Adolescence and Assessment of Nutritional StatusCo 4Adolescence and Assessment of Nutritional StatusAdo			pregnancy		
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1.6Advantages of Breast FeedingCO 21.7Nutritional requirements of lactation. Diet plan for a lactating motherCO 2Infant and Young Child FeedingYCF guidelines, Exclusive breastfeeding and Baby Friendly Hospital Initiative- Steps and Policies, Common problems during breastfeeding.CO 32.1Priendly Hospital Initiative- Steps and Policies, Common problems during breastfeeding.CO 32.2Operational guidelines for breast feeding.102.2.3Preeding of low birth weight and preterm babies.CO 32.3Complementary feeding, Feeding related Problems.102.4Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 3Nutrition i Children and Assessment of Nutritional Status33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4			Human milk composition. Value of colostrum.		$CO^{2}$
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2.1IYCF guidelines, Exclusive breastfeeding and Baby Friendly Hospital Initiative- Steps and Policies, Common problems during breastfeeding.CO 322.1Operational guidelines for breast feeding. Artificial feeding-Adverse effects. 	Infant ai				
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2Operational guidelines for breast feeding. Artificial feeding-Adverse effects. Feeding of low birth weight and preterm babies.CO 32.2Feeding of low birth weight and preterm babies. Feeding related Problems. HIV and Infant Feeding. Concept and need of Human milk bank in India.102.3Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 3Nutrition in Childbood & Adolescence and Assessment of Nutritional Status33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4			Common problems during breastfeeding.		
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2.3HIV and Infant Feeding. Concept and need of Human milk bank in India.CO 32.4Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 3Nutrition in Childbood & Adolescence and Assessment of Nutritional Status33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4			Complementary feeding, Feeding related Problems.	10	
Image: milk bank in India.Image: milk bank in India.Image: milk bank in India.2.4Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 3Nutrition in Childbood & Adolescence and Assessment of Nutritional Status33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4		2.3	HIV and Infant Feeding. Concept and need of Human		CO 3
2.4Infant Feeding in Maternal illness. Growth monitoring and Promotion.CO 3Nutrition in Childbood & Adolescence and Assessment of Nutritional Status33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4			milk bank in India.		
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Nutrition in Childhood & Adolescence and Assessment of Nutritional Status         3       3.1       Normal Pattern of Growth and Development, Standards for Growth in children       CO 4         3.2       Nutritional requirements of children and adolescents       CO 4		2.7	Growth monitoring and Promotion.		005
33.1Normal Pattern of Growth and Development, Standards for Growth in childrenCO 43.2Nutritional requirements of children and adolescentsCO 4	Nutrition in Childhood & Adolescence and Assessment of Nutritional				
3     Standards for Growth in children     CO 4       3.2     Nutritional requirements of children and adolescents     CO 4		3.1	Normal Pattern of Growth and Development,		CO 4
3.2 Nutritional requirements of children and adolescents CO 4	3	5.1	Standards for Growth in children		00 7
		3.2	Nutritional requirements of children and adolescents		CO 4

	3.3	Nutritional concerns- Vitamin A deficiency, Iron Deficiency Anemia, PEM, Obesity.	15	CO 4
	3.4	Direct Assessment of Nutritional Status. Anthropometry- Length and height, Weight, BMI, Z scores and percentiles, MUAC		CO 5
	3.5	Biochemical assessment, Clinical and Dietary Assessment. Indirect measures of Nutritional status.		CO 5
Practical	l			
	4.1	Prepare a portfolio for key nutritional concepts for children		CO 6
	4.2	Creating balanced meal plans for Pregnant and lactating mother, preschoolers		CO 6
	4.3	Revise traditional weaning recipes and modernize them for contemporary preferences		CO 6
	4.4	<ul><li>Make a PPT on Healthy food choices and conduct</li><li>4.4 awareness class for preschoolers.</li></ul>		CO 6
	4.5	Identification and prevention of common health problems in children		CO 6
4	4.6	Case studies on managing childhood illnesses through nutrition (At least 2)		CO 6
	4.7	Conducting nutritional assessments for children		CO 6
	4.8	Interpretation of growth charts and nutritional indicators		CO 6
	4.9	Group projects on community-based nutrition initiatives		CO 6
	Teacher	specific content		
5	(This co	ntent will be evaluated internally)		
	Practical	session, Class room Teaching, Field visits etc.		



## **MGU-UGP (HONOURS)**

# Syllabus

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration a Assignments	and practical	
	Mode of asse	essment			
	B. Conti	nuous Comprehensive	Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva- voce/Interview	· · · · · · · · · · · · · · · · · · ·		
			Test paper- I		
			Test paper- II/open book test/any other		
Total			AN	25	
	Practical	Observation of practical skills			
	Ś	Viva-voce/Oral Presentation	मञ्चनुत		
			Record		
Total				15	
	C. End Semester Examination				
	Written Exar	Written Examination			
	Practical Exa	mination	lass a	35	

#### **End Semester Examination**

### **Theory: 50 Marks**

- Short answer type questions: Answer any 10 questions out of 12 (10x2=20) i)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

## **Practical: 35 Marks**

- Laboratory Evaluation (25 marks) i)
- ii) Record (10 marks)

#### **REFERENCES**

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- Gropper, S. S., Smith, J. L., & Groff, J. L. (2017). Advanced Nutrition and Human Metabolism (7th ed.). Cengage Learning.
- Krebs, N. F. (2014). Nutrition in Pediatrics: Basic Science, Clinical Applications (5th ed.). American Academy of Pediatrics.
- Wardlaw, G. M., Smith, A. M., & Collene, A. L. (2018). Contemporary Nutrition: A Functional Approach (5th ed.). McGraw-Hill Education.
- 6. Heyman, M. B. (2015). Pediatric Nutrition (7th ed.). American Academy of Pediatrics.

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- 2. ACC/SCN Reports
- Bamji S.M., Rao N. P and Reddy V.1998.Text book of Human Nutrition. Oxford and IBH Publishing C. New Delhi.
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- Gibney J.M., Macdonald A.I., & Roche M.H. (2003). Nutrition and Metabolism. Blackwell Publishing.
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Paran angeruaria	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) Hom	e Science					
Course Name	<b>Clothing Care</b>						
Type of Course	SEC	SEC					
Course Code	MG6SECHSC30	MG6SECHSC300					
Course Level	300-399	CAN	Dui				
Course Summary	This comprehensi science and techni in understanding t	ve course c ques, provi he principle	overs a wic ding essent es behind ef	le range of t ial knowled fective fabri	topics relate ge for anyo ic care and r	ed to laundry ne interested naintenance.	
Semester	VI		Credits	F	3	Total	
Course	Learning	Lecture	Tutorial	Practical	Others	Hours	
Details	Approach	3		-/-	-	45	
Pre-	Students should h	ave knowle	dge about t	he basic con	ncepts of tex	xtile	
requisites, if any	materials used in clothing.						

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After th	e completion of the course the student could be able to:				
1	Explain the process of determination and removal of water hardness	K	1, 2, 10		
2	Comprehend the manufacturing process and actions of surfactants	U	1, 2, 6		
3	Analyse the application of laundry agents	А	1, 6, 7		
4	Explain the processes of washing, dry cleaning and stain removal	U	1, 4, 7		
5	Evaluate the care labels used in clothing materials	Е	1,3, 4, 10		
*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

(S), Interest (I) and Appreciation (Ap) COURSE CONTENT

Module	Units	Course description	Hrs	CO No.	
Water and	d Surfactants	5	1		
	1.1	Water- hard and soft water, determination of water hardness, methods of softening water. Zeolite or base exchange. Surfactants- Soaps and Detergents		CO1	
1	1.2	Laundry soaps – Manufacture of soap (Hot process, cold process), composition of soap, types of soap, chemical action 15			
	1.3	Soap less detergents-detergent manufacture, advantages of detergents, Difference between soap & detergents.		CO2	
Laundry A	Agents				
2	2.1	Stiffening Agents – Starch (cold water and hot water, Other stiffening agents, preparation of starch.		CO3	
	2.2	Bleaching agents-Types of Bleaching agents- oxidising and reducing agents			
	2.3	Laundry blues, types and their application		CO3	
Launderi	ng Processes	and Care Labels			
	3.1	Principles of washing- suction washing, washing by kneading and squeezing, washing by machine. Dry cleaning – definition, using absorbents, using grease solvents.		CO4	
3	3.2	Stain removal food stains, lead pencil, lipstick, mildew, nose drops, paint ,perfume, perspiration / mildew, tar, turmeric and kum- kum, general rules & ways of stain removal.	15	CO4	
	3.3	Care labels – washing, bleaching, Drying, ironing and different placements of label in garments.		CO5	
	Teacher spo	ecific content			
4	(This conter Practical ses	nt will be evaluated internally) ssion, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3		Lecture		
	Mode of Assessment				
	A.Continuous Comprehensive Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total				25	
	B.End Semest	B.End Semester Examination			
	Written Examination			50	

End Semester Examination

## Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)
#### REFERENCES

- Dantyagi S., "Fundamentals of Textile and Their Care", Oriental Longmans Ltd, New Delhi, 1996
- 2. Denlkar, "Household Textiles and Laundry Work", Atma Ram and Sons, Delhi, 1993
- 3. Neomi D'Souza, "Fabric Care", New Age International Publisher, 1998
- 4. Davis, "Laundry and Clothing Care", Drama Book Publishers, 1995 Textiles fabrics and their Selection Wingate I B, Allied publishers Ltd, Chennai.

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- 1. Vatsala, R. 2003. Textbook of Textiles & Clothing, Indian Council of Agriculture Research
- Joseph, M.L. Essentials of Textiles (5th Edition), New York, Holi Rinehert & Winston, 1988.
- 3. Tortora g. Phyllis, Understanding Textiles (2nd Edition) MCmillan Co. USA, 1987.
- 4. Vidyasagar, P.V. Handbook of Textiles, New Delhi, Milttle Publication, 1998.
- 5. Winate, B. Isabel, Textile Fabrics and their Selection, 7th ed. Englewood Chilft, Prentice Hall, 1976.
- 6. Family Clothing Tate of Glession, John Wiley & Sons In c, Illinois.

# MGU-UGP (HONOURS) Syllabus

And a	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons)	Home Science	e			
Course Name	Creative A	oplied Arts				
Type of Course	SEC					
Course Code	MG6SECH	SC301				
Course Level	300-399	CI	NDL			
Course Summary	Make students familiar to the discipline of Applied Arts through hands-on experience to divert young minds from too much of academics to lighter enjoyable exercises. It would prove an attempt to initiate in them an opportunity to develop and kindle their senses in fine and applied arts, a viable avenue for lifelong learning.					
Semester	VI	107	Credits		3	Total Hours
Course	Learning	Lecture	Tutorial	Practical	Others	
Details	Approach		പ്പപപ	ខែភិប		45
Pre- requisites, if any	Aptitude tow and principl skills. The a ability to tak inspirations	vards sketchin es of design, S bility to solve te criticism co and concepts.	ng and drawi Strong obser problems cr nstructively	ng, Basic K vational, res reatively and . Developing	nowledge ir earch and a 1 using initia g an open m	n elements nalytical ative. The nindset to new

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	ne completion of the course the student could be able to:		
1	Appreciate aesthetics of arts and crafts & develop and practice nuances of creative arts	Ар	2
2	Inculcate ability to develop and implement new artistic ideas and skills through hands-on experience in applied arts.	С	1,4

3	Comprehend significance of art concepts as an integral component of man's living styles from bygone days	Е	3
4	Customize/ optimize use of visual and applied arts, accessories and antiques for designing interiors and other aspects	Е	2,7
5	Realize learning as an enjoyable stress free experience resulting in lifelong learning	An	6,10
6	Expand knowledge and equip skills and emerge as self employed freelancers	S	6,9
		~ ~	

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

Module	Units	Course description	Hrs	CO No.
Introduct	ion to Vi	sual Arts and Crafts for Design in Everyday life		
	1.1	Meaning and philosophy of art; categories of art related to interior design and decoration: visual, plastic, decorative, applied arts		1
	1.2	Type of arts and designs - Visual and graphic art; Visual and graphic design		1
1	1.3	Concept and Basics of design, Aesthetics and Creativity: significance in design development	10	1
	1.4	Colouring exercises using the Prang colour system. Blending of colours to observe the effect of colour on each other. Colour harmonies		2
Materials	& Medi	um in the application of Art & Design		
	2.1	Materials and their use in applied arts – Paper, Canvas, Cloth, Wood, Earthenware, Ceramics, Glass, Plastics and Metals - processing and use		2
2	2.2	Basic drawing techniques, pencil drawing, charcoal drawing, Cartoon drawing, Portrait drawing, Doodling, Rendering etc. Painting- Water colour painting, painting with crayons/ Oil pastels, Oil painting, Glass painting, Fabric painting	20	2
	2.3	Different methods and techniques used in Drawings - Abstraction and stylization, perspective drawings, sketching, rendering, still- life, land-scape, anatomy, two and three dimensional, Ornamentation and fine tuning techniques		2

	2.4	2D Art and Crafts such as Madhupani, Kalamkari, Tanjore; Mural, Warli art, Gond art, Fresco art, Stenciling and Collage etc.		2,5
	2.5	3D art and craft forms: Sculptures,Pot/ Bottle art, Jewellery making/decoupage/ Macrame/ soft toy making/ Papier-mâché etc.		2,5
	2.6	Creation of innovative designs from trash- Creative upcycling of paper, cloth and other materials		2,5
	2.7	Study of Major Work of Artists- Foreign artists – Michelangelo, Leonardo da Vinci, Raphael Sanzio, Pablo Picasso, Vincent van Gogh, etc. Indian artists – Raja Ravi Varma, R.K. Laxman, M.F. Husain, Anjoli Ela Menon etc.		2, 4
Basics of	n the Al	oplication of Arts and Crafts for Functional/ Aesthetic Decoration	Use in 1	Interior
	3.1	Painting - Worli and Madhubani, Floor decorations – Kolam, Alpana, Rangoli, flower carpet, Rangoli. Accessories – Macrame, pottery, soft toys, terrarium & Paper Mache, Collection and display of antiques.		3,6,
	3.2	2D art such as Madhupani, Kalamkari, Tanjore; Mural, Warli art, Gond art, Fresco art and Collage		3,6
3	3.3	3D art forms: Sculptures,Pot/bottle art Jewellery making/decoupage/ Macrame/ soft toy making/ Paper Mache. 3D printing Floor and wall decorations	15	3,6
	3.4	Creation of innovative designs from trash. Upcycling paper, cloth and other materials creatively		2
		Collection and analysis of paintings/ work of art of famous artists		

3,6

Submission of a complete record on practical work

**Teacher specific content** (This content will be evaluated internally)

Practical session, Class room teaching, Field visits, Exhibition etc.

3.5

4

Evaluation of art forms

and portfolio on specified topics

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3		Lecture		
	Mode of Asse	essment			
	A.Continuous	Comprehensive Assessment	(CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva-voce/Interview			
	1		Test paper- I		
			Test paper- II/open book test/any other		
Total				25	
	B.End Semest	ter Examination			
	Written Exam	ination		50	

End Semester Examination

### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

llabus

#### REFERENCES

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# Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Women Entreprene	eurship De	velopment	Ţ		
Type of Course	SEC					
Course Code	MG6SECHSC302					
Course Level	300-399	AND	HIN			
Course Summary	This course provides business developme entrepreneurs.	s a compre ent, cove	ehensive ex ring key	ploration of aspects es	entrepren sential f	eurship and or aspiring
Semester	VI		Credits	<i>?</i> //	3	Total
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours
		3		-	-	45
Pre-requisites, if any	A foundational under	rstanding o	f entrepren	eurship and	an interest	in the field.

# COURSE OUTCOMES (CO) (HONOURS)

CO No.	Expected Course Outcomes	Learning Domains *	PO No
After th	e successful completion of the course the student should be ab	le to:	
1	Understand the fundamentals of entrepreneurship and its role in economic development.	U	1,2
2	Identify ways to approach supportive Institutions and Banks for starting an enterprise	K	1,9
3	Recognize the challenges faced by women entrepreneurs in India.	К	1,4
4	Analyze financial statements, implement budgeting strategies, and identify diverse funding sources for entrepreneurial ventures.	А	1,2,3,

5	Develop a business idea, including conducting market analysis and customer segmentation.	С	5,6
*Reme Interes	mber (K), Understand (U), Apply (A), Analyse (An), Evaluat t (I) and Appreciation (Ap)	e (E), Create	(C), Skill (S),

Module	Units	Course description	Hrs	CO No.
Foundations o	f Entreprei	neurship and Women Entrepreneurship		
1	1.1	Definition, meaning, and scope of entrepreneurship.		CO1
	1.2	Entrepreneurial qualities, functions, and types, with a focus on women entrepreneurs. Forms of organization: sole proprietorship, partnership, joint-stock companies.	15	CO2
	1.3	Women in Entrepreneurship: Challenges and Opportunities- The role of women entrepreneurs in economic development.		CO3
<b>Business Plan</b>	ning and Fi	nancial Management for women entrepreneur	'S	
	2.1	Ideation process tailored for women entrepreneurs. Developing a business idea.		CO4
	2.2	Market Analysis and Customer Segmentation- Strategies for market analysis and customer segmentation from a women-centric perspective.		CO 4
	2.3	Crafting a Comprehensive Business Plan- Business planning specific to women-led enterprises.		CO 5
2	2.4	Financial Management for Women Entrepreneurs: Financial statements, budgeting, funding sources, and financial planning from a gender-sensitive lens. Institutional support for women entrepreneurs at central and state levels. Central level- SSIB,NSIC, SIDO,KVIC, NIESBUD, NABARD(any three relevant institutional support) State, Level-DIC, SFC, SSIDC, SIDBI, SISI, ICICI (any three)	15	CO 4

Technology, Digital Literacy, and Networking for Women Entrepreneurs				
	3.1	Leveraging digital marketing, establishing an online presence, and embracing e-commerce for women entrepreneurs.	15	CO1
5	3.2 Establishing and sustaining small-scale enterprises with a focus on women's involvement.		15	CO4
5	Teacher specific content         (This content will be evaluated internally)         Practical session, Class room Teaching, Field visits etc.			

