

BANASTHALI VIDYAPITH
Department of Home Science

Minutes of the Board of Studies held on 24 April 2016 at 10: 30a.m. in the Department of Home Science, Gyan Mandir, Banasthali Vidyapith

Summary

Particulars	Detail	Pages
Confirmation of BOS Minutes 11 th March' 2012	Confirmed	
Panel of Examiner	Updated for theory and practical keeping in view the Bye- Law of 15.3.0 2 of the Vidypaith	Submitted in Soft copy to secrecy section
Recommend course of study curricula / Syllabus	<p style="text-align: center;">minor changes in syllabus</p> <p>I. B.A.</p> <p>Paper-2.1 Introduction to Human Development</p> <p>Paper- 3.1 Nutrition in Health and Disease</p> <p>Paper -4.2 Life Span Development</p> <p>II. B.Sc.(Home Science) examination</p> <p>HS4101 Introduction to Home Science</p> <p>HS4104 Introduction to Human Development</p> <p>HS4202 Elements of Food Science</p> <p>HS4303 Introduction to Resource Management</p> <p>HS4402 Communication Process</p> <p>HS4504 Assessment of Nutritional Status</p> <p>III. M.Sc. (Home Science Human Development)</p> <p>HS45102 Research Methods in Human Development</p> <p>HS45103 Techniques of Studying Human Development and Scientific Writings (theory and practical)</p>	

	<p> HSHD 5104 Theories of Human Development HSHD 5202 Early Childhood Care and Education HSHD 5205 Contemporary Issues and Concerns in Human Development (specified practical) HSHD5302 Introduction to Guidance and Counseling HSHD5303 Curriculum for Early Years HSHD5304 Child in the family HSHD5403A Principles & Procedures in Guidance and Counseling HSHD5404A Guidance and Coping in Crisis HSHD5403B Innovative Programmes & Curriculum Planning for ECE Centers M.Sc. (Home Science Food Science and Nutrition) HSFN5204 Problems in Human Nutrition HSFN5302 Advanced Nutrition HSFN 5303 Applied and Community Nutrition HSFN5304 Nutrition in Specific Diseases and Disorders HSFN5402- Nutrition for Health and Fitness (New Course) M.Sc. (Home Science Clothing and Textile) HSCT5304 Textile Merchandising (Th.) HSCT5403 CAD in Textile and Garment Designing </p>	
	<p>Change in maximum marks for project in M. Sc. (Home Science) IV semester HD/ FN/ CT from 180 to 90</p>	
Evaluate the examiner's reports	Total 49 reports were received and evaluated	
Co-opt external	Board co-opted following external members	

members	<p>1. Dr .Sheela Sangwan , Professor (HDFS) HAU, Hisar</p> <p>2. Dr Mini Sheth, Associate Professor (Foods and Nutrition) The M. S. University of Baroda,</p> <p>3. Anjali Karoliya , Professor (Clothing and Textile) The M. S. University of Baroda,</p>	
Any other Item	Identified Online learning resources for M.Sc. Students	
	Proposal for an integrated M. Phil + Ph. D Home Science Programme	

BANASTHALI VIDYAPITH
Department of Home Science

Minutes of the Board of Studies held on 24 April, 2016 at 10:30 am in the Department of Home Science, Gyan Mandir, Banasthali Vidyapith

PRESENT

Dr. Krishna Khambra

External Members

Dr. Shanti Balda

Prof. Anuradha Goyle

Dr. Chandra Kumari

Internal Members

Ms. Charu Panwar

Dr. Charu Vyas

Dr. Deepti Bhargava

Dr. Ekta Singh Chauhan

Dr. Gita Bisla

Dr. Monika Jain

Dr. Namrata Arora Charpe

Mrs. Navita Pareek

Dr. Neelam Chaturvedi

Ms. Parul Sharma

Dr. Parul Tripathi

Mrs. Parsansha Sharma

Mrs. Shalini Juneja

Prof. Sheel Sharma

Dr. Shivi Rastogi

Mrs. Shweta Dubey

Prof. Suman Pant

Dr. Suvidha

Ms. Ekta Sharma

Special Invitee

Mrs. Namita Bhattnager

Ms. Prawla Pandey

Prof. Indu Bansal

Convener (in the Chair)

Note: Prof. Sheel Sharma (Internal Members) could not attend the meeting.

Agenda Item No. 1 of the BOS: The board confirmed the minutes of the meeting of the board of study held on 11th March' 2012.