Mode o	Mode of Assessment						
		CLASSROOM P	ROCEDURE				
	Module		Mode of Transaction				
	1,2,3		Lecture				
	Mode of Ass	sessment					
	A.Continuou	as Comprehensive Assessment (	CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview	OURS)				
			Test paper- I				
		Sollahu	Test paper- II/open book test/any other				
Total		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	5 Av	25			
	B.End Seme	ster Examination					
	Written Exa	mination		50			

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### REFERENCES

- 1. Desai, V. (2001). Women Entrepreneurship: Issues and Strategies. Himalaya Publishing House.
- 2. Helgesen, S. (1995). The Female Advantage: Women's Ways of Leadership. Doubleday.
- 3. Wagman-Geller, M. (2018). Women Who Launch: Women Who Shattered Glass Ceilings. Mango Publishing.
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- 5. Ries, E. (2011). The Lean Startup. Crown Business.
- 6. Deiss, R., & Henneberry, R. (2017). Digital Marketing For Dummies. For Dummies.
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- 1. Anilkumar, S. Poornima S.C. Mini K. Abraham and Jayashree, K. (2012).Entrepreneurship Development. New Delhi: New Age International Pvt. Ltd., Publishers
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- 5. Khanka, S.S. (2006). Entrepreneurial Development. New Delhi:S. Chand and CompanyLimited
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Received and and and and and and and and and an	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home Sc	eience				
Course Name	Techniques of Food	Preservatio	n			
Type of Course	SEC					
Course Code	MG6SECHSC303					
Course Level	300 - 399					
Course Summary	This course helps us to understand what is possible in the world of food preservation; then understanding the factors that cause food to deteriorate. Course also helps to study the different ways foods can be preserved from chemical treatments, to changing the environmental conditions (temperature, moisture content, etc.) Food preservation is something that should be understood by anyone who handles food; whether for their own use or on a commercial basis					
Semester	VI	X	Credits		3	Total
Course Details	Learning Approach	Lecture 3	Tutorial	Practical	Others	Hours 45
Pre-requisites, if any	Prior knowledge in ba principles is recomme	sic food sciended for the	ence and un e course on	nderstanding Techniques	of food safe of Food Pre	ety servation.

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome OURS)	Learning Domains *	PO No		
1	Understand the principles and methods of preservation	K	1,2, 5,6,9		
2	Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved food products	U	1,2, 5,6,9		
3	Understand to formulate food based products	S	1,2, 5,6,9		
4	Explore the principles of preservation in fruits and vegetables based products.	An	1,2, 5,6,9		
5	Acquire skills to prepare preserved products and develop new products with retention of quality.	S	1,2, 6,9		
6	Evaluate food processing industries	Е	1,2,3,4,5		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course description	Hrs	CO No.
Concept o	f Food Pr	eservation and Preparation of Dehydrated Products		
	1.1	Importance of Food Preservation		CO 1
	1.2	Types of Food spoilage by Micro organisms and by Enzymes		CO 1
	1.3	Basic Principles of Food Preservation		CO 1
1	1.4	Food preservatives- Use of Salt, Acid, Sugar, natural food preservatives and artificial preservatives	15	CO 1
	1.5	Starting a food preserving unit Product	15	CO 1
	1.6	Promotion strategies and marketing skills		CO 1
	1.7	Methods of drying &dehydration, different types of driers, freeze drying-lyophilisation, packing & storage		CO 2
	1.8	General tips with drying foods		CO 2
Preservati	on by Sug	gar, Chemicals, Salt and Advanced Preservation Techn	ology	
	2.1	Stages in Sugar Cookery		CO 2
	2.2	Sugar Concentrates – Principles of Gel Formation		CO 2
	2.3 Role of Pectin in Preserved foods			CO 2
	2.4	Evaluation of pH, Acidity and pectin quality	-	CO 2
	2.5	Preparation and Preservation of Fruit Juices, RTS		CO 3
	2.6	Pickling – Principles Involved and Types of Pickles		CO 3
2	2.7	Chemical Preservatives – Definition, Role of Preservation	15	CO 3
2	2.8	Permitted Preservatives, FSSAI guidelines	15	CO 4
	2.9	Meaning and needs of freezing foods Types of Freezing and managing freezers	-	CO 4
	2.10	Guidelines for types of frozen foods-Fruits, Vegetables, fish, meat and poultry		CO 4
	2.11	Smoking foods, Pasteurization and Sterilization Food Irradiation Vacuum Packing Canning and Bottling		CO 4
	2.12	Food Packaging Materials for preserved food products		CO 4
Related ex	perience			
3	3.1	Hands on Experience- Demonstrate drying methods for the selected products -Rice/ Wheat Roots and Tubers/ Fruits/ Vegetables, Reconstitution of dried vegetables and Preparation of salted, dehydrated, preserves	15	CO 5
	3.2	<b>Product Evaluation</b> Preparation of Jam/ Jelly, Marmalades/ Sauce and Squash Preserves		CO 5

		Candied, Glazed, Crystallized Fruits, Toffee Preparation and Preservation of Fruit Juices Hands on experience: Blanching of fruits & Vegetables		
	3.3	<b>Industrial experience</b> Development of a preserved food product and labelling according to FSSAI norms. Visit to Food Industries		CO 6
4	<b>Teacher</b> (This cor	<b>specific content</b> ntent will be evaluated internally) Practical session, Class room Teaching, Field visits	etc.	

Mode of A	ssessment	GANDHI					
		CLASSROOM PR	OCEDURE				
	Module		Mode of Transaction				
	1,2,3	1,2,3 Lecture					
	Mode of Ass	sessment					
	A.Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work	aga N				
		Assignment/oral presentations					
	N	Viva-voce/Interview	)URS)				
			Test paper- I				
		Syllabu	Test paper- II/open book test/any other				
Total		0		25			
	B.End Seme	ster Examination					
	Written Exa	mination		50			

#### **End Semester Examination**

#### **Theory: 50 Marks**

- Short answer type questions: Answer any 10 questions out of 12 (10x2=20) i)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### REFERENCES

- Adebo O., Chinma C., Obadina A., Soares A., Panda S., Ren-You Gan (2023) Indigenous Fermented Foods for the Tropics, 1st Edition, Elsevier Publication.
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#### SUGGESTED READINGS

- Shafiur, Rahman, M. (2007), Handbook of Food Preservation, 2 nd edition, CRC press, New Delhi.
- Srivastava R.P. (2012), Fruit and vegetable preservation Principles and Practices, International Book Distributing Co., (IBDC), New Delhi.

ग्रंथा अमतसः

MGU-UGP (HONOURS)

Syllabus

Анган элданта.	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	Science				
Course Name	Food Service Mana	gement				
Type of Course	SEC					
Course Code	MG6SECHSC304					
<b>Course Level</b>	400 - 499					
Course Summary	The goal of the course "Food Service Management" is to provide students with a fundamental grasp of the many facets of managing a food service business, including hospital dietary food service. This raises awareness of the basic ideas and roles of management as well as the instruments available for streamlining tasks, making effective use of labour and time, and managing supplies and other resources. Students will have practical experience in all aspects of food service, from purchasing to serving, which will help them develop their managerial skills and pave the way for them to become confident entrepreneurs					
Semester	VI	Y	Credits	-//	3	
Course Details	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	3	सउत	3/11-		45
Pre-requisites, if any	Basics of menu plan	ning				

## COURSE OUTCOMES MGU-UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No				
After the successful completion of the course the student should be able to:							
1	Identify different types of Food Service	U	1,2				
2	Describe the characteristics of each type of menu and when they are typically used.	K	1,2				
3	Explain the importance of effective purchasing in food service operations.	А	1,2,3				
4	Critique the service provided in a hotel restaurant based on the chosen style of service.	E	3,4				
5	Evaluate the appropriateness of different table settings arrangements in restaurants	An	3,4,9				
6	Organize food service events	С	3,4,10				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)							

Module	Units	Course description	Hrs	CO No.		
Scope and	objective	s of food service management and Menu Planning				
	1.1	Scope, objectives and advantages of food service management.		CO 1		
	1.2	Commercial Food service management System – Hotels, Restaurants, fast food outlets, cafeterias, snack bars, kiosks, vending machines.		CO 1		
1	1.3	1.3Noncommercial food management system – Hospitals, Nursing homes, Industrial canteens and child care centers.		CO 1		
	1.4	Functions, Sequence of Courses, Factors affecting menu planning	15	CO 2		
	1.5	Types of menu - Al a carte, table d'hote and combination,		CO 2		
	1.6	Steps in Menu Planning, Design of Menu Card.		CO 2		
	1.7	Quantity food preparation- Standardisation, Recipe adjustments and portion control, Cost and Quality control in food preparation. Food Laws		CO 3		
Purchase	& Food S	ervice system				
	2.1	Methods of purchase (formal and informal)		CO 3		
	2.2	Identifying needs, Selection, Receiving, Storage types, Issuing		CO 3		
	2.3	Delivery Systems (Centralised and Decentralised)	10	CO 3		
2	2.4	Type of food service systems (conventional, commissary, ready prepared, assembly),		CO 4		
	2.5 Service Styles-(table, assisted, self, single point, specialised/in situ)			CO 4		
Table Setting and Arrangement						
	3.1	Indian and Western Styles of Table Setting		CO 5		
	3.2	Table Appointments		CO 5		
3	3.3	Napkin folding styles, Flower arrangement, Table Etiquettes.	20	CO 5		
	3.4	Prepare recipes and menus.		CO 6		
	3.5	Demonstrate napkin folding and flower arrangement suitable for different styles		CO 6		

	3.6	Organize and conduct a food sale Plan the menu, resources and execute production and sale and estimate profit or loss.		CO 6	
	3.7	Visit to a commercial and a non-commercial food service institution.		CO 6	
4	Teacher specific content         (This content will be evaluated internally)         Practical session, Class room Teaching, Field visits etc.				

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3		Lecture				
	Mode of Assessment						
	A.Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
	1	Assignment/oral presentations	<b>द्रते</b>				
	_	Viva-voce/Interview					
			Test paper- I				
			Test paper- II/open book test/any other				
Total		Sullahur	7	25			
	B.End Semest	er Examination					
	Written Exam	ination		50			

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- 1. Sethi, M. (2011). Institutional Food Management, New Age International (P) Limited, second edition
- 2. Prasad, L. M. (2019). Principles & practice of Management, Sultan Chand and sons.
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#### SUGGESTED READINGS

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Rener Segmant	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Communication for	Developn	nent			
Type of Course	VAC					
Course Code	MG6VACHSC300	MG6VACHSC300				
Course Level	300-399	300-399				
Course Summary	Upon completing th analyze the pivotal re diverse approaches a strategies to address o	Upon completing the course, students are expected to possess the ability to analyze the pivotal role of communication in developmental processes, employ diverse approaches and methods in practical situations, and formulate effective strategies to address challenges in development through communication.				
Semester	VI		Credits	<u> </u>	3	Total Hours
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others	•
	Learning Approach	3		-	-	45
Pre-requisites, if any	Basic understanding education, and found background in interp	g of com dational kr ersonal cor	munication nowledge in nmunicatio	n extension on or related	y with ag or related areas being	griculture and fields, with a g beneficial.

## COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcomes	Learning Domains *	PO No		
After th	e successful completion of the course the student should be a	able to:			
1	Gain knowledge on the need and importance of communication and its significance in exchange of information	U	1,2		
2	Analyze the models of Communication and role of media in societal development	An	3,5		
3	Acquire knowledge on the effective communication and extension approaches.	U	3,7		
4	Apply communication methods in the implementation of programme.	А	4,5,6		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course description	Hrs	CO No.
Introduction a	nd Approa	ches to Development Communication		
1	1.1	Meaning, definition, nature, scope and importance of communication Functions of communication – information function, command or instructive function, influence or persuasive function and integrative function		CO1
1	1.2	Elements of Communication – three elements – source, message, receiver, four elements – encoding, decoding, sender and receiver, five elements – communicator, communicate, message, channel and feedback	15	CO1
	1.3	Means of Communication – Oral, Written, Sign / signal, action, object Types of Communication – Formal and Informal Communication Pattern - one way, two way, circular		CO1
	1.4	Meaning, nature, role and characteristics of development communication		CO1
Communicatio	on Models	TAT		
	2.1	Importance of communication in extension Models of Communication-Aristotle Model, Shanon – Weaver Model, Berlo Model, Scharmm Model	15	CO2
	2.2	Concept, purposes and significance of model in communication		CO2
Effective Comm	unication a	nd extension approaches		
	3.1	Characteristics – Clear, correct, complete and precise message, reliability, consideration of the recipient Skills – Observance, clarity and Brevity, Listening and Understanding, self- efficacy and self confidence		CO3
3	3.2	Significance – Team work, Team building, problem solving and decision making skills, facilitate creativity and reduces misunderstanding	15	CO3
	3.3	Approaches – General Extension, Commodity specialized, Training and visit, Agricultural, Extension participatory, project, farming		CO5

	Teacher specific content
4	(This content will be evaluated internally)
	Practical session, Class room Teaching, Field visits etc.

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3		Lecture		
	Mode of Asso	essment			
	A.Continuous	s Comprehensive Assessment (CC	CA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations	T BS		
		Viva-voce/Interview			
			Test paper- I		
		TAYA	Test paper- II/open book test/any other		
Total		्रावदां आ अर्मपम	इनुत	25	
	B.End Semes	ter Examination			
	Written Exan	nination (HON		50	

#### **End Semester Examination**

#### **Theory: 50 Marks**



- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

- Bandarkar, P.I. and T.S. (2000). Methodology and Techniques of Social Research. Mumbai: Himalaya Publishing House
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- 7. Ray, G.L. (2015). Extension Communication and Management. Ludhiyana: Kalyan Publishers.
- Sandhu, A.S. (2015). Extension Programme Planning. New Delhi: Oxford & IBH Publishing, Co. Pvt. Ltd

#### SUGGESTED READINGS

- Development Communication: Reframing the Role of the Media" by Thomas L. McPhail
- 2. "Communication for Development and Social Change" by Jan Servaes
- "Theories of Development Communication" by Srinivas R. Melkote and H. Leslie Steeves
- 4. "Communication and Human Development: The Freirean Connection" by C. A. Bowers
- Bowers
   "Media and Development" by Servaes and Malikhao
- 6. "Development Communication Sourcebook: Broadening the Boundaries of Communication" by Paolo Megalopolis
- 7. "Communication and Sustainable Social Change: Policy, Planning, Implementation" by George Cheney, Daniel J. Lair, and Debra L. Dougherty
- 8. "Environmental Communication and the Public Sphere" by Robert Cox
- 9. "Social Marketing and Social Change: Strategies and Tools For Improving Health, Well-Being, and the Environment" by R. Craig Lefebvre
- "ICTs, New Media, and Development: Globalizing the Information Society" by Ingrid Volkmer

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons)	Home Scienc	e			
Course Name	Guidance a	Guidance and Counselling				
Type of Course	VAC	VAC				
Course Code	MG6VACH	MG6VACHSC301				
Course Level	300 - 399	300 -399				
Course Summary	The course a counselling a	The course acquaints the learner with the basic theoretical perspectives of counselling and guidance and also its application.				
Semester	VI	X	Credits	2	3	Total
Course Details	Learning	Lecture	Tutorial	Practical	Others	Hours
	Approach	3		5/-	-	60
Pre-requisites, if any	A foundation communication awareness of	al knowledge ion. Familiari f the cultural a	e in psycholo ty with basic and social co	ogy and interp c counselling ontext.	personal concepts as	well as an

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome OURS)	Learning Domains *	PO No			
After th	After the successful completion of the course the student should be able to:					
1	Describe the meaning, principles, goals of counselling and scope of counselling.	U	1			
2	Explain the different theoretical approaches to counselling.	U	2			
3	Apply counselling in different settings.	А	4,6			
4	Examine the innovative approaches of counselling to be followed for children and adolescents.	An	1,6			
5	Appraise various tests on intelligence, personality, and aptitude for children.	Е	1,2			
6	Develop skills in offering guidance and counselling.	S	4,10			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

Module	Units	Course description	Hrs	CO No.
		Fundamentals of Counselling		
1	1.1	Definition and meaning of Counselling, Goals of Counselling, Principles of Counselling. Scope of Counselling with special reference to the Indian scenario	10	CO1
	1.2	The counselling Process: Stages, Variables affecting the counselling process, Qualities and skills of a Counsellor-communication skills, Counsellee features.		CO1
Theories/Approaches to Counselling and Therapy				
	2.1	Psychoanalytic Approach: Freud's psychoanalysis; Humanistic Approach: Client Centered Therapy, Carl Roger's Non-directive		CO2
2	2.2	Behavioural Approach: Systematic desensitization, Aversive Conditioning, Behaviour modification.	15	CO2
	2.3	Cognitive Approach: Behaviour therapy (CBT); Transactional Analysis		CO2
	Į M	Make a visit to any four Counselling centre make a report on its functioning and the therapies used for different cases		
Special and In	novative app	proaches with children		
3	3.2	Counselling in different settings: School counselling, Career counselling, Family /relationship counselling, Workplace counselling, Hospital counselling, Grief/ Trauma counselling, Addiction counselling, Crisis counselling, Online counselling	20	CO3
	3.3	Talk therapy, Play therapy, Music therapy, Dance Therapy, Drama therapy, Art therapy, Bibliotherapy, Horticultural therapy, Yoga, meditation		C04

	3.4	Two weeks participation in a counselling centre and observe the counselling process / participate in the activities of a Child guidance clinic/ Remedial centre or Resource centre and report	CO6
	Related experience	Psychological testing	
		Tests for Intelligence: Binet-Stanford Test, Wechsler Intelligence Scale for Children, Raven's Progressive Matrices	CO5
	3.5	Tests for aptitude; Personality tests: 16 PF, Big Five personality inventory	CO5
		Projective Tests: Children's Apperception test, Draw a man test, Sentence Completion Test	CO5
		Use any one of the following for psychological testing and make a report: personality test/ Self Concept Inventory/ Self Esteem Inventory/ Emotional Maturity Scale/ Mental Health Scale/ Decision Making Scale	CO5
5		Teacher Specific Content This will be evaluated internally	

विद्यया अमूतमञ्जूते

# **MGU-UGP (HONOURS)**

Syllabus

Module 1,2,3 Mode of Asses A.Continuous	ssment Comprehensive Assessment	Mode of Transaction Lecture		
1,2,3 Mode of Asses A.Continuous	ssment Comprehensive Assessment	Lecture		
Mode of Asses A.Continuous	ssment Comprehensive Assessment			
A.Continuous	Comprehensive Assessment			
	1	(CCA)		
Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
Lecture	In-class discussion/Group tutorial work			
	Assignment/oral presentations			
	Viva-voce/Interview			
		Test paper- I		
		Test paper- II/open book test/any other		
	1 AN		25	
B.End Semester Examination				
Written Exam	ination		50	
	approach Lecture B.End Semest Written Exam	approach (FA) Lecture In-class discussion/Group tutorial work Assignment/oral presentations Viva-voce/Interview B.End Semester Examination Written Examination	approach approach(FA)Assessment (SA)LectureIn-class discussion/Group tutorial workIn-class discussion/Group tutorial workAssignment/oral presentationsIn-class discussion/Group tutorial workViva-voce/InterviewIn-class discussion/Group tutorial workViva-voce/InterviewTest paper- IIn-class discussion/Group presentationsIn-class discussion/Group tutorial workB.End Semester ExaminationViva-voce/Interview	

#### **End Semester Examination**

**Theory: 50 Marks** 

## **MGU-UGP (HONOURS)**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### REFERENCES

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- Rao S.N. (2013). Counseling and Guidance. New Delhi: Tata McGraw Hill Publishing Company Ltd
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- Feltham, C. &Horton, I. (2000). Handbook of Counseling & Psychotherapy. New Delhi: Sage Publications: India.
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- Wolfs, R.D. W. (1998). Handbook of Counseling Psychology. India: Sage Publications.

#### SUGGESTED READINGS

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- 2. Garfield. S.L (1980). Psychotherapy: An Electric Approach, NJ: John Willey & Sons.
- 3. Brice, Avery (2000). Principles of Psychotherapy. India: Harper Collins Publishers.
- 4. Antony J. (2003). Psychotherapies in Counseling. Dindigul: Anugraha Publication
- Corey G. (2009). Counseling & Psychotherapy: Theory & Practice. India: Learning India Pvt. Ltd.
- 6. Batshaw Lm and Prof Y M. Children with Disabilities (A Medical Primer)
- 7. Hardman M L, Drew C I and Egan m W. (1999). Human Exceptionality. Boston: Allyn and Bacon.
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- Singh D. (1995). Issues policies and program of child development in India. New Delhi: Kanishka publishing and Distributors.



## **MGU-UGP (HONOURS)**

# Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Ho	me Science				
Course Name	Advanced Fash	ion Designii	ng			
Type of Course	DCC	DCC				
Course Code	MG7DCCHSC	MG7DCCHSC400				
Course Level	400-499	400-499				
Course Summary	This compreher in fashion desig accessories, fash	This comprehensive course offers a holistic exploration of advanced principles in fashion design, computer-aided design (CAD), portfolio preparation, fashion accessories, fashion show management, and sustainable fashion practices.				
Semester	VII		Credits	2	4	
Course Details	Learning	Lecture	Tutorial	Practical	Others	Total Hours
	Approach	3		1	-	45+30=75
Pre-requisites, if any	Students should have a foundational understanding of fashion design concepts, basic garment construction techniques, and familiarity with computer usage for design applications.					

# COURSE OUTCOMES (CO) UGP (HONOURS)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Describe principles of pattern making and CAD in design.	А	1, 2, 7		
2	Explain the essential elements of fashion portfolio and holistic preparation involved in organizing a fashion show	K	1, 4, 5		
3	Demonstrate a comprehensive understanding of various accessories within fashion industry	U	1, 6, 10		
4	Explain the principles of sustainable fashion	U	1, 3, 7		
5	Create a comprehensive and visually compelling fashion portfolio incorporating all essential elements	U	2, 4, 9		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

Module	Units	Course description	Hrs	CO No.
Principles of	of pattern	making and Computers in fashion	<u></u>	
	1.1	Principles of Pattern making - Dart manipulation, Added fullness, Contouring		CO1
1	1.2	Computer Aided Design -Textile designing, embroidery designs, Garment designing -2D and 3D forms, Pattern making and grading	10	CO1
Portfolio pr	reparation	n and fashion shows		
	2.1	Basic elements in mood board, client board, fabric board/swatch board, accessory board, illustration board, story board, flat specs, cost sheet		CO2
	2.2	Fashion show – Basic preparation of fashion show – sound, light, models, ramp, choreographer, buyer invites, hair and make up, accessories, publicity, advertisement and invite design		CO2
2	2.3	Fashion accessories: Types of accessories - aesthetic and functional purpose. Footwear – anatomy, types of toes and heels Umbrella – anatomy, different styles and types Bags and Wallets -Component parts Sun glasses – anatomy, glass technology Caps and Hats, Belts, ties, gloves, Hair accessories and veils, Wrist bands, Watches	20	CO3
Sustainable	e fashion			
3	3.1	Developments in sustainable fashion, Lifecycle of a Garment: reducing laundering, repair and maintenance, evaluation of apparel products, slowing fashion Product End-of-life: Reuse in fashion cycle, remanufacture, upcycling, approaches to upcycling, material recycling, closed loop production. Sustainable fashion brands in India.	15	CO4
Practical				
4	4.1	<ul> <li>Fashion Portfolio Presentation- Number of garments in a collection is 2.</li> <li>a. Client Board- specifying the details of the client: place of residence, interests, hobbies, occupation, nature of work, age, preferences if any etc</li> <li>b. Mood Board- shows the mood/inspiration from which design is developed</li> <li>c. Illustration Board and flat specs– shows how a design is developed from flat sketch to illustration</li> </ul>	30	CO5

		d. Fabric Board- shows the fabrics used in the garment	
		with details	
		e. Colour Board-shows the colours used in the	
		collection	
		f. Story Board	
		g. Final presentation- constructed garment is put on the	
		model and photographed	
		h. Cost calculation	
	Teacher s	specific content	
5	(This cont	tent will be evaluated internally)	
	Practical s	session, Class room Teaching, Field visits etc.	



# **MGU-UGP (HONOURS)**

# Syllabus

	CLASSROOM PROCEDURE					
	Module		Mode of Transaction			
	1,2,3,4		Lecture, Demonstration and practical Assignments			
	Mode of assess	Mode of assessment				
	A.Continuous Comprehensive Assessment (CCA)					
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks		
	Lecture	In-class discussion/Group tutorial work				
		Assignment/oral presentations				
		Viva-voce/Interview				
			Test paper- I			
			Test paper- II/open book test/any other			
Total	tal		25			
	Practical	Observation of practical skills	। इन्. ते			
		Viva-voce/Oral Presentation				
	MG	U-UGP (HO	Record			
Total				15		
	B.End Semester Examination					
	Written Examination		50			
	Practical Examination			35		

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### Practical: 35 Marks

- i. Laboratory Evaluation (25 marks)
- ii. Record (10 marks)

#### REFERENCES

- 1. Armstrong, H. J. (2013). Patternmaking for Fashion Design: Pearson New International Edition. United Kingdom: Pearson Education.
- 2. Computer Technology for Textiles and Apparel. (2011). Germany: Elsevier Science.
- 3. Kathryn Hagen (2017). Fashion Illustration for Designers: Second Edition. (n.p.): Waveland Press.
- 4. Hopkins, J. (2009). Basics Fashion Design 05: Fashion Drawing. Switzerland: Bloomsbury Academic.
- 5. Morris, B. (2006). Fashion Illustrator. United Kingdom: Laurence King.
- Freer, A. (2018). The Accessory Handbook: A Costume Designer's Secrets for Buying, Wearing, and Caring for Accessories. United States: Clarkson Potter/Ten Speed.
- 7. Taylor, P. F. (2013). How to Produce a Fashion Show, from A to Z. United Kingdom: Pearson.
- 8. Gwilt, A. (2014). A Practical Guide to Sustainable Fashion. United Kingdom: Bloomsbury Publishing Plc.

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- 2. MacDonald, N. M. (2009). Principles of Flat Pattern Design 4th Edition. United States: Bloomsbury Publishing.
- 3. Calderin, J. (2009). Form, Fit, Fashion: All the Details Fashion Designers Need to Know But Can Never Find. United States: Rockport Publishers.
- 4. Faerm, S. (2012). Design Your Fashion Portfolio. United Kingdom: A. & C. Black.
- Tain, L. (2018). Portfolio Presentation for Fashion Designers. United States: Bloomsbury Publishing.
- 6. Diamond, J., Diamond, E. (1994). Fashion Apparel and Accessories. United States: Delmar Pub..
- 7. Lester, K., Oerke, B. V. (2013). Accessories of Dress: An Illustrated Encyclopedia. United States: Dover Publications.
- 8. Peacock, J. (2000). Fashion accessories: the complete 20th century sourcebook. United Kingdom: WW Norton.
- 9. Everett, J. C., Swanson, K. K., Blanco F., J. (2019). Guide to Producing a Fashion Show. United States: Fairchild Books.

	Mahatma Gandhi University Kottayam			
Programme	BSc (Hons) Home Science			
Course Name	Advanced Nutrition -I			
Type of Course	DCC			
Course Code	MG7DCCHSC401			
Course Level	400 - 499			
Course Summary	This course is designed to introduce students to the functional aspects of macronutrients in our diet. A strong emphasis will be placed upon the aspects of physiology and biochemistry including digestion, absorption, assimilation and excretion of carbohydrates, fats and proteins. An understanding of these principles will enhance the student's ability to predict, diagnose and treat conditions associated with various states of disturbed metabolism. Furthermore, the course projects and assignments will introduce the students to current concepts in applied clinical nutrition via peer-reviewed research, discussion topics, reading assignments and links to relevant websites.			
Semester	MGU-UGP (HO Credits RS) 4 Total			
Course Details	Learning ApproachLectureTutorialPracticalOthers460			
Pre-requisites, if any	Understanding of basic nutrition principles, biochemistry, physiology and chemistry			

## **COURSE OUTCOMES (CO)**

CO No.	Expected Course Outcome	Learning Domains *	PO No	
After the successful completion of the course the student should be able to:				
1	Differentiate levels of body composition and elucidate the significance in human nutrition	А	1,2	
2	Understand components of energy balance	U	1,3.4	
3	Cite physiological and biochemical functions of macronutrients Develop knowledge in the digestion and assimilation of nutrients and consequences of malnutrition	An	2,10	
4	Relate human nutrition to the maintenance of health and the prevention of disease	Е	10	
5	Develop competence in the scientific foundation of nutrition and dietetics practice and research.	A	10	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)				

Module	Units	ferential Course description		CO No.	
Body Composition and Energy Balance					
1	1.1	Body Composition- Significance.		CO 1	
	1.2	Levels of Body Composition	-	CO 1	
	1.3	Assessment of Body Composition – Direct, indirect and doubly indirect methods		CO 1	
	1.4	Energy content of foods, measurement, Physiological Fuel Value	15	CO 2	
	1.5	Total Energy Expenditure (TEE)- measurements		CO 2	
	1.6	Components, basal metabolism, thermic effect of activity, thermic effect of food and adaptive thermogenesis. States of energy balance		CO 2	
	1.7			CO 2	
	1.8	Current methodology for determining energy requirements		CO 2	
	1.9	RDA, Regulation of energy intake		CO 2	

	1.10	Chemical mediators of energy homeostasis, Chronic Energy Deficiency (CED) and Obesity		CO 2	
Carbohyd	Carbohydrates				
	2.1	Nutritional importance, functions, sources, classification		CO 3	
	2.2	2.2Digestion, absorption and transportof carbohydrates2.3Glycaemic index, glycaemic load and satiety index,		CO 3	
	2.3			$CO_{3}$	
		Factors affecting glycaemic index of foods		005	
	2.4	Hormonal control of carbohydrate homeostasis	10	CO 3	
2	2.5	Non glycaemic carbohydrates - Fibre, classification, components and sources, properties, role of fibre in human nutrition, requirements.	10	CO 3	
	2.6	Resistant starch, factors influencing resistant starch content in foods and potential health benefits		CO 3	
	2.7	Carbohydrates and exercise performance, role of multiple transportable carbohydrates		CO 3	
Protein &	Lipids		1		
	3.1	Proteins- Classification, digestion, absorption and transport		CO 3	
	3.2	Role of proteins and other nitrogen containing compounds		CO 3	
3	3.3	Protein turnover, nitrogen balance, obligatory nitrogen losses, current methodology for determining protein and essential amino acid requirements, RDA		CO 3	
	3.4	Evaluation of Protein Quality- BV, DC, PER, NPR, NPU, chemical score, NDP Cal%, PDCAAS, DIAAS		CO 3	
	3.5	Supplementary value of Proteins, Novel Protein Foods, improvement of nutritional quality of vegetarian diet	20	CO 3	
	3.6	Classification, chemistry and structure of lipid		CO 3	
	3.7	Fatty acids and its sources, functions,		CO 3	
	3.8	Digestion and absorption lipids		CO 3	
	3.9	Lipid transport and transformation in liver		CO 3	
	3.10	Role of essential fatty acids and eicosanoids		CO 3	
	3.11	Lipotropic factors, visible and invisible fats, plant sterols in human nutrition, Requirement of fat and fatty acids		CO 3	
	3.12	Fat burners and replacers		CO 3	
Nutritional Assessment and Planning					
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	4.1	Body composition measurements		CO 4	
		Measurement of BMI, skinfold thickness,			
		waist circumference, Hip Circumference (HC), MUAC and			
	4.2	WHR.		CO 4	
		Assessment of body composition- Measurement of fat mass			
		and fat free mass.			
	Energy	7			
	4.3	·	CO 5		
4	4.4		CO 5		
	4.5		CO 5		
	Carbo				
	4.6	Percent energy of carbohydrates	30	CO 5	
	4.7	Survey of high fibre products in the market.	30	CO 5	
	Proteir				
		Chemical score computation of food items			
		Calculating chemical score and NDP cal % of a recipe.			
	4.8	Planning suitable dishes for supplementary feeding		CO 5	
		programmes based on protein quality.			
	Teacho	r specific content			
	Tracile				
5	(This c				
	Practica	al session, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3,4		Lecture				
	Mode of Assessment						
	A.Continuou	s Comprehensive Assessment	(CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview					
			Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total		TOT TON	AM .	30			
	B.End Semes	ster Examination					
	Written Exan	nination TETET STALL	मउन्रते	70			
	1	5		-1			

# End Semester Examination GU-UGP (HONOURS)

# **Theory: 70 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

### REFERENCES

- 1. Gibney, M.J., MacDonald, I.A. and Roche, H.M. (2003). Nutrition and Metabolism, First Edition, The Nutrition Society Textbook Series, Blackwell Publishing.
- Gibney, M.J., Lanham- New, S.A., Cassidey, A. and Vorster H.H. (2009). Introduction to Human Nutrition, Second Edition, The Nutrition Society Textbook Series, Blackwell Publishing.
- 3. ICMR, (2010). Nutrient Requirements And Recommended Dietary Allowances For Indians A Report of the Expert Group of the Indian Council Of Medical Research.