Agenda Item No. 2 of the BOS: Panel of Examiners for each examination up to and inclusive of Master's Degree Examination has been prepared in the prescribed format keeping in view the Vidyapith Bye-laws. It has been sent to secrecy section by the convener.

Agenda Item No. 3 of the BOS: To recommend courses of Study Curricula and scheme of examination for B.A., B.Sc. (Home Science), M.Sc.(Home Science- HD/CT/FN)

Board recommended courses of Study Curricula and scheme of examination for different courses as follows-

I. There is no change in scheme of examination for B.A. and B.Sc. (Home Science).

II. M.Sc. (Home Science) HD / FN/ CT students go for work experience / internship after second semester. They have to make presentations and submit report at the beginning of III Semester and given Grades A, B Or C (A-Excellent, B- Satisfactory, C-Poor) on the basis of presentation reports submitted by student and reports sent by appropriate authority after completing of internship. Board recommended that existing summer **training grades be replaced** by (A-Excellent, B-Good and C- Satisfactory) for poor grade sounds negative.

Board recommended change in evaluation scheme/ pattern of project work in M.Sc. (Home Science) IV semester (2017-18) onward examination in HD / FN/ CT. Accordingly scheme for IV Semester will be revised as follows –

HUMAN DEVELOPMENT

SEMESTER IV (April/May, 2018)

Paper	Contact Hour		Duration (Hrs.)		Max. Marks		Cont.Asst. Marks		Sem.Asst. Marks		
	T	P	T	P	T	P	T	P	T	P	
1. Parent & Community Education	4		3	4	60	30	20	10	40	20	
2. Abnormal Psychology	4		-	3	-	60	-	20	-	40	-
Any One Specialization Groups											
Group A: Guidance & Counseling											
3. Principles & Procedures in Guidance & Counselling	4		-	3	-	60	-	20	-	40	-
4. Guidance & Coping in Crisis (Practical common for paper 3 & 4)	4	4	3	4	60	30	20	10	40	20	
Group B: Early Childhood Education											
3. Innovative Programmes & Curriculum Planning for ECE Centers	4		-	3	-	60	-	20	-	40	-
4. ECE Centers Organization, Administration & Management (Practical common for paper 3 & 4)	4	4	3	4	60	30	20	10	40	20	
5. Project Work/Dissertation	12		-	-	-	90	-	30	-	120	-
Total	28	8			420	60	140	20	280	40	

FOOD SCIENCE AND NUTRITION

SEMESTER IV (April/May, 2018)

Paper	Contact Hour		Duration (Hrs.)		Max. Marks		Cont.Asst. Marks		Sem.Asst. Marks		
	T	P	T	P	T	P	T	P	T	P	
1. Techniques and Instrumentation in Nutrition Research	4		-	3	-	60	-	20	-	40	-
2. Nutrition for Health & Physical Fitness,	4	4	3	4	60	30	20	10	40	20	

HUMAN DEVELOPMENT

SEMESTER IV (2017-18)

Paper	Contact Duration	Max. Marks	Cont.Asst. Marks		Sem.Asst. Marks		Hour		(Hrs.)		
			T	P	T	P	T	P	T	P	
1. Parent & Community Education	4	4	3	4	60	30	20	10	40	20	
2. Abnormal Psychology	4	-	3	-	60	-	20	-	40	-	
Any One Specialization Groups											
Group A: Guidance & Counseling											
3. Principles & Procedures in Guidance & Counselling	4	-	3	-	60	-	20	-	40	-	
4. Guidance & Coping in Crisis (Practical common for paper 3 & 4)	4	4	3	4	60	30	20	10	40	20	
Group B: Early Childhood Education											
3. Innovative Programmes & Curriculum Planning for ECE Centers	4	-	3	-	60	-	20	-	40	-	
4. ECE Centers Organization, Administration & Management (Practical common for paper 3 & 4)	4	4	3	4	60	30	20	10	40	20	
5. Project Work	6	-	-	-	90	-	30	-	60	-	
Total	22	8			330	60	110	20	220	40	

FOOD SCIENCE AND NUTRITION

SEMESTER IV (2017-18)

Paper	Contact Hour	Duration (Hrs.)	Max. Marks		Cont.Asst. Marks		Sem.Asst. Marks			
			T	P	T	P	T	P		
1. Techniques and Instrumentation in Nutrition Research	4	-	3	-	60	-	20	-	40	-
2. Nutrition for Health & Fitness, Common practical	4	4	3	4	60	30	20	10	40	20