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- 1. Kohlmeir, M. (2015). Nutrient metabolism, Second Edition, Elsevier Ltd. f
- 2. Medeiros, D.M. and Wildman, E.C. (2019). Advanced Human Nutrition, Fourth Edition, Jones and Bartlett learning. *f*
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- 4. Groff, J.L. and Gropper, S.S.(2016). Advanced Nutrition and Human Metabolism, Seventh Edition, Wadsworth Publishing Company.

विद्यया अमूतसञ्जते

# MGU-UGP (HONOURS)

Syllabus

Page 255 of 337

	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) Home Scie	ence					
Course Name	Quantity Food Prepar	ration and	Food Serv	vice Techni	ques		
Type of Course	DCC						
Course Code	MG7DCCHSC402						
Course Level	400-499						
Course Summary	This course outlines the food preparation and service techniques in quantity food settings. Students become familiar with different types of food service establishments, theory of menu planning, portion control, ingredients, culinary terminology, and learn to read and evaluate menus. Recipe conversion and costing skills are developed. Different production schemes and product flow are examined, and discussed.						
Semester	VII	OTTA	Credits		4	Total	
Course Details	Learning Approach	Lecture 4	Tutorial -	Practical	Others	Hours 60	
Pre- requisites, if any	Must be enrolled in one Nutrition, Food Service Community Science, H	e of the foll e manageme lospitality&	owing Ma ent, Nutrit Tourism	jors: Home ion Fitness & Managemen	Science, Dietet &Health, Family nt	ics, 7 &	

# Syllabus

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
After the successful completion of the course the student should be able to:					
1	Understand the objectives of different types of food service establishments, cuisines and types of service	U	1,2		
2	Create skills in quantity food preparation and control techniques	С	1,2		
3	Develop skills in menu planning and large scale food preparation and control techniques	S	1,2		

4	Develop skill in controlling quantity food preparation, service & cost and asses the organisation and functioning of restaurants and Quantity Food production units.	Е	1,2,7,8,9,10
5	Design Menu for different Catering outlets & understand the importance of Standard Recipe and verify the cost profit analysis of a food service unit	Ар	2,3,7,10
6	Evaluate the adequacy of quality & safety of food.	Е	6,8

\*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

# COURSE CONTENT

#### CO Module Units **Course description** Hrs No. Menu Planning, Purchasing, Receiving and Storage Menu- Definition Importance, Functions of Menu, Types of menus for different food service 1.1 CO1 establishment, Steps in Menu planning, designing a 1 menu card, presentation, pricing and evaluation. Procurement, product selection specification, Methods 15 1.2 CO2 of purchasing and purchasing process Receiving Process, Storage – Types, pest control and sanitation, Inventory control- Physical and perpetual 1.3 CO6 methods \_\_\_\_\_ **Quantity Food Production and Quality Control** Standardisation of recipes -Definition, Importance, steps and methods, stepping up of recipes, portion CO3 2.1 control- Definition, need and tools Production forecasting and production scheduling, Food 15 CO4 2.2 budget concepts, food costing, and food cost control Quality control in food preparations, Food laws and 2.3 CO6 standards, Role of HACCP **Distribution and Service of Food** Types of cuisine and food service ,Food service delivery system-Centralised and Decentralised, Types 3.1 CO1 of food service systems-conventional, commissary, ready prepared, assembly

3.2	Styles of Food service – French, Russian, Gueridon, American, Buffet, Silver, Family Style, Self, Waiter- waitress service, Tray, Portable, plate, cafeteria, buffet service. Specialised forms of service (hospital, airline, rail, home deliver, catering and banquet, room and lounge service	15	CO1
3.3	Beverages- Service and control measures- Alcoholic, Non-Alcoholic beverages		CO1

Creating Standardized Indian Snack Recipes for Cafeteria Production: From Selection to Cost Analysis

4	4.1		CO1						
	4.2	4.2 Standardisation of recipes		CO2					
	4.3	4.3 Setting up of standardized recipes for quantity products (more than 50 portions)		CO5					
	4.4	4.4 Planning, purchasing, preparing and serving foods in the college cafeteria. Cost and profit analysis		CO8					
	Related experie nce	elated Visit /Training in a quantity /quality-based food production unit related with baking and confectionary nce /food quality control unit /food service unit		CO7					
	Teacher specific content								
5	(This content will be evaluated internally)								
	Practical	Practical session, Class room Teaching, Field visits etc.							



	CLASSROOM PROCEDURE						
	Module		Mode of Transaction	Mode of Transaction			
	1,2,3,4		Lecture				
	Mode of Assessment						
	A.Cor	ntinuous Comprehensive Asse	ssment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva-voce/Interview					
			Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total		OTTAN	AM .	30			
	B.End	Semester Examination					
	Written Exam	nination <b>Contract</b>	मञ्जूते	70			

# **End Semester Examination**

Theory: 70 Marks

# **MGU-UGP (HONOURS)**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any 2 question out of 4 (2x10=20)

## REFERENCES

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- West B Bessie & Wood Levelle (1988) Food Service in Institutions 6th Edition Revised ByHargar FV, Shuggart SG, &Palgne Palacio June, Macmillian Publishing Company New York

# SUGGESTED READINGS

- 1. Sylvia Meyer- Professional Table Service-
- 2. R. S. Nathniel-Catering Management -
- 3. Kinton Cesarani,- Practical Cookery Published by Hodder & Stoughton
- 4. K Arora,-Theory of Cookery by published by Frank Bros & Co., New Delhi

	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) H	ome Science					
Course Name	Public Health	Nutrition					
Type of Course	DCE	DCE					
Course Code	MG7DCEHS	MG7DCEHSC400					
Course Level	400-499						
Course Summary	This course air Nutrition, emp of India. It cov prevalent publ intervention ar	This course aims to provide a comprehensive overview of Public Health Nutrition, emphasizing the concept, importance, and challenges in the context of India. It covers various units to equip students with knowledge about prevalent public health problems, assessment techniques, and strategies for intervention and prevention.					
Semester	VII		Credits	<b>D</b>	4		
Course	Learning	Lecture	Tutorial	Practical	Others	Total Hours	
Details	Approach	4		5//-	-	60	
Pre- requisites, if any	Students with	basic unders	tanding of nut	rition are eli	gible for the	e course.	

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No				
After the successful completion of the course the student should be able to:							
1	Explain food and nutrition security in India.	Е	1,6,7				
2	Apply the ABCD technique and conduct different types of dietary assessments in community settings.	А	1, 2,6				
3	Identify the epidemiology of nutritional disorders.	А	1,6				
4	Evaluate the strategies of nutrition intervention programs.	E	2, 6,7				
5	Describe national and international organizations for combating malnutrition.	U	1, 2,5,6				
6	Examine the nutritional status of a community to combat nutritional disorders.	An	2,5,6				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)							

# **COURSE CONTENT**

Module	Units	Course Description	Hours	CO No.		
Food & I	nmunity	Setting				
	1.1	Definition – Health, Community health. Health care deliverysystem at central, state and district level		CO 1		
	1.2	Hunger in India, Global Hunger Index. India State hungerIndex (based on current statistics).		CO 1		
	1.3	Food and nutrition security in India – production, availabilityand consumption of food in India. (based on current statistics)		CO 1		
	1.4	Nutritional Assessment – importance, objectives, types: indirect assessment and direct assessment.		CO 2		
1	1.5	Direct assessment- Anthropometry: height, length, weight, MUAC, waist circumference, WHR, skin fold measurements	15	CO 2		
	1.6	Biochemical assessment for nutritional deficienciesClinical assessment of nutritional disorders				
	1.7	-	CO 2			
	1.8	Indirect assessment – mortality and morbidity rates		СО		
Epidemio	logy of N	utritional Disorders				
	2.1	Epidemiology – definition, aims, uses, types, epidemiologicalstudy methods.		CO 3		
	2.2	PEM – prevalence, types, aetiology, clinical symptoms, consequences, prevention and management.		CO 3		
	2.3	Vitamin A deficiency – epidemiology, aetiology, clinical symptoms, consequences, intervention strategies for preventing vitamin A deficiency disorders (VADD).		CO 3		
2	2.4	Iron Deficiency Anaemia– prevalence, epidemiology, aetiology, approaches for prevention and control of anaemia: National Nutritional Anaemia Control Programme.	15	CO 3		
	2.5	Iodine deficiency disorders – epidemiology, aetiology, consequences, Iodine deficiency Disorders Control Programme of India. Zinc deficiency – epidemiology, aetiology, clinical				

		manifestations of zinc deficiency, zinc supplementation in		CO 3
		pregnancy.		
		Non communicable chronic disorders - epidemiology,		
	2.6	prevalence, control measures of – Diabetes, Hypertension,		
		CHD, Obesity, Cancer.		CO 3
Nutrition	Interven	tion Programmes & Strategies to Combat Malnutrition		<b></b>
		National Nutrition Policy Preschool feeding programme, Integrated Child Development Services (ICDS), Mid-Day Meal Programme (MDM)		
	3.1	Special Nutrition Programme (SNP), Wheat-Based Supplementary Nutrition Programme (WNP), Applied Nutrition Programme (ANP), National Nutritional Anaemia Prophylaxis Programme (NNAPP), Balwadi Nutrition Programme (BNP), Food & Nutrition Board (FNB), National Iodine Deficiency Disorder Control Programme (NIDDCP).		CO 4
	3.2	National Program for Prevention of Blindness due to Vitamin A Deficiency	15	CO 4
3	3.3	International organizations concerned with food and nutrition: FAO, WHO, UNICEF, CARE, AFPRO, CWS, CRS World Bank and others.		CO 5
	3.4	National organizations concerned with Food and Nutrition: ICMR, ICAR, CHEB, CSWB, SSWB		CO 5
	3.5	Economics of Nutrition: Malnutrition and its economic consequences; Economics in Nutrition – Food security, food production and food pricing.		CO 5
	4.1	Assessment of nutritional status of pre-schoolers		CO 6
	4.2	Use and interpretation of Growth Charts		CO 6
4	4.3	Preparation of low cost recipes-low cost recipes, cyclic menu and one dish meal	15	CO 6
	4.4	Planning and implementation of a nutrition and health education programme in the community.		CO 6
	Teache	r specific content		
5	(This co			
	Practica			

		CLASSROOM F	PROCEDURE	
	Module		Mode of Transaction	
	1,2,3,4		Lecture	
	Mode of Asse	essment		
	A.Cor	ntinuous Comprehensive Asses	ssment (CCA)	
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks
	Lecture	In-class discussion/Group tutorial work		
		Assignment/oral presentations		
		Viva-voce/Interview		
			Test paper- I	
			Assignment/project/any other	
			Test paper- II/open book test/any other	
Total		OTTAN		30
	B.End	Semester Examination		
	Written Exam	nination and a state	मञ्चत्रते	70

# **End Semester Examination** MGU-UGP (HONOURS)

Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii)Essay type questions: Answer any2 question out of 4 (2x10=20)

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- Maurice B Shils ,MosheShike. A, Catherine Ross, Benjamin Cabellero, Robert J Cousins, Lippincott Williamsal Wilkins (2006). Modern Nutrition in Health and Disease, Lippincott Williams and Wilkins Publishers.
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# SUGGESTED READING

- 1. Kishore J. 2007. National Health Programmes of India. 7th Edition Century Publication. New Delhi.Pp- 340-361.
- 2. Oxford textbook of Public Health Ed. Roger Detels, James Mcewen, Robert Beaglehole, and Heizo Tanaka Oxford University Press (OUP) 4th Edition: 2002.
- Public Health at the Crossroads Achievements and Prospects. Robert Beaglehole and Ruth Bonita 2nd Edition Cambridge University Press
- 4. Maxcy-Rosenau-Last Public Health & Preventive Medicine, Fourteenth Edition Ed Robert Wallace, MD, et al.
- 5. Epidemiology and Management for Health Care: Sathe, P.V. Sathe, A.P., Popular Prakashan, Mumbai, 1991

PERMI APPROX		Ma	hatma Gand Kottay	hi University ′am		
Programme	BSc (Hons) Hor	ne Science				
Course Name	Apparel Manuf	acturing Tech	nology			
Type of Course	DCE					
Course Code	MG7DCEHSC4	401				
Course Level	400-499		ND			
Course Summary	This course prov elements such a pressing, packin	ides an in-dept s marker plan g, trims, access	h exploration ning, spreadi sories, and pra	of the garment ing, cutting, se actical garment	and seven and se	cusing on key ving, fusing, ng elements
Semester	VII		Credits	FR	4	Total
Course Details	Learning	Lecture	Tutorial	Practical	Others	110015
Details	rippiouon	4	-	· //-	-	60
Pre- requisites, if any	Students should sewing techniqu	have a foundat es, and familia	ional underst rity with texti	anding of basic le materials.	garment cor	struction,

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	ne successful completion of the course the student should be ab	le to:	
1	Analyze the apparel industry's organizational structure and various departments	U	1, 6, 7
2	Explain the concepts of marker making, spreading, cutting machine mechanisms, notches, drills and thread markers	K	1, 2, 10
3	Explain classifications of industrial sewing machines, seams and stitches	U	1, 3, 9
4	Describe purpose and types of fusing, pressing and packing methods, trims, closures, and accessories.	U	1, 3, 9
5	Developing a collection showcasing different types of seams, stitches, and applied trims and accessories	А	2, 4, 7, 10
*Reme Interes	mber (K), Understand (U), Apply (A), Analyse (An), Evaluate t (I) and Appreciation (Ap)	(E), Create (	C), Skill (S),

# **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Overview	of Garm	ent Industry		
	1.1	Overview of apparel industry, organization structure of apparel manufacturing industry.		CO1
1.	1.2	Different departments in Garment industry – design, marketing, finance, purchase, production and operations	8	CO1
Cutting R	oom Cor	nponents		
	2.1	Markers: Introduction to markers, marker planning, digitizer, plotters, duplicating and markers. Spreading: manual, semi, fully automatic, Quality requirements for spreading, types of spread		CO2
2.	2.2	Introduction to cutting, Mechanism and technical features - Straight knife, round knife, band knife cutting machines, die cutting, laser cutting, plasma cutting, water jet cutting and ultrasonic cutting Principles of notches, drills and thread markers, Computerized cutting- Computerized controlled cloth spreaders and cutting heads, Bundling and ticketing	15	CO2
Productio	n Room	Components		
	3.1	Sewing machine – classification – Single needle, double needle. Types of bed – Flat bed, raised bed, post bed, cylinder bed, side bed. Special sewing machines -Overlock, button hole, bartack, feed of arm, blind stitch, button sewing machine Seams - classification – Class-1, Class-2 Class-3, Class-4, Class-5 and Class-6 Stitches - classification - Class 100, 200, 300, 400, 500, 600		CO3
3	3.1	Fusing equipment, methods; Pressing - purpose, types of pressing equipment	22	CO4
	3.3	Packing - types of packing and packing materials, types of carton packing, quality specification for packing materials, requirements for packing		CO4
	3.4	Trims: Closures - zippers, buttons, hook and eye, hook and loop, Velcro, elastic; lining and interlinings, shoulder pads, waddings, rivets, eyelets Accessories - labels, hangtags, stickers, polybag, carton box, cardboard, tapes		CO4

Applicatio	ons in Ga	rment Construction and Finishing		
	4.1	Develop a collection of samples for different types of seams		CO5
Л	4.2	Develop a collection of samples for different types of stitches	lection of samples for different typesCO5lection of samples for different typesCO5f trims: zippers, buttons, hook and loop, Velcro, elasticCO5e of Accessories - labels, hangtags, bag, carton box, cardboard, tapesCO5	
4	4.3	Application of trims: zippers, buttons, hook and eye, hook and loop, Velcro, elastic	15	CO5
	4.4	Record the use of Accessories - labels, hangtags, stickers, polybag, carton box, cardboard, tapes		CO5
	Teacher	r specific content		
5	(This co	ontent will be evaluated internally)		
	Practica	l session, Class room Teaching, Field visits etc.		

		CLASSROOM P	ROCEDURE	
	Module		Mode of Transaction	
	1,2,3,4		Lecture	
	Mode of Asse	ssment		
	A.Con	tinuous Comprehensive Asses	ssment (CCA)	
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks
	Lecture	In-class discussion/Group tutorial work		
		Assignment/oral P (H)	NOURS)	
		Viva-voce/Interview		
		Spliat	Test paper- I	
			Assignment/project/any other	
			Test paper- II/open book test/any other	
Total				30
	B.End	Semester Examination		
	Written Exam	ination		70

## **End Semester Examination**

## Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
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## REFERENCES

- Rathinamoorthy, R., Surjit, R. (2015). Apparel Machinery and Equipments. India: CRC Press.
- 2. Advances in Apparel Production. (2008). United Kingdom: Elsevier Science.
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- Garment Manufacturing: Processes, Practices and Technology. (n.d.). (n.p.): Online Clothing Study.
- Textiles and Fashion: Materials, Design and Technology. (2014). Netherlands: Elsevier Science.