Common practical for papers 1 & 2											
(i) Specialisation I:											
Food Processing											
3.	Food Processing and Technology	4	3	-	60	-	20	-	40	-	
4.	Food Product Development Safety and Quality Control	4	4	3	4	60	30	20	10	40	20
Common practical for papers 3 & 4											
(ii) Specialisation II:											
Therapeutic Nutrition											
3.	Clinical Nutrition and Dietetics	4	-	3	-	60	-	20	-	40	-
4.	Nutrition and Critical Care	4	4	3	4	60	30	20	10	40	20
Common practical for papers 3 & 4											
5.	Project work	12	-	-	-	180	-	60	-	120	-
Total		28	8			420	60	140	20	280	40

CLOTHING AND TEXTILE

SEMESTER IV (April/May, 2018)

Paper	Contact		Duration		Max. Marks		Cont.Asst. Marks		Sem.Asst. Marks	
	Hour		(Hrs.)		Marks		Marks		Marks	
	T	P	T	P	T	P	T	P	T	P
1. Textile Finishes	4	4	3	4	60	30	20	10	40	20
2. Commercial Clothing	4	8	3	4	60	60	20	20	40	40
3. CAD in Textile and Garment Designing	2	8	3	4	30	60	10	20	20	40
4. Project Work	12	-	-	-	180	-	60	-	120	-
Total	22	20			330	150	110	50	220	100

Grand Total (For all the Semesters) (390+390+390+390) = 1650

Project evaluation scheme

Students will take Project on a suitable problem related to their respective field of specialization. Project will commence in the second semester and will be completed in the fourth semester. The project report

for papers 1 & 2											
(i) Specialisation I:											
Food Processing											
3.	Food Processing and Technology	4	3	-	60	-	20	-	40	-	
4.	Food Product Development Safety and Quality Control, Common practical for papers 3 & 4	4	4	3	4	60	30	20	10	40	20
(ii) Specialisation II:											
Therapeutic Nutrition											
3.	Clinical Nutrition and Dietetics	4	-	3	-	60	-	20	-	40	-
4.	Nutrition and Critical Care Common practical for papers 3 & 4	4	4	3	4	60	30	20	10	40	20
5.	Project Work	6	-	-	-	90	-	30	-	60	-
Total		22	8			330	60	110	20	220	40

CLOTHING AND TEXTILE

SEMESTER IV (April/May, 2017-18)

Paper	Contact		Duration		Max. Marks		Cont.Asst. Marks		Sem.Asst. Marks	
	Hour		(Hrs.)		Marks		Marks		Marks	
	T	P	T	P	T	P	T	P	T	P
1. Textile Finishes	4	4	3	4	60	30	20	10	40	20
2. Commercial Clothing	4	8	3	4	60	60	20	20	40	40
3. CAD in Textile and Garment Designing	2	8	3	4	30	60	10	20	20	40
4. Project Work	6	-	-	-	90	-	30	-	60	-
Total	16	20			240	150	80	50	160	100

Grand Total (For all the Semesters) (390+390+390+390) = 1560

Project evaluation scheme

Students will take Project on a suitable problem related to their respective field of

shall be type written and submitted in triplicate so as to reach the office of the Secretary at least three weeks before the commencement of theory examination. The project report shall be of 180 marks.

The distribution of marks will be as under –

Total Marks - 180

- (i) *Continuous assessment - 60 marks
- (ii) **Final presentation seminar - 30 marks
- (iii) ***Viva-voce (external) - 30 marks
- (iv) ****Report - Evaluation (Internal) - 60 marks

* Continuous assessment will include

- (i) Synopsis presentation in II semester - 20 marks
- (ii) Mid-term Seminar in II semester - 20 marks
- (iii) Progress report - 20 marks

by concerned supervisor based on timely submission, regularity and punctuality of work.

**** Project seminar in IV semester which will be evaluated by all the staff members of specialized course and compiled by Head of Department.

**** Project-viva will be conducted by an external examiner, an internal examiner and vice-chancellor's nominee.

**** Project report will be evaluated by three member committee chaired by the Head and having two other internal members.

specialization. Project will commence in the second semester and will be completed in the fourth semester. The project report shall be type written and submitted in triplicate so as to reach the office of the Secretary at least three weeks before the commencement of theory examination. The project report shall be of 90 marks.