# **MGU-UGP (HONOURS)**

### SUGGESTED READINGS

# Syllabus

- 1. Jelka Gersak, Design of Clothing Manufacturing Processes: A Systematic Approach to Planning, Scheduling and Control, 2013, 1st edition, Woodhead Publishing, USA
- Janace E. Bubonia, Apparel Production Terms and Processes, 2011, 2nd edition, Fairchild Books, UK
- Prasanta Sarkar, Garment Manufacturing: Processes, Practices and Technology, 2015, 1st edition, Online Clothing Study, India
- 4. Carr and Latham's Technology of Clothing Manufacture. (2009). Germany: Wiley.
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Repair And	Μ	ahatma I	Gandhi Kottayar	Universi n	ity	
Programme	BSc (Hons) Home Scien	nce				
Course Name	Inclusive Education					
Type of Course	DCE					
Course Code	MG7DCEHSC402					
Course Level	400-499	NN				
Course Summary	This course envisions to characteristics, diagnosi education and rehability prevention.	acquaint th s of disabi tation tech	ne learners ilities affec niques, as	with an und ting childr well as	lerstanding en. It will strategies	g of the causes, cover special for disability
Semester	VII		Credits	2	4	
<b>Course Details</b>	Learning Approach	Lecture	Tutorial	Practical	Others	Total Hours
		4-1		-	-	60
Pre-requisites, if any	A basic understanding of child development and an interest in gaining knowledge about the causes, characteristics, and diagnosis of disabilities affecting children. Additionally, an interest in special education, rehabilitation methods, and disability prevention.					

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	e successful completion of the course the student should be able	to:	
1	Comprehend the concept and characteristics of children with special needs.	U	1, 3, 7, 10
2	Analyse the special education strategies and intervention available for children with orthopedic impairments.	An	1, 3, 6, 10
3	Choose suitable rehabilitative measures and special education for children with sensory disabilities.	An	1, 4, 6, 7, 10
4	Examine the special education, rehabilitation measures and intervention strategies for children with mental and neurological disorders.	E	1, 6, 8, 10

-5	Detect different intervention strategies for emotionally disturbed and socially maladjusted children.	С	1, 6, 7, 10
6	Develop practical skills relevant to handle children with special needs.	S	1, 7, 8, 10
*Reme Interes	mber (K), Understand (U), Apply (A), Analyse (An), Evaluate (E t (I) and Appreciation (Ap)	E), Create (C),	Skill (S),

# **COURSE CONTENT**

# **Content for Classroom transaction (Units)**

Module	Units	Course description	Hrs	CO No.
Concept of Chi	ldren with	Special Needs		
	1.1	Definition, types, demographic profile of children with special needs in India.		CO1
	1.2	Special education –recent trends; National Institutes for children with special needs. RCI.	graphic profile of children with nt trends; National Institutes I needs. RCI. 15 or disabled in Government rernment provisions, and Legislations for , mental and neurological disorders on, Characteristics vention, 15 tment (Intervention) and Children on and Characteristics 15 tment and Rehabilitation struttonics	CO1
	1.3	Rights and Provisions for disabled in Government Agencies- Policies, Government provisions, Concessions, Facilities and Legislations for challenged children.		CO1
Children with O	rthopaed	ic, sensory impairments, mental and neurological disc	orders	
	2.1	Definition, Classification, Characteristics		CO2
	2.2	Etiological Factors, prevention,	15	CO3
	2.3	Special Education, Treatment (Intervention) and Rehabilitation		CO4
Emotionally Dis	turbed an	d Socially Maladjusted Children		
	3.1	Definition, Classification		CO5
3	3.2	Etiology, Identification and Characteristics	15	CO5
3	3.3	Special Education, Treatment and Rehabilitation Measures, intervention strategies		CO5
Practical Explora	ntion in Sp	pecial Needs Rehabilitation and Education		
		Visit and absorbed the convises offered by		

4	4.1	Visit rehabi	and litation	observe	the or chil	services Idren with	offered special ne	by eds.	15	CO6
		Tender			•••••		speerar ne	• 4.5.		

	CLASSROOM PROCEDURE								
	Module	e		Mode of Transaction	Mode of Transaction				
	1,2,3,4			Lecture					
	Mode of	of Asses	sment						
		A.Continuous Comprehensive Assessment (CCA)							
	Learnir approa	ng ch	Formative Assessment (FA)	Summative Assessment (SA)	Mark	٢S			
	Lecture	e	In-class discussion/Group tutorial work						
		-	Assignment/oral presentations						
			Viva-voce/Interview						
-				Test paper- I					
				Assignment/project/any other					
				Test paper- II/open book test/any other					
Total			OTTAN	AM	30				
	B.End Semester Examination								
	Writter	Written Examination							
		4.2	Conduct an awareness p related to children with	rogramme based on any topic special needs		C			
		4.3	Two-week training prog centres catering for	ramme in rehabilitation		C			
		4.4	Prepare aids (one each) tactile and kinesthetic st	suitable for visual, auditory, imulation in children.		C			
		4.5	Prepare study materials/ with differently abled ar	teaching aids for children nd test the efficiency of it		C			
5	Teacher specific content       This content will be evaluated internally.								

#### **End Semester Examination**

# Theory: 70 Marks

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# **MGU-UGP (HONOURS)**

# Syllabus

## REFERENCES

- 1. Heward, W (2009) Exceptional Children: An Introduction to Special Education (Book Alone): International Edition. Pearson Education, Limited
- 2. Panda, K.C. (1997) Education of Exceptional children. Vikas Publishing
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- 4. Kaplan, P, (1996). Pathways for Exceptional Children, Minneapolis M. N: West Publishing Co.
- Moores, D. F (1996). Educating the Deaf: Psychology Principles and Practices (4thed), Boston: Houghton Mifflin.
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# SUGGESTED READINGS

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- 4. Schwartz Diane (2005) Including Children with Special Needs: A Handbook For Educators And Parents, Greenwood pub, United states

MGU-UGP (HONOURS)

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# Page 274 of 337

Лана зираната	Mahatma Gandhi University Kottayam							
Programme	BSc (Hons) Home Science							
Course Name	<b>Research Meth</b>	nodology and	Statistics					
Type of Course	DCE	DCE						
Course Code	MG7DCEHSC	MG7DCEHSC403						
Course Level	400-499	GAIL	ょう					
Course Summary	The research methodology course is a comprehensive exploration of fundamental principles and ethical considerations in research. The course further encompasses sampling techniques, research methods, and tools, emphasizing the importance of reliability and validity. Descriptive statistics, measures of central tendency and dispersion, correlation, and regression analysis are explored. The curriculum also includes an in-depth study of sampling distributions, hypothesis testing, and the use of statistical software for practical application. Additionally, students learn preliminary data processing, graphical representation, and research report							
Semester	VII		Credits	n n	4	Total		
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Hours		
Pre-requisites, if any	Approach460The prerequisites for this course include a foundational understanding ofresearch concepts and statistical methods.							

# course outcomes (CO) Syllabus

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	e successful completion of the course the student should be	e able to:	
1	Describe research designs, ethical considerations, and formulate hypotheses.	R	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
2	Explain sampling techniques, methods and tools used in research	U	1, 2, 3, 4, 6, 8, 10
3	Apply appropriate statistical techniques to analyze numerical data and draw inferences.	U	1, 2, 3, 4, 6, 7, 8, 9, 10
4	Explain the concepts of variables sampling distribution and tests of significance in data analysis.	U	1, 2, 3, 4, 5, 8, 9, 10

5	Recognize the methods and techniques for scientific writing.	U	1, 2, 3, 4, 5, 6, 7, 8, 10		
6	Analyse the data using statistical software	An	1, 2, 3, 4, 5, 6, 7, 8, 9, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

# **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
		Fundamentals of Research, Sampling techniques, research methods and tools		
	1.1	Definition, Objectives and Characteristics of research, Types of Research – Basic, Applied and Action research, Exploratory and Descriptive, Ex-post facto research.		CO1
	1.2	1.2Ethics in research: Permission, Data Fabrication and falsification, Plagiarism, IPR. Research design: Research problem: sources, Statement of problem, Criteria for the selection of research problem.		CO1
1	Definition of concepts, operational definition; variables – independent and dependent, control and intervening variables1.3Hypothesis: Meaning and importance, types of		20	CO1
		hypotheses.		
	1.4 Sample: Sampling techniques, Size of sample			CO2
	1.5	Merits and Limitations of sampling, Sampling and Non-sampling errors.		CO2
	1.6	Methods: Survey, observation, interview, experimental, case study.		CO2
	1.7	Tools: Questionnaire, Schedule (for interview and observation) Rating Scales, Attitude Scales. Reliability and validity.		CO2
		Descriptive Statistics		
2	2.1	Measures of Central Tendency: Mean, Median, Mode.	10	CO3
	2.2 Measures of Dispersion: Range, Quartile deviation, Standard deviation.			CO3

	2.3	Coefficient of variation: Correlation and Regression. Coefficient of Correlation: Karl Pearson and Rank Correlation Coefficients.		CO3	
		Sampling distribution and Tests for significance			
	3.1	Random variable, Normal distribution, Sampling distributions.		CO4	
	2.2	Standard normal distribution and calculation of		CO4	
	3.2	probability of events: F, $\chi^2$ and t distributions.			
	3.3	Standard error, its importance and applications.		CO4	
3	3.4	TestingofHypothesis:TypeIandTypeIIerrors,Significan ceLevelandsizeof test, critical region, Concept of P value in testing.	20	CO4	
	3.5	Large and small sample tests (Z,t, Fand $\chi^2$ statistics), ANOVA, Use of software packages in data analysis– SPSS			
	3.6	Statistical analysis usingsoftware-Using any statistical software perform the following: Descriptive statistics, Graphical Representation, Sorting and Organizing Data			
		Presentation of data and report writing			
	4.1	Preliminary processing of data: Classification, Tabulation of data		CO5	
	4.2	4.2 Representation of data: diagrams and graphs			
4	4.3	Research report writing: Parts of dissertation-Abstract, Introduction, Review of Literature, Methodology, Results and Discussion, Summary and Conclusion, Bibliography	10	CO5	
	4.4	Articles in journals, Writing for grants.		CO5	
		Teacher specific content			
E		(This content will be evaluated internally)			
5		Practical session, Class room Teaching, Field visits etc.			

	CLASSROOM PROCEDURE							
	Module		Mode of Transaction					
	1,2,3,4		Lecture					
	Mode of Asse	ssment						
	A.Continuous Comprehensive Assessment (CCA)							
	Learning	Formative Assessment	Summative Assessment	Marks				
	approach	(FA)	(SA)					
	Lecture	In-class discussion/Group tutorial work						
		Assignment/oral presentations						
		Viva-voce/Interview						
			Test paper- I					
			Assignment/project/any other					
			Test paper- II/open book test/any other					
Total				30				
	B.End	Semester Examination	M					
	Written Exam	ination		70				

End Semester Examination

# Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
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### REFERENCES

- 1. American Psychological Association (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.
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Permi signiting	Mahatma Gandhi University Kottayam						
Programme	BSc ( Hons) Hor	ne Science					
Course Name	Community Dev	elopment					
Type of Course	DCE						
Course Code	MG7DCEHSC4	MG7DCEHSC404					
Course Level	400-499	400-499					
Course Summary	This course cov community-based the role of studen Sustainable Deve	This course covers community development principles, rural initiatives, community-based organizations, phases, and evaluation methods, emphasizing the role of student volunteers, and addressing sustainability through the lens of Sustainable Development Goals (SDGs).					
Semester	VII		Credits		4		
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Total Hours	
	- PProwen	4		-	-	60	
Pre-requisites, if any	Interest in Extens	ion educatio	तमञ्च	<b>J</b> A			

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No		
After the	successful completion of the course the student should be	e able to:			
1	Distinguish community development from community organization	An	1,2		
2	Comprehend significant phases in community development	K	1,2,4		
3	Gain knowledge on sustainability and community development concepts	U	3,4		
4	Demonstrate the role of community-based organizations in community development	А	1,3		
5	Assess the efficiency of extension programme using methods and tools for evaluation.	Е	1,2,5		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

# **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Concept of Co	mmunity D	evelopment	1	
	1.1	Meaning and Definition of community development		CO1
1	1.2	Principles, Philosophy and objectives	20	CO1
	1.3	Elements of community development - Community development as a process, community development as a method, community development as a programme, community development as a movement		CO1
	1.4	Rural development initiatives prior to independence and post-independence		CO1
Role of Comm	unity Base	d Organizations		
	2.1	Conceptual meaning and definition of community based organizations		CO2
2	2.2	Role, structure and functions of community organizations		CO2
	2.3	Models of community based organizations		CO2
	2.5	Approaches of community based organizations		CO2
Phases of Com	munity De	velopment and Evaluation of Community Dev	elopmen	t Programme
	3.1	Phases of community development – definition and needs		CO 3
	3.2	Seven Phases of community development: sequence and exclusive roles		CO 3
	3.3	Relationship, Assessment, Discussion, organization, reflection, modification, continuation		CO 3
3	3.4	Personnel involved in community development activities – qualities and role	20	CO 3
	3.5	National Extension Service – Role of student volunteers in community development		CO 3
	3.6	Review of community development programmes - Evaluation methods, Analysis /merits and demerits		CO 3
	3.7 Community involvement and assay of Benefits			CO 3

	3.8	Incentives and Prizes/ Awards		CO 3	
Sustainability	and Comm	unity Development			
	4.1	Concept and need of sustainable community development		CO4	
4	4.2	SDGs – Sustainable Development Goals – concept 10		CO4	
<b>T</b>	4.3	Significance of SDGs to community development	inificance of SDGs to community velopment		
	4.5	Sustainability in community development- aims, objectives and principles		CO4	
	Teacher specific content				
5	(This content will be evaluated internally)				
Practical session, Class room Teaching, Field visits etc.					
Mode of Assessment					

	CLASSROOM PROCEDURE						
	Module		Mode of Transaction				
	1,2,3,4		Lecture				
	Mode of Assessment						
	A.Continuous Comprehensive Assessment (CCA)						
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work Assignment/oral presentations	NOURS)				
		Viva-voce/Interview	itt of				
		æyna.	Test paper- I				
			Assignment/project/any other				
			Test paper- II/open book test/any other				
Total				30			
	B.End	Semester Examination					
	Written Exam	ination		70			

# **End Semester Examination**

# Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any 2 question out of 4 (2x10=20)

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	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Sustainable Resour	ce Manage	ement			
Type of Course	DCE					
Course Code	MG7DCEHSC405					
Course Level	400-499	AND	HIN			
Course Summary	The Course enable the students with knowledge, skills, and values that are essential for creating a more sustainable and resilient future. Students gain a comprehensive understanding of natural resources, including renewable and non-renewable sources. This knowledge extends to the interconnectedness of ecosystems, promoting a holistic perspective on environmental systems. The course equips students with critical thinking and problem-solving skills. Students become environmentally conscious and develop a sense of responsibility towards the planet. This mindset encourages sustainable practices in their personal and professional lives, contributing to the global effort to protect natural resources.					
Semester	VII		Credits		4	Total Hours
Course Details	Learning Approach	Lecture 4	Tutorial -	Practical	Others -	60
Pre-requisites, if any	Basic understanding	of resource	e managem	ent	<u> </u>	

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcomes	Learning Domains *	PO No		
After the	After the successful completion of the course the student should be able to:				
1	To identify various community resources and their efficient management	U	1,2,7		
2	Inculcate eco concerns in students and analyse energy management	An	1,2		

3	Fosters a sense of global citizenship where students recognize the interconnectedness of environmental issues of water pollution and need for conservation	E	2,6,7	
4	To develop skill in sustainable waste management	S	3,5	
5	Create awareness on sustainable resource management	С	1,7	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)				

# **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.	
Environmental	resources ar	nd management	I		
	1.1	Natural Resources: Land, Water, Soil, and Air – Depletion and Crisis, Impact on human beings, interrelationship between population and development		CO1	
	1.2	Environmental pollution : causes and effects – types of pollution and their global, regional and local aspects, air, water, land/soil pollution, Noise pollution – source, measurement, effects and control		CO1	
	1.3	Global warming, acid rain and ozone layer depletion.		CO1	
1	1.4 <b>N</b> 1.5	EnvironmentalProtectionMeasures:Environmental protection laws and action atdifferent levelsEnvironmentmanagementthroughconservation of resources, greenpracticespertaining to environmental issuesLife style changes for creating sustainableenvironment, social responsibility towardssustainabledevelopmentandsocial	20	CO2	
		movements end route for better environment.		002	
Energy Management					
2	2.1	Sources and classification of energy, patterns of energy use in the past, present and in the projected future, environmental/ecological impact of their over exploitation	20	CO3	
	2.2	Energy crisis meaning, need for combating energy crisis, measures at micro level, energy		CO3	

		and climatic issues. Alternate energy sources,		
		their potentialities and environment impacts of		
		their use. Solar energy – Significance and		
		techniques of harnessing - solar devices and its		
		working advantages and limitations		
		Wind a second and a sill area laise and listing	-	
		wind energy wind mill – working applications		
		– advantages and limitations. Energy from		
	2.3	biomass – characteristics, Biogas plants,		CO3
		Smokeless chulah/ improved chulah; Energy		
		conservation – need, ways, end-use energy		
		conservation		
Water and was	ste manage	ment		
		Water related problems - quantitative,		
		qualitative, Water quality and standards -		
		Home scale, small scale and large scale		
		purification techniques.		
		Ways of augmenting water resources, rain		
		water harvesting – need and techniques.		
		irrigation – drip and sprinkler methods:		
	3.1	Sources of pollution of surface and ground		CO3
		water	20	
		Water pollution parameters physical		
		chemical and biological: Types of water		
		pollutants: Effects of water pollution on water		
	2	bodies autrophication impact of water		
		pollution on aquetic life vegetation and human		
		health, control measures		
		Classification and characteristics of waster the		
		need of a good waste management programme		
		Different methods of solid waste disposal		
		dumping compositing / vormin compositing		
		in sine section house waste menosconstruction		
		Sources and classification Storage and		
		sources and classification, Storage and		
	3.2	volte courses and times control measures		CO4
		wasie sources and types – control measures;		
		constituents of a waster maximum of a matter		
		and its anvironmental		
		And its environmental consequences,		
		wanagement of e-wastes, Basel convention.		
		Sewage/ waste water, methods of treatment		
		and disposal; Sanitary latrine – meaning, types		
		and working; Sullage disposal – problems and		

	solutions – soak pit, its construction and functioning.		
	Teacher specific content		
4	(This content will be evaluated internally)		
	Practical session, Class room Teaching, Field visits etc.		