The distribution of marks will be as under –

Total Marks -90

- (i) *Continuous assessment - 30 marks
- (ii) **Viva-voce (external) - 30 marks
- (iv) ***Report - Evaluation (Internal) - 30 marks

* Continuous assessment will include

- (i) Synopsis presentation in II semester - 10 marks
- (ii) Progress seminar in III semester - 10 marks
- (iii) Final project seminar in IV semester - 10 marks

Project seminar in IV semester which will be evaluated by all the staff members of specialized course and compiled by Head of Department.

** Project-viva will be conducted by an external examiner, an internal examiner and vice-chancellor's nominee.

*** Project report will be evaluated by three member committee chaired by the Head and having two other internal members.

III There are minor changes/ modifications / reorganization in syllabuses of the following courses

***B.A. examination-**

Paper-2.1 Introduction to Human Development Unit 1 and 2 be reorganized to make it concise and appropriate. Unit 3-5 no change.

Paper- 3.1 Nutrition in Health and Disease

Unit I – be revised and rewritten to make it more specific

Unit 2 ,3 and 4 no change. Unit 5 basic over view management be rewritten as **Definition causes symptoms & dietary management in -**

Paper -4.2 Life Span Development

be reorganized to make more relevant and avoid repetitions

***See APPENDIX 1** for above mentioned changes

**** B.Sc.(Home Science) examination**

HS4101 Introduction to Home Science

Existing syllabus be revised and reorganized in four units and unit five on Entrepreneurship development in home science has been added to make this paper more appropriate and vocation oriented .

**** HS4104 Introduction to Human Development**

Unit I be rewritten as

Orientation to Human Development

- (a) Concept, scope and significance of human development
- (b) Human Development as multi disciplinary science
- (c) Objectives of studying children, Major approaches and methods of child study.

Unit 2-5 no change

HS4202 Elements of Food Science

Unit II 3. Delete word **structure**

Delete 4 Barley - composition, structure, milling

5 and 6 be renumbered as 4&5

Unit III 5 word structure and composition be replace with nutrition aspect

Unit V 3 delete words **production , processing since** it is beyond the scope of this paper

HS4303 Introduction to Resource Management (Th.)

Be reorganized and rewritten

HS4402 Communication Process (Th.)

Be reorganized and rewritten

HS4504 Assessment of Nutritional Status (Th.)

Unit III last line Evaluation of indices – Gomez, Waterlow and IAP

be replaced by Evaluation of indices- WHO classifications

Practical: -

Add 4. Growth chart

**** See APPENDIX 2**

***** M.Sc. (Home Science) Examination-**

Human Development –

HSHD5102 Research Methods in Human Development

Section A **add case study**

Section B **delete** ‘Outlining a research proposal (Introduction, review of literature, significance of study, operational definition of terms and concepts, delimitations of study, basic assumptions/hypothesis, sampling, tool and procedure of collecting data, bibliography, time and budget schedule. (Shifted to paper HSHD 5103)

Section C **Add word sources of** before primary

Delete Methods and devices of data collection:

(a) Survey, Observation, Interview, Questionnaire, Case study, Check list, Rating scale, Field studies.

Delete Writing for publication (Shifted to paper HSHD 5103)

HSHD5103 Techniques of Studying Human Development and Scientific Writings

Syllabus for theory and practical be reorganized to make it more specific

Add references 4 -8

HSHD5104 Theories of Human Development

Section A **delete** 5 Clinically based Neo analytical theories.

(i) Erich Fromm – the Escape from freedom.

(ii) Harry Sullivan- The interpersonal theory of Psychiatry since these theories are of not much importance in present context.

Renumber 5

(iii) Psycho – Social theory of Erick H. Erickson. As 5

Section C **add Kohlberg -theory of moral development**

HSHD5202 Early Childhood Care and Education - Reorganized to make it more specific

HSHD52045 Contemporary Issues and Concerns in Human Development (Practical)
syllabus has been added

Since, the students are expected to get acquainted with various contemporary issues of the society, practicals related to collection of literature , preparation of monographs, writing articles, planning strategies for reduction or alleviation of problems of burning issues will be conducted.

HSHD5302 Introduction to Guidance and Counseling - Section B and C be reorganized to make it more specific and balanced

HSHD5303 Curriculum for Early Years - reorganized to make it more relevant

HSHD5304 Child in the Family Section A **delete** ecological and sociological factors affecting the interpersonal relationships.

Section B **delete** critical analysis of contemporary theories in family and status of children.