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4		Lecture		
	Mode of Asse	ssment			
	A.Con	tinuous Comprehensive Asses	ssment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work	T S		
		Assignment/oral presentations			
		Viva-voce/Interview			
		विद्यया असत	Test paper- I		
			Assignment/project/any other		
		MGU-UGP (HO	Test paper- II/open book test/any other		
Total				30	
	B.End Semester Examination				
	Written Examination			70	

# **End Semester Examination**

## Theory: 70 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: Answer any 6 questions out of 8 (6x5=30)
- iii) Essay type questions: Answer any2 question out of 4 (2x10=20)

### REFERENCES

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# **SEMESTER-VIII**



# **MGU-UGP (HONOURS)**

# Syllabus

	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Hon	ne Science				
Course Name	Early Developm	ental Stimula	ation			
Type of Course	DCC					
Course Code	MG8DCCHSC4	MG8DCCHSC400				
Course Level	400-499					
Course Summary	This course envis various perspecti in children and experiences.	ions to acqua ves, enabling equip them	int the learn them to re to create	ers with dev cognize pot developme	velopmental ential deve ntally appr	l milestones from lopmental delays ropriate learning
Semester	VIII		Credits	Z	4	
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Total Hours $45+20 = 75$
Pre-requisites, if any	A foundational understanding of child development, as well as an interest in identifying and addressing developmental delays in children.					
TAYP						

### **COURSE OUTCOMES**

COURD					
CO No.	Expected Course Outcome	Learning Domains *	PO No		
After th	ne successful completion of the course the student should be able to	:	I		
1	Describe the developmental milestones in developmental perspectives.	U	1, 2, 4, 10		
2	Appraise the importance of developmental stimulation in early years.	An	1, 2, 6, 8, 10		
3	Analyse the causes and the tools for assessment of developmental delay	An	1, 6, 8, 10		
4	Assess the appropriateness of early intervention techniques and tools for overcoming developmental delays.	Е	1, 4, 7, 10		
5	Develop skill in assessing diverse early intervention approaches for children with developmental delays and designing awareness programs and aids on topics related to early developmental stimulation.	S	1, 6, 8, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

## Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
Developm	ental Mileston	es and early stimulation		
	1.1	Definition. Physical and Motor, Intellectual, Social & Emotional, Language milestones		CO1
	1.2	Developmental milestones and its significance in overall development		CO1
1	1.3	Definition of early stimulation – importance and benefits.	12	CO2
	1.4	Role of parents- Mother the key stimulator, Safety Measures to be taken while giving stimulation		CO2
	1.5	Newborn stimulation at home, baby massage, Touch therapy and its effects on infants, Importance of touch for development in infancy		CO2
Developm	ental Delays –	Assessment		
	2.1	Definition and causes for developmental delay.		CO3
2	2.2.	Introduction to assessment tools used in early intervention – TDSC, DASII, Denver, CDC grading for major motor milestones, MCHAT, Autism Screening Tool, Language Evaluation Scale, Trivandrum (LEST), Bayley's scale.	13	CO3
Early Inte	ervention for D	evelopmental Delays		
	3.1	Definition of early intervention, its need and importance.		CO4
3	3.2	Sensory integration therapy, occupational therapy, speech therapy for children with developmental delays	20	CO4
	3.3	Techniques of intervention used for head control, rolling, creeping, sitting, standing and walking etc. Age appropriate toys and materials used in intervention.		CO4

	3.3	Activities to foster/ stimulate language development, socio-emotional development, and cognitive development		CO4
Practical				
	4.1	Observe and study the early intervention approaches adopted to children with developmental delays (Occupational therapy, sensory integration, speech therapy)		CO5
4	4.2 Visit, observe and report activities of any 2 intervention centres			CO5
	4.3	Conduct an awareness programme for rural/ urban mothers on importance of early developmental stimulation	30	CO5
	4.4 Prep 4.4 aud chil	Prepare aids (one each) suitable for visual, auditory, tactile and kinesthetic stimulation in children.		CO5
	4.5	Prepare an e-learning material on any topic to early developmental stimulation		CO5
5	5	Teacher specific content(This content will be evaluated internally)Practical session, Class room Teaching, Fieldvisits etc.		CO5

# MGU-UGP (HONOURS)

# Syllabus

#### **Mode of Assessment**

		CLASSROO	M PROCEDURE	
	Module		Mode of Transaction	
	1,2,3,4		Lecture, Demonstration and practical Assignments	
	Mode of assess	ment		
	A. Con	tinuous Comprehens	sive Assessment (CCA)	
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks
	Lecture	In-class discussion/Group tutorial work		
		Assignment/oral presentations		
		Viva- voce/Interview		
			Test paper- I	
			Test paper- II/open book test/any other	
Total		<b>VITA</b>	P.V.	25
	Practical	Observation of practical skills	मद्रनुते	
		Viva-voce/Oral Presentation		
	MG	U-UGP (HC	Record	
Total				15
	B. End Semeste	er Examination		
	Written Examin	nation	JUS	50
	Practical Exam	ination		35

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

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## **MGU-UGP (HONOURS)**

Spllabus

Page 294 of 337

Анги зараните	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons)	Home Scienc	e			
Course Name	Hospitality 1	Management				
Type of Course	DCC					
Course Code	MG8DCCH	SC401				
Course Level	400-499					
Course Summary	The course helps the students to develop skill in managing the accommodation department and dealing with the procedural aspects of front office and housekeeping sections of the hospitality institutions, and also develop social skills and effective communication while dealing with guests. This course aims to provide an understanding of the housekeeper's role in the provision and supply of accommodation and cleaning services, as well as evaluating types and materials used throughout the hospitality industry.					
Semester	VIII		Credits		4	Total Hours
Course Details	Learning Approach	Lecture 3	Tutorial -	Practical 1	Others	45+30=75
Pre-requisites, if any	The student second year.	who has take	en Home Scie (HONC	ence as a Ma	ajor comp	onent in the

# COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	ne successful completion of the course the student should be ab	le to:	
1	Identify the functions of various departments of Hospitality Industry	U	1, 2
2	Describe various records and registers for control in the housekeeping and front office departments of hospitality industry	K	3
3	Organize and execute duties, training and appraisals of the staff and conceptualize the staffing requirement.	А	3, 4

4	Develop personal skills and in accommodation operation and services	А	5	
5	Design and manage Linen room, Laundry and suggest the types of cleaning agents and procedures for different levels of guest room and common area cleaning.	S	6	
6	Plan and execute safe and aesthetic treatments for Interior enhancement of hospitality institutions and create a secure working environment	А	2, 6, 10	
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)				

### **COURSE CONTENT**

COURSE	CONT	ENT		
Module	Units	Course description	Hrs	CO No.
Introduc	tion to H	lospitality industry and Front Office		
	1.1	Classification of hospitality Institutions, Importance of tourism in hospitality industry, Types of hospitality operations. Major Departments in a hospitality Institution- classifications and Interdepartmental relationship. Manpower Planning, Staff Recruitment, Job Specifications and Job Descriptions and Training.		CO1
	1.2	Front Office Management- Basic Functions, Layout and sections, organizational structure and Staff Designations, Duties, Qualities and Etiquette.		CO2
	1.3	Basic reservation system, Guests cycle-Procedures of check- in and check-out, Registration, C-form, Room types and Tariff structure, PMS.	16	CO2
1	1.4	Coordination and communication of the front office with other departments; front office records		CO3
	1.5	Lobby management, Guests services, VIP Procedure, Key handling and control, Concierge services, Hostess		CO2
Housek	eeping,	Linen and Laundry Management		
2	2.1	Definition, organization and functions of housekeeping department, organizational Hierarchy and Staff designations, duties and responsibilities of housekeeping employees.	16	CO4

	2.2	SOP - Standard Operating Procedures - Layout, duty roaster, Interdepartmental coordination and communication.		CO4
	2.3	Classification and selection of linen, Layout and physical attributes of Linen room. Linen Distribution and Condemnation		CO5
	2.4	Upkeep and Sanitation- Cleaning equipment, cleaning agents and maids' trolley, Sterilization, disinfection, Pest Control- control of infestation, Room inspection checklist. Cleaning Guest rooms and service areas- procedures and principles, types of room cleaning- daily, weekly, spring cleaning and turn down service.		CO6
	2.5	Laundry: Types, Layout, Equipment, Methods of washing and finishing processes.		CO5
Safety ar	nd Aesth	etic treatments of Indoor & Outdoor Environment:		
	3.1	Safety Aspects- Safety education and First Aid, General Security measures- fire prevention and control, Accident prevention.		CO6
3	3.2	Floral decorations, Napkin folding, Table settings for different occasions. Interior Decoration Trends in the field of Hospitality, Indoor gardens and Landscaping	13	CO6
	3.3	Eco friendly concept in Hospitality Field- Ecotels – Energy and Water Conservation		CO6
Practical	of Hosp	itality Management		
	4.1	Visits to front office and housekeeping departments of a hospitality institution		CO1
	4.2	Photographic evaluation of the layouts of Front office, Housekeeping, Linen and Laundry in hotels		CO5
4	4.3	Role play of guest handling / Guest Cycle/ Practical Bed making procedure / Linen Distribution/ First Aid	30	CO5
	4.4	Aesthetic treatments - Table setting / Flower Arrangement / Curtain Styles / Napkin Folding		CO6
	4.5	Creation of Art Materials from Condemned Linen and conducting exhibition of accessories created with discarded materials.		CO6
	Teache	er specific content		
5	(This co	ontent will be evaluated internally)		
	Practical session, Class room teaching, Field visits, Exhibition etc.			

#### **Mode of Assessment**

		CLASSROOM PROCEDURE			
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration and practical Assignments		
	Mode of assess	sment	·		
	A. Cor	ntinuous Comprehens	sive Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work	TIC .		
		Assignment/oral presentations			
		Viva- voce/Interview	T B		
			Test paper- I		
		TOTTAL	Test paper- II/open book test/any other		
Total		TA		25	
	Practical	10bservation of practical skills	मञ्चनुते		
		Viva-voce/Oral Presentation			
		0-06P (HC	Record		
Total			•	15	
	B. End Semest	er Examination	1110		
	Written Exami	nation	JU2	50	
	Practical Exam	nination		35	

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

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द्यं या समतन

MGU-UGP (HONOURS)

Spllabus



## Mahatma Gandhi University, Kottayam

Programme	BSc (Hons) Home Science			
Course Name	Commercial and Residential Space Designing			
Type of Course	DCE			
<b>Course Code</b>	MG8DCEHSC400			
Course Level	400-499			
Course Summary	This Comprehensive and Innovative Interior Space Design course is designed to equip students with the necessary knowledge and skills required to enter the field of interior design. With an emphasis on both residential and commercial spaces, this curriculum fosters creativity while ensuring practical application of theoretical concepts. Through proper training, participants will learn how to efficiently organize space, determine design and décor preferences, and manage projects effectively. Students will explore current trends in the field and develop their critical thinking and problem-solving abilities to tackle complex design challenges. Furthermore, they will have ample opportunities to apply their newly acquired skills through hands-on projects. Tailored to meet industry demands, our course covers various aspects of interior design including			
Semester	computer-aided design techniques.       VIII     Credits     4     Total Hours			
Course Details	Learning     Lecture     Tutorial     Practical     Others			
	Approach 37113-0115 1 45+30=75			
Pre-requisites, if any	Complete the Semester V course in 'Designing Interior Spaces' and / or should have a basic knowledge of the spatial concepts, space organization and ergonomics and aptitude in fine arts and drawing.			

## **COURSE OUTCOMES (CO)**

CO No.	Expected Course Outcome	Learning Domains *	PO No.			
After the	successful completion of the course the student should be	able to:				
1	Describe Space standards after the comprehensive study of Anthropometrics and spatial requirements for optimal design solutions.	U	1, 3			
2	Analyse residential and commercial properties, providing insights into design considerations and best practices.	An	1,6			
3	Devise conceptual designs through technical drawing techniques and communicate design ideas to clients through artistic expressions.	С	1,4			
4	Handle real-world challenges in small scale project management by virtue of hands-on experiences during internships.	S	2,5, 9			
5	Acquire skill in encompassing environmentally and socially responsible concepts into design work.	S	4, 6			
6	Keep abreast of current trends, technological advancements, and sustainable practices in interior design and materials selection through publications, seminars, and industry visits.	E	6,9, 10			
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

#### **COURSE CONTENT**

Module	Units	Course description	Hours	CO No.
Fundame	entals of	Interior Planning and Design Review		
	1.1	General influences and objectives of interior space design – spatial awareness, theme, style and symbolism		CO1
1	1.2	Ergonomics in Interior Space Design- Principles and Anthropometrics for space planning. Ergonomic designs of Work spaces - Optimum working heights, work triangle.	12	CO1
	1.3	Classification of life spaces for various activities, Functional designs to suit different purposes, age groups and special consideration to Persons with special needs (PWD, Aged and Children)		CO1

	1.4	Professional Practice -Scope of Interior Design as a profession, Role and Career options of Interior Designer. Portfolio preparation. Computer in designing - Software for design development and visualization.		CO5
Int	erior De	sign Methodology		
	2.1	Engineering Drafts man ship- drafting tools; paper sizes and layout, Technical Lines and Lettering, Scales and Measurements, Symbols and Abbreviations, Tracing, Shading, Sciography, Rendering Techniques.		CO4
2.	2.2	Technical and free hand drawing- Orthographic drawing of house plans, Metric Drawings- Isometric, Axonometric and Oblique, Perspective drawing- One point and Two point.	15	CO4
	2.3	Past, Present and future of Architecture-A brief outlook into the evolution of Architecture and Design. Influence of technology and materials on Future designs, Sustainable and Technical materials		CO3
Resident	Commercial Space Planning and Design			
	3.1	Interior Space organization in Residential areas- Standard Dimensions and Layouts, Creation of Mood and Illusion.		CO1
	3.2	Commercial Space Design- Planning considerations, design and layout of Hospitality areas, Offices, Institutions, Merchandising areas. Barrierfree / Inclusive designs for Public spaces.		CO1
	3.3	Visual Merchandising: Visual graphics and signage, Designing Display units, Thematic Decor for Window display and Events	15	CO3
	3.4	Resources for Interior Design- finishes and fixtures for floor, walls, ceilings, etc. Essential Services - Plumbing and Sanitation, Electricity, Lighting, HVAC, Safety and security features.		CO6
	3.5	Specialized Services In Interiors- Acoustics, Fenestration, Audio-Visual and Display Systems, Security Systems, Building Automation, Human Sensitive Devices		CO6

Practica	1			
	4.1	Design Communication and Representational techniques (Any 3) - Drawing of Technical Lines, Lettering, Typography Exercises in Tracing, Shading, Rendering, etc. (One each)		CO4
	4.2	Metric Drawings - Isometric, Axonometric and Oblique – of simple 3D objects and Furniture. Perspective Drawing of Interior Spaces - One point and Two point.		CO4
	4.3	Drafting House plans: Bubble diagram, Line drawing, drawn to scale complete with symbols and abbreviations		CO3
	4.4	Residential Space Planning and Design: Interior Scheme preparation of a residential project		CO4
	4.5	Commercial Space Planning and Design: Preparation of an Interior Scheme of a small commercial project	30	CO4
	4.6	<ul> <li>Design for events : (Minimum 1)</li> <li>Any 1 Dias / Hall Decoration</li> <li>Any 1 Decoration for special occasion or celebrations at home</li> <li>Any 1 Window / Shop display</li> </ul>		CO5
	4.7	Exercises in Visualization- Model making of furniture and simple 3D objects. (Any 2) Develop a building model showing details of interior and exterior components using colour, lighting and landscape design.		CO3
4	4.8	Case Study and Evaluation (One each) of any Commercial or Residential area: Photographic evaluation of interiors with the interior layout.		CO2
	4.9	<ul> <li>Colloquium of Field Exposure and Market Study of decoration materials for interior design:</li> <li>Sanitary fittings</li> <li>Electrical and Light fixtures</li> <li>Finishing materials</li> <li>Furniture, furnishing, accessories etc. (Any 1)</li> </ul>		CO2
	4.10	Field Trips/ Seminars/ Workshops/ Exhibitions (Any 1)		CO10

		CLASSROOM PROCEDURE				
	Μ	lodule		Mode of Transaction		
	1.	2.3.4		Lecture, Demonstration and practical		
				Assignments		
	M	ode of assess	sment			
		A. Cor	tinuous Comprehens	ive Assessment (CCA)		
	L	earning	Formative	Summative		
	ap	proach	Assessment	Assessment	Marks	
			(FA)	(SA)		
			In-class discussion/Group			
	L	ecture	tutorial work			
			Assignment/oral			
			presentations			
			Viva-			
			voce/Interview			
				Test paper- I		
				Test paper- II/open		
			OTTAL	book test/any other		
Total			TA		25	
	Pı	ractical	Observation of practical skills	मञ्चनुते		
			Viva-voce/Oral			
			Presentation			
		MG	U-UGP (HO	Record		
Total					15	
	В.	End Semest	er Examination	1 1 1 1 1		
	W	ritten Exami	nation	1112	50	
	Pı	ractical Exam	ination		35	
		Internship	(Either is Compul	sory) (Outside class		
		hours / d	uring semester breat	k) : Training in any		
	4.11	Design So	ftware (such as CAD	D, AUTODESK, 3DS		
		MAX/ Sketchup or any other popular design				
		software) / One month Internship in a Design or				
		Decoration	n tırm			
_	Teac	her specific	content			
5	(This	This content will be evaluated internally)				
	Practi	Practical session, Class room teaching, Field visits, Exhibition etc.				

#### **Mode of Assessment**

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

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And a subsection of the subsec	Mahatma Gandhi University Kottayam				
Programme	BSc (Hons) Home Science				
Course Name	Applied Ergonomics				
Type of Course	DCE				
<b>Course Code</b>	MG8DCEHSC401				
<b>Course Level</b>	400- 499				
Course Summary	Applied ergonomics focuses on creating environments that reduce the risk of musculoskeletal disorders and other health issues. Students learn to design workspaces and tools that promote proper posture and movement, leading to improved health and safety for individuals in various settings. It emphasizes a user-centered approach to design. Students learn to consider the needs, abilities, and preferences of end-users, ensuring that products and systems are tailored to meet their requirements. This user-centric focus can lead to the creation of more effective and user-friendly products.				
Semester	VIII Credits 4 Total Hours				
Course	Learning Lecture Tutorial Practical Others				
Details	Approach $3$ - 1 $45+30=75$				
Prerequisite, if any	Awareness of motion involved in doing a particular work and basics of work related issues.				

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After th	ne successful completion of the course the student should be	e able to:	
1	Understand workload and anthropometry	U	1
2	Analyse wrong posture, and identify its ill effects and suggest better work postures and anthropometrics	An	2
3	Apply ergonomic concepts in the day today human work environment, to ensure health, safety and welfare of human resources	А	10

4	Apply ergonomic solutions suitable to increase the efficiency of the work, worker and working environment.	А	6		
5	Understand the environmental parameters and other design consideration for workstation/ tools/ equipment	U	7		
6	Customize and optimize the use of ergonomics principles for better health	С	8		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Introduc	ction to E	rgonomics and fundamentals of work physiology		
	1.1	Importance, Principles, Components, Definition and Scope of Ergonomics Impact of Ergonomics in workplace designing, Man- Machine and Environment System interaction.		CO1
	1.2	Physiological factors involved in muscular work, Static and Dynamic muscular effort, Energy requirement for various activities.		CO1
1	<ul> <li>Identification and Analysis of postures - Sitting, standing, reaching, moving- Static and Dynamic work, Body mechanics.</li> <li>1.3 Wrong postures and its ill effects on cardiovascular and muscular skeletal system, Fatigue - Classification, Causative factors and alleviating techniques</li> <li>Work simplification - meaning and techniques, Mundallia alegan of sharese</li> </ul>		20	CO2
	1.4	Work related MSD- cause and prevention, Correct techniques of lifting and carrying weights, Technique such as OWAS, RULA, REBA etc.		CO2
Anthropo	ometry an	d Environmental Parameters in Ergonomics		
	2.1	Human body as a system of leavers, Anthropometric measurements, percentile humans, anthropometric data base.	15	CO3
2.2 Accessible Workstations, Nutrition and physical fitness, Physiological cost of Household activities		Accessible Workstations, Nutrition and physical fitness, Physiological cost of Household activities-		CO5

2		Acceptable workload (AWL), Principles of motion					
		economy					
	2.3	Effect of Illumination/ Lighting on work environment, Thermal comfort and its impact on work efficiency.		CO5			
	2.4	Effect of air pollution, Effect of Noise on					
			CO5				
	2.5 Vibrations and its effect on body parts during work with body parts, Psycho-social environment.						
Design co	nsideratio	n for workstation/ tools/ equipment					
	3.1	Hazards of ill designed workstation, Ergonomic factors considered while designing workplaces, ergonomic / work triangle.		CO6			
3	3.2	10	CO6				
	3.3	3.3 Design consideration for tools/ equipment in various work stations.					
Practical		TOTTAVAN					
	4.1	Identifying the types of postures assumed during work, Analysis and interpretation of the results.		CO3			
	4.2	Calculation of minimum space required for selected activities. Anthropometric Measurements for various work postures.		CO2			
4	<ul> <li>4.3 Study few commonly used tools and equipment on the basis of their shape, size length etc. in saving time, human energy and fatigue</li> <li>4.4 Determination of maximum and comfortable working heights in horizontal and vertical plane</li> <li>4.5 Study a few commonly used tools and equipment on the basis of their shape, size, length etc. to save time, human energy and fatigue. Modify and design minor manual gadgets for optimizing work.</li> </ul>		30	CO5			
				CO4			
				CO6			
		human energy and fatigue. Modify and design minor manual gadgets for optimizing work.		000			
	Teacher	human energy and fatigue. Modify and design minor manual gadgets for optimizing work. specific content					
5	<b>Teacher</b> (This cor	human energy and fatigue. Modify and design minor manual gadgets for optimizing work. specific content ntent will be evaluated internally)					

#### Mode of Assessment

		CLASSROO	M PROCEDURE		
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration and practical Assignments		
	Mode of asses	sment			
	A.C	Continuous Comprehe	ensive Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture In-class discussion/Group				
		Assignment/oral presentations			
		Viva- voce/Interview	· · · ·		
			Test paper- I		
			Test paper- II/open book test/any other		
Total		TAY	All	25	
	Practical	Observation of practical skills	मउन्रते		
		Viva-voce/Oral Presentation			
	MO	U-UGP (HO	Record		
Total	101 4		MOONS,	15	
	B.End Sem	ester Examination	,		
	Written Exam	ination	111 g	50	
	Practical Exan	nination	0.44.70	35	

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation(25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Aggarwal, D.K. (2006) Kitchen Equipment and Design, Aman Publications, New Delhi
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# **MGU-UGP (HONOURS)**

Syllabus

Rear Argenters		Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) H	ome Scienc	e				
Course Name	Advanced Nu	trition II					
Type of Course	DCE						
<b>Course Code</b>	MG8DCEHS	MG8DCEHSC402					
<b>Course Level</b>	400-499		AND	HI			
Course Summary	This advanced course in nutrition will explore the nutritional and biochemical roles/aspects of micronutrients and water. The study of micronutrients will extend beyond the fundamentals of nutrition and provides an integrated overview of the physiological requirements and functions of fat-soluble vitamins, water-soluble vitamins micro minerals and will include its relevance to human health and disease.						
Semester	VIII	Lecture	Credits	Practical	4 Others	Total Hours	
Details	Approach	3	असूत	मञ्चनुते		45+30 = 75	
Pre- requisites, if any	Basic nutrition advanced con human healt	on and bio urse explo h and dise	ochemical oring the ro ase.	understand oles of mic	ling are	prerequisites for this nts and water in	

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No
After the su			
1	Summarise physiological and metabolic role of water	U	1
2	Outline digestion and assimilation, deficiency and toxicity of macro minerals	U	1
3	Explain the functions, sources, deficiency and toxicity of micro minerals and nutritional requirements through life cycle	А	3

4	Analyze the role of fat-soluble vitamins in maintaining various aspects of health, such as vision, bone health, and immune function	An	10		
5	Explain the role of water-soluble vitamins in the body and their functions.	U	4		
6	Develop competence in the scientific foundation of nutrition and dietetics practice and research	А	10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Water &	Macro Mi	nerals	13	
	1.1Distribution of water, functions, requirements, sources, water balance and its regulation			CO 1
	1.2	Importance of hydration	1	CO 1
	1.3	Assessment of hydration Status- common indices	1	CO 1
	1.4	Hazards of hypo and hyper hydration	1	CO 1
1	Calcium-Distribution, a1.5Sources, requirement, dHypocalcemia and Hyp	Calcium-Distribution, absorption and utilization, sources, requirement, deficiency and toxicity, Hypocalcemia and Hypercalcemia	3	CO 2
	1.6	Phosphorus-Distribution, absorption and utilization, sources, requirement, deficiency and toxicity, calcium - phosphorus ratio.	3	CO 2
	1.7	Magnesium, Sulphur, Chorine, Sodium and Potassium- Functions, sources, requirement, deficiency and toxicity.	2	CO 2
Micro Mir	nerals	Zynavus	10	
	2.1	Iron -Distribution, absorption, metabolism, transport and utilization, sources, requirement, deficiency, assessment of iron nutritional status, methods of assessing iron availability, effect of excess iron retention and deficiency	4	CO 3
2	2.2	Iodine, Fluorine and Zinc -Metabolism, functions, sources, requirements, deficiency, assessment of nutritional status and toxicity.	3	CO 3
	2.3	Trace elements - Physiology, function, sources, deficiency and toxicity of cobalt, copper, molybdenum, manganese and selenium,	3	CO 3

Fat Solub	le and Wate	22		
	3.1	Vitamins -Introduction	1	CO 4
	3.2	6	CO 4	
	3.3	Vitamin A, D, E and K - Chemistry, physiological functions, absorption, transport, utilization, storage, excretion and methods of assay, Dietary sources and losses in preparation and recommended intakes, human deficiency and diagnosis, hyper vitaminosis, antivitamins	6	CO 4
3	3.4	Ascorbic Acid- Sources, absorption, transport, functions, deficiency and requirements	2	CO 5
	3.5	Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, Cyanocobalamine Physiological action, sources, functions, deficiency, requirements	5	CO 5
	3.6	Pantothenic acid and biotin- Sources, functions, deficiency	2	CO 5
Practical			30	
	4.1	Nutrient Estimation of the following in various food samples: Calcium	10	CO 6
4	4.2	Iron विद्यया असूतसङ्ग्रेते	5	CO 6
	4.3	Phosphorus	8	CO 6
	4.4	Vitamin C	7	CO 6
	Teacher s	pecific content		
5	(This conte	ent will be evaluated internally)		
	Practical s	ession, Class room Teaching, Field visits etc.		
		~ y uuvus		

#### **Mode of Assessment**

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of asses	sment	·				
	A.C	Continuous Comprehe	ensive Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work					
		Assignment/oral presentations					
		Viva- voce/Interview	78				
			Test paper- I				
		TOT TAN	Test paper- II/open book test/any other				
Total		TAT		25			
	Practical	Observation of practical skills	मञ्चन्द्रते				
		Viva-voce/Oral Presentation					
	MC	0-06P (HC	Record				
Total				15			
	B.End Seme	ester Examination	1110				
	Written Exami	nation	JUD	50			
	Practical Exam	nination		35			

#### **End Semester Examination**

#### Theory: 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2 (1x10=10)

#### **Practical: 35 Marks**

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Bamji M.S., Krishnaswamy K. and Brahman G.N.V.(2017) . Textbook of Human Nutrition, 4th Edition, Oxford & Ibh Publishing.
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Address Sectors	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	cience				
Course Name	Environment and H	luman Re	source Ma	nagement		
Type of Course	DCE					
Course Code	MG8DCEHSC403	MG8DCEHSC403				
Course Level	400-499	400-499				
Course Summary	This course is designed to provide students with a comprehensive understanding of the intersection between environmental sustainability and human resource management. It explores the dynamic relationship between organizations, their employees, and the natural environment, emphasizing the role of HRM in fostering sustainable business practices					
Semester	VIII		Credits	ŝ	4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3		1	-	45+30
Pre-requisites, if any	Basic understanding issues	of resour	ce manager	ment and in	iterest in e	environmental

# COURSE OUTCOMES (CO) U-UGP (HONOURS)

CO No.	Expected Course Outcomes	Learning Domains *	PO No				
After the	After the successful completion of the course the student should be able to:						
1	To understand management theory and principles	U	1,2				
2	Analyze the role of communication, leadership and motivation	An	4,10				
3	Understand the significance of renewable energy resources	U	6,7				
4	To Evaluate the environmental problems and to develop civic consciousness towards environmental concerns	U	1,7				
5	To develop and appreciation towards environment and management concepts	Ap	7,10				
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)							

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.
Significance of	f Resource	Management and Managerial Decision Makin	g	
	1.1	Management process: Planning - Types and Dimensions; Planning in a systems perspective, Factors affecting planning; Implementation-Controlling, Checking and Adjusting; Evaluation.		CO1
	1.2	Systems Approach to Management. Henri Fayol's Principles of management;		CO1
1	1.3	Levels of management. Management by Objectives (MBO): meaning, features, scopes, Total Quality Management (TQM): Objectives, components and significance	15	CO1
	1.4	Concept, Steps, types, Stages and Techniques of decision making; Creativity; Rationality and Risk and Certainty.: Methods of resolving conflicts-Dominance, submission, compromise, conversion, integration		CO1
Essentials in N	Ianagemen	विराया यसतस्य तत्व ते		
2	2.1	Communication- Meaning, Significance, Recent trends in communication ICT tools- print and electronic media, email, internet, uses of multimedia, mobile phone, video and teleconferencing, web technology, tech talks and information kiosks. Barriers of communication.	15	CO2
2	2.2	Leadership-Importance, Characteristics and styles, quality of a leaders Trait theory of leadership, Behavioral theory of leadership	15	CO2
	2.3	Motivation - Importance, theories-Maslow's theory, Herzberg's Motivation Hygiene Model, Key elements of motivation.		CO2
Energy Conse	rvation and	Environment Management		
3	3.1	Energy resources: types-renewable and non- renewable, need and importance of renewable energy resources;		CO3

		Sources and Devices: Photovoltaic cell, solar	15	
		water heaters, Solar cooker, dryer		
		Rainwater harvesting; Wind mill, bio-mass		
		plants — working principles, application,		
		advantages and limitations. Energy		
		conservation techniques.		
		Environmental education and awareness,		
		environment problem-ozone depletion, global		
		warming, climate change, current		
		environmental issues in India. Waste		
		management-Definition, classification,		
		segregation,		
		Pollution: types-Land, water and air- causes		
		and effects, control measures- global warming,		
	3.2	acid rain and ozone layer depletion, Sound		CO4
		Pollution-Hazards and control measures;		
		Wastemanagement-6Rs, methodsof disposal-		
		dumping, composting, vermi- compost, bio gas		
		waste management		
		Soals nit its construction and functioning.		
		Role of organic pesticides and fertilizers in		
		environmental sustainability: Green Protocol:		
	/	Carbon Foot Print.		
Practical-App	lication of r	nanagement principles and ecofriendly practic	ces	
		Plan an event incorporating management		
	4.1	process, Study on recent trend in		
		Communication		
		Visit to renewable energy centre /rain water		
		harvesting unit.		
	4.2	Use solar dryer and cookers and prepare dried		
4		products and prepare leaflets to popularise	30	CO5
		these devices		
		Study on waste segregation and management		
		practices in rural/urban areas		
	4.3	Prepare organic pesticide/insecticide/fertilizer		
		Prepare a decorative or functional product		
		from waste material		
-	Teacher s	pecific content		
5	(This cont	ent will be evaluated internally)		
	Practical s	ession, Class room Teaching, Field visits etc.		

Mode of Assessment

	CLASSROOM PROCEDURE				
	Module		Mode of Transaction		
	1,2,3,4		Lecture, Demonstration and practical Assignments		
	Mode of assess	ment			
	A. Con	tinuous Comprehens	ive Assessment (CCA)		
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks	
	Lecture	In-class discussion/Group tutorial work			
		Assignment/oral presentations			
		Viva- voce/Interview			
			Test paper- I		
			Test paper- II/open book test/any other		
Total				25	
	Practical	Observation of practical skills	-111-		
		Viva-voce/Oral Presentation	मञ्चनुते		
			Record		
Total	MG	U-UGP (HC	NOURS)	15	
	B. End Semeste	er Examination	1100110/		
	Written Examin	nation		50	
	Practical Exam	ination	1115	35	
		C +++++			

#### **End Semester Examination**

#### Theory : 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Paneerselvam and Mohana Ramakrishnan (2007), Environmental Science Education.
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- 8. International (P)Ltd, New Delhi.
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- 11. Dr. N. Arumugam 2005.Environment and Pollution. Saras Publication Nagercoil.G.N.Tiwari,(2010)SolarEnergyFundamentalsDesign,NarosaPublishingHou se, New Delhi.
- 12. Harold Koontz, Heinz Weihrich (2014) Principles of Management, Mcgraw hill
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- 2. N.Manivasakam(2010)EnvironmentalPollution,NationalBookTrustIndia,New Delhi.

Syllabus

- Nambiar, R.K (2007), Textbook of Environmental Studies, SCITECHPublication (India) Pvt.Ltd, Chennai.
- 4. P.C. Varghese (2013) Building construction, PHI learning Delhi

ABERET SHERE TO	Mahatma Gandhi University Kottayam					
Programme	BSc (Hons) Home S	BSc (Hons) Home Science				
Course Name	Functional Foods an	nd Nutrac	euticals			
Type of Course	DCE					
Course Code	MG8DCEHSC404					
Course Level	400 - 499	400 - 499				
Course Summary	The course aims to discuss several classes of functional foods and nutraceuticals and to explore the concept of bioactive compounds and their impact on health. It also provides students with a comprehensive understanding of functional ingredients encompassing scientific principles, health benefits regulatory aspects and practical applications					
Semester	VIII		Credits	R	4	
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	Total Hours
		3		1		45+30=75
Pre-requisites, if any	Knowledge on food s	science, nu	trition and	dietetics		

# COURSE OUTCOMES (CO) 2121 3131 ALAISA

CO No.	Expected Course Outcome	Learning Domains *	PO No				
After th	After the successful completion of the course the student should be able to:						
1	Explain the functions of nutraceuticals and functional foods for the treatment of various disorders.	U	1,2, 4				
2	Examine the importance of probiotics and prebiotics in human health	An	1,2, 4				
3	Relate the various concepts, classification of nutraceuticals and the active components of various nutraceutical ingredients.	An	1,2, 4,9				
4	Justify the principle of nutraeuticals in controlling life style diseases.	Е	1,2, 4,9				
5	Recognize the marketing and regulatory aspects of nutraceuticals and functional foods	U	1,2,4, 9				
6	Gain skills in developing functional food products, their sensory attributes and potential health benefits.	S	1,2, 8,9,10				
*Remen Interest	*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)						

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO No.			
Introduction to Nutraceuticals and Functional Foods - Probiotics and Prebiotics							
1	1.1	Inter relationship of food, nutrients and health. Bioactive compounds in foods. Definition of functional and traditional foods, designer foods, pharma foods and FOSHU foods. An overview of Nutraceuticals and Nutrigenomics.	20	CO1			
	1.2	History of functional foods, components of functional foods, stages involved in development of functional foods. Types of Functional Foods.		CO1			
	1.3	Concept of free radical and antioxidant. Increasing role of Nutraceuticals in management of health and diseases.		CO1			
	1.4	Human gastrointestinal tract and its microbiota		CO2			
	1.5	Prebiotics - Definition, role of prebiotic as functional ingredient, examples.		CO2			
	1.6	Probiotics - Definition, role of prebiotic as functional ingredient, examples.		CO2			
	1.7	Synbiotics - Definition, role of prebiotic as functional ingredient, examples.		CO2			
	1.8	Role of : Polyphenols: Flavonoids, catechins, isoflavones, tannins Phytoestrogens and Phytosterols Pigments: Lycopene, Curcumin Organo sulphur compounds		CO2			
Nutraceuticals							
2	2.1	Classification and Sources of Nutraceuticals Relation of Nutraceutical Science with other Sciences: Medicine, Human physiology, genetics, food technology, chemistry and nutrition		CO3			
	2.2	Plant Based Nutraceuticals: Glucosamine, Octacosanol, Carnitine, Melatonin and Ornithine alpha ketoglutarate, Chlorophyll, Caffeine, Green tea, Lecithin, soybean	10	CO3			
	2.3	Fruit based nutraceuticals: grape products, Lycopene, carotene, proanthocyanidins.		CO3			
	2.4	Animal and Algae based nutraceuticals		CO3			
	2.5	Novel nutraceutical ingredients.		CO3			
Food as remedies & Regulatory aspects							
---------------------------------------	---	---	----	-----	--	--	--
	3.1	Nutrigenomic links to chronic diseases. Nutraceuticals bridging the gap between food and drug.		CO4			
	3.2	Nutraceuticals for Mental Health, Arthritis and Osteoporosis		CO4			
	3.3	Nutraceuticals Remedies for cancer, heart disease, diabetes		CO4			
3	3.4	Nutraceutical Remedies for Digestive Disorders (Ulcer, Liver disorders, Lactose Intolerance, Celiac Disease) and Circulatory System	15	CO4			
	3.5 International and national regulatory aspects of functional foods in India, ICMR guidelines for Probiotics.			CO5			
	3.6	Development of biomarkers to indicate the efficacy of functional ingredients. Research frontiers in functional foods.		CO5			
Practical							
	4.1	Market survey of existing healthy probiotic foods		CO6			
	4.2	Development of protein enriched foods as a functional food		CO6			
	4.3	Production of functional food for diabetic and CVD patients		CO6			
4	4.4	Production of functional food for cancer patient	30	CO6			
	4.5	Fortify common food items with probiotics		CO6			
	4.6 Assess the antioxidant level of different fruits or vegeta using DPPH radical scavenging activity.			CO6			
	4.7	Demonstrate the preparation of different types of yogurt enriched with probiotics.		CO6			
E	Teache	r specific content					
5	(1his co	Practical session, Class room Teaching, Field visits etc.					

#### **Mode of Assessment**

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of asses	ssment					
	A.	Continuous Compreh	ensive Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work Assignment/oral					
	F	presentations					
		Viva- voce/Interview	IS I				
			Test paper- I				
		OTTAN	Test paper- II/open book test/any other				
Total	/6	Saran Tran	EEEE	25			
	Practical	Observation of practical skills	angozan (				
	M	Viva-voce/Oral Presentation	)NOURS)				
			Record				
Total		Sull-1	here	15			
	B.End Ser	mester Examination	ງແສ				
	Written Exam	ination		50			
	Practical Examination			35			

#### **End Semester Examination**

#### Theory : 50 Marks

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- 1. Mahtab, S, Bamji, Kamala Krishnasamy, G.N.V. Brahmam, Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi, 2015.
- Simopoulus, A.P. and Ordovas, K.J.M., 2004, Nutrigenetics and Nutrigenomics, Vol. 93, Karger, Switzerland.
- 3. Webb G.P (2006), Dietary Supplements and Functional Foods, Blackwell Publishing Ltd, New York.
- 4. Tamine. A (2005), Probiotic Dairy Products, Blackwell Publishing Ltd, United Kingdom.
- 5. USFDA regulations on functional foods

#### SUGGESTED READINGS

- 1. Robert E.C. Wildman, Robert, Wildman, Taylor C, Handbook of Nutraceuticals and Functional Foods, Third Edition, Wallace, 2002
- 2. Pathak Y. Handbook of Nutraceuticals; Ingredient, Formulations, and Applications. CRC Press, Taylor & Francis Group, London.
- 3. Richard Neeser& J. Bruce German Bioprocesses and Biotechnology for Functional Foods and Nutraceuticals, Jean, Marcel Dekker, Inc.2004
- Aluko, Rotimi, Functional Foods and Nutraceuticals, Springer-Verlag New York Inc., 2012.
- 5. Satinder Kaur Brar, Surinder Kaur and Gurpreet Singh Dhillon, Nutraceuticals Functional Foods, 2014.
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Rent Superverse	Mahatma Gandhi University Kottayam						
Programme	BSc (Hons) H	Iome Science					
Course Name	Food Chemis	stry					
Type of Course	DCE						
Course Code	MG8DCEHS	MG8DCEHSC405					
Course Level	400 - 499						
Course Summary	This course of properties of a	covers advance food.	d principles	of food sci	ence, char	acteristics and	
Semester	VIII		Credits		4	T ( 1 H	
Course Details	Learning	Lecture	Tutorial	Practical	Others	I otal Hours	
Course Details	Approach	3	X	1		45+30=75	
Pre-requisites, if any	Basic underst biochemistry, involved in fc	anding of gener can be benefic ood composition	ral chemistry ial for unders 1.	or a backgr standing the	ound in bio biological	ology with processes	

### COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No					
After th	After the successful completion of the course the student should be able to:							
1	Understand the physic chemical changes that occur in food.	U	1					
2	Understand the chemistry and explain properties of carbohydrate, protein and lipids in relation to cookery.	U	1					
3	Acquire practical skills to understand the properties of food components.	А	1					
4	Develop nutritious products with better properties.	А	10					
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)								

TAYPY

#### **COURSE CONTENT**

Module	Units	Course description	Hrs	CO NO
Physio- cl	nemical p	roperties of food		
1	1.1	Physical properties of water – role of water in food systems, bound water in food products, water activity in foods.	10	CO 1
	1.2	Colloidal systems in food- True solutions and colloids, types and properties of colloids.		CO 1
Chemistr	y of starc	h and sugar		
	2.1	Starch: components and characteristics of food starches. Native and modified starches and their applications, effect of dry and moist heat on starch.		CO 2
2		Gel formation, factors affecting gelatinization, retrogradation, syneresis.		
2	2.2	Food Polysaccharides: algal polysaccharides; seed gums, exudates gums, microbial polysaccharides.	20	CO 2
	2.3	Sugar and sugar products- Types of sugar used in cookery, stages of sugar cookery. Types of sweeteners. Crystallization of sugar and factors affecting. Types of candies.		CO 2
	2.4	Chemistry of milk sugar, non-enzymatic browning.		CO 2
Chemistr	y of Prote	eins		
	3.1	Structure and composition, structure of proteins and forces involved in protein conformation.		CO 2
	3.2	Functional properties of proteins in foods.	15	CO 2
3	3.3	Components of wheat protein and structure.		CO 2
	3.4	Gluten formation and factors affecting. Denaturation of protein and factors affecting. Egg white foam formation, stages and factors affecting.		CO 2
	3.5	Role of proteins in food products; Texturized vegetable protein, protein concentrates.		CO 2

	Practical Session: Exploring the Chemistry of Culinary Ingredients.					
		Chemistry of Fats and oil, pectic substance, plant pigments, spices and condiments				
4	4.1	Fats and oil -Structure, composition and classification. Properties of lipids.		CO 2		
	4.2	Hydrogenation, winterization, flavor reversion, smoking point, Rancidity-Types, Mechanism and prevention	30	CO 2		
	4.3	Role of fat/oil in food products; Factors affecting fat absorption of foods. Fat substitutes.		CO 2		
	4.4	Pectins, phenolic compounds, enzymatic browning in fruits and vegetables		CO 2		
	4.5	Types of plant pigments, effect of acid and alkali.		CO 2		
	4.6	Types and active principles of spices and condiments.		CO 2		
5	Teache	r specific content				
	(This co	ontent will be evaluated internally) Practical session, Class room Teaching, Field v	visits etc.			

### **MGU-UGP (HONOURS)**

# Syllabus

#### Mode of Assessment

		CLASSROOM PROCEDURE					
	Module		Mode of Transaction				
	1,2,3,4		Lecture, Demonstration and practical Assignments				
	Mode of assess	sment					
	A. Con	ntinuous Comprehens	sive Assessment (CCA)				
	Learning approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
	Lecture	In-class discussion/Group tutorial work	HIGH I				
		Assignment/oral presentations					
		Viva- voce/Interview					
			Test paper- I				
		TOTTAN	Test paper- II/open book test/any other				
Total		taran anar	TITT	25			
	Practical	Observation of practical skills	and				
	MG	Viva-voce/Oral Presentation	)NOURS)				
			Record				
Total		Sulla	1110	15			
	B. End Semeste	er Examination	042				
	Written Exami	nation		50			
	Practical Examination			35			

#### **End Semester Examination**

#### **Theory: 50 Marks**

- i) Short answer type questions: Answer any 10 questions out of 12 (10x2=20)
- ii) Short essay type questions: answer any 5 questions out of 7 (5x4=20)
- iii) Essay type questions: Answer any I question out of 2(1x10=10)

#### Practical: 35 Marks( Practical)

- i) Laboratory Evaluation (25 marks)
- ii) Record (10 marks)

#### REFERENCES

- Bowers, J (1992): Food Theory and Applications, 2nd MacMillan Publishing Co., New York.
- 2. Charley, H (1982): Food Science, 2nd Edition, John Wiley & Sons, New York.
- Khader V.(2001) Text book of Food Science and Technology, Published by Directorate of Knowledge Management in Agriculture Indian Council of Agricultural Research Krishi Anusandhan Bhavan-I, Pusa New Delhi.
- 4. Potter, N. and Hotchkiss, J.H (1996): Food Science, 5th Edition, CBS Publishers and Distributors, New Delhi.
- 5. Srilakshmi B., (2003), 'Food Science'', New Age International.

#### SUGGESTED READINGS

- 1. Journal of Food Science
- 2. Advances in Food Research
- 3. Journal of Food Science and Technology
- 4. Cereal Science
- 5. Journal of Dairy Science
- 6. Peckham, G and Freeland-Graves, G.H (1979): Foundations of Food Preparation
- 7. Pomeranz, Y (1991): Functional Properties of Food Components, 2nd Edition, Academic Press, New York.

#### **SUMMER INTERNSHIP**

After the completion of the IV semester, the students may undergo a 15 days summer internship, apprenticeship or community outreach activities under any one of the following areas.

- Boutiques/Stitching Units
- ➢ Food Industry/Units
- Day-care Centers /Anganwadi
- NGO Centers /SOS Villages/Rehabilitation Centers
- Event Management Centers/ Hospitality Institutions
- Design software training Centers
- Interior Design Firms

The internship can be done individually or as a group of maximum 5 students. However, a report of the internship in duplicate should be submitted to the department to attain 2 credits as per the curriculum.

## विद्यया अमूतमइनुते

	MODE OF ASSESSMENT						
	A. Continuous Comprehensive Assessment (CCA)						
	Learning Approach	Learning ApproachFormative Assessment (FA)Summative A (SA)		Marks			
	Internship	Performance Appraisal from the Industry/Units		15			
Assessment		Total		15			
Types	B. Semester End Examination						
	Exam Components						
	Internship Report						
	Viva-Voc	Viva-Voce					
	Total						

Rear Strategy	Mahatma Gandhi University Kottayam					
Programme	B.Sc. Home	Science				
Course Name	Project Diss	ertation				
Type of Course	PRJ	PRJ				
Course Code	MG8PRJHS	MG8PRJHSC400				
Course Level	400					
Course Summary	The internshi operation of a	p aims to pro a textile indus	vide practica stry specifical	l experience a lly focusing o	and insight in on the export s	to the actual segment.
Semester	VIII		Credits	S	12	Total
Course	Learning	Lecture	Tutorial	Practical	Others	Hours
Details	Approach	10	AXA	-	-	-
Pre- requisites, if any	A basic know	vledge about t	the functions	of a garment	industry.	·

## COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome	Learning Domains *	PO No		
1	Identify a research problem.	U	2, 4, 6, 10		
2	Collect critique knowledge from research literature reviews.	А	2, 4, 6, 10		
3	Employ appropriate research design and associated methods rigorously.	А	2, 4, 6, 10		
4	Operate research project in an ethical way and draw conclusions.	А	2, 4, 6, 10		
5	Analyze the research in a scholarly manner appropriate to the disciplinary area.	An	2, 4, 6, 10		
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)					

#### **COURSE CONTENT**

#### **Content for Classroom Transaction (Units)**

	<b>Course Description</b>	Hrs	CO No.
•	An introductory synopsis on the research topic shall be submitted at the		
	commencement of the semester.		
•	Intermediate reports on the work in progress should be produced		
	timely.		
•	The final documentation along with the respective institution's		
	certification shall be obtained to prove them genuine.		
•	The work of the students will be supervised and assessed by the faculty		
	members who will award the internal marks.		
•	The report shall be typed on A4 size paper with 1-inch margins on all 4		
	sides in Times New Roman font with font size 12 and 1.5 line spacing		1 2 2 4 5
	and shall submit the report in triplicate.	-	1, 2, 3, 4, 5
•	The report shall have 5 chapters including introduction, review of		
	literature, methodology, results & discussions and summary &		
	conclusion ending with bibliography.		
•	Use APA style guide for formatting the referencing system		
	throughout the manuscript, the bibliography at the end of the work,		
	formatting and labelling of all tables, and for the captions for all		
	figures.		
•	The dissertation project will be evaluated both internally and		
	externally.		

	MODE OF ASSESSMENT						
	A. Continuous Comprehensive Assessment (CCA)						
	Learning Approach	Formative Assessment (FA)	Summative Assessment (SA)	Marks			
		Relevance of Topic		10			
		Depth of Research		20			
	Dissertation	Punctuality		10			
			Final Report	20			
Assessment Types		Т	60				
	B. Semester End Examination						
	Exam Components						
	Relevance of The Topic and Analysis						
	Review and Data Collection or Experiment						
	Project Content and Presentation						
	Project Viva						
	Total						

#### References

1. Publication Manual of the American Psychological Association: The Official Guide to APA Style. (2019). United States: American Psychological Association.

TAYA



#### **Syllabus Revision Workshop Participants**

- Mrs. Manjulin Jacob, Associate Professor, Assumption College, Changanassery. (BoS Chairperson)
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  (BoS Member)
- Mrs. Rose Mary Francis, Associate Professor, St Teresa's College, Ernakulam. (BoS Member)
- 4. Mrs. Sherin Abraham, Assistant Professor, Morning Star Home Science College, Angamaly (BoS Member)
- 5. Mrs. Sajitha Suseelan S., Assistant Professor, Morning Star Home Science College Angamaly (BoS Member)
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- 20. Ms. Anu CS, Assistant Professor on contract, St Teresa's College, Ernakulam