HSHD5403A Principles & Procedures in Guidance and Counseling

Section A delete - Cognitive - Behavioral

HSHD5404A Guidance and Coping in Crisis - reorganized

HSHD5403B Innovative Programmes & Curriculum Planning for ECE Centers Section B and C and references be reorganized

Food Science and Nutrition -

HSFN5204 Problems in Human Nutrition

Section C be revised and rewritten

HSFN5302 Advanced Nutrition

Section A (iii) be rewritten as (iii) Evaluation of protein quality :In vitro evaluation- Chemical score, Protein digestibility coefficient, PDCAAS

In vivo evaluation- Biological value (BV), Net protein utilization (NPU), Protein efficiency ratio (PER), NDP caloric percent.

Section B (ii) **add** Estimation of Energy, Protein, Fat, Iron, Calcium, vitamin A and vitamin C requirements.

HSFN 5303 Applied and Community Nutrition

Section B 5 **be rewritten as** Operations research – Definition and its application in nutrition programme management .

An overview of response surface methodology (RSM) as a technique of process optimization .

HSFN5304 Nutrition in Specific Diseases and Disorders - be reorganized

HSFN5402 Nutrition for Health and Physical Fitness

Section B and C be reorganized

Practical (Techniques and Instrumentation in Nutrition Research & Nutrition for Health and Physical Fitness) (Common for Paper 1 & Paper 2)

Delete Exercise 6

Exercise 7 be renumbered as 6

Clothing and Textiles-

HSCT5304 Textile Merchandising (Th.)

Section A existing be numbered as 1

Add 2 Policies for import and export market, Organizations for promoting export in textile and garment industries

HSCT5403 CAD in Textile and Garment Designing be reorganized

***** See APPENDIX 3**

These changes be made applicable from session 2016-17 onwards

Agenda Item No. 4 Total 49 reports were received. Answers of most of the question papers (80%) were found average / satisfactory, some were rated good to very good (10%). Few were diffused and vague. Two examiners reported performance as unsatisfactory.

They should read more books and do in-depth study. 2-3 examiners stated need for improvement of expression as well as precise and to the point answers. Students should put correct question number Answers should be supported with illustrations and diagrams where ever necessary.

Agenda Item No. 5 To evaluate the question papers :

Board reviewed the question papers for annual examination and observed that standard of question papers is satisfactory and not deteriorated. In 5% papers, either some parts of the questions were out of syllabus or there was unit jumping.

Agenda Item No .6 to co-opt external members of the BOS

Board co-opted following external members of the board of studies for term of three years commencing from 1st January 2017

1. Dr .Sheela Sangwan , Professor (HDFS)

College of Home Science

HAU, Hisar

2. Dr Mini Sheth, Associate Professor (Foods and Nutrition)

Faculty of Family and Community Science

The M. S. University of Baroda,

Vadodara

3. Anjali Karoliya , Professor (Clothing and Textile)

Faculty of Family and Community Science

The M. S. University of Baroda,

Vadodara

Agenda Item No. 7 Any other Items

I. In view of discussion with honourable vice chancellor during presentation at session beginning , the following online learning resources have been shortlisted and proposed for addition in the M.Sc. (H.Sc.) curriculum-

Food Science and Nutrition

Lectures of renowned scientists and nutritionists (videos)

i. <https://www.nestlenutritioninstitute.org/country/in/resources/Conference/Pages/OnlineConferences.aspx>

Online demonstration of cooking techniques

ii <http://www.bbc.co.uk/food/>

Application tools in nutrition survey and nutritional anthropometry

iii <http://www.who.int/growthref/tools/en/>

Essentials of clinical nutrition

iv <http://www.bapen.org.uk/bapenlearning/vle/doctors.php>

Clothing and Textile

Fashion illustration

v <http://www.fashionillustrationtribe.com/>

Human Development

Early Childhood Education (Early Education and Care in Inclusive Settings; Cognition and Learning in Educational Setting)

vi <http://academicearth.org/early-childhood-education/>

II Board proposed an integrated M. Phil + Ph. D M. Phil Home Science Programme to cater to the needs of students interested in taking up Home Science research be offered to continuing as well as new students. Details of the programme are as under -

Proposed Programme

Programme Name : M. Phil Home Science (Clothing and Textile / Human Development / Food Science and Nutrition / Resource Management /Extension Education)

Introduction : M. Phil Home Science Programme will be offered to continuing as well as new students. The programme will be designed to cater to the needs of students interested in taking up Home Science research. An integrated M. Phil + Ph. D. is being proposed .The students who opt out after III semesters will get M. Phil degree, provided they complete required credits, and those continue with the research can get enrolled for Ph.D. after completion of III semesters.

Admission Requirement: The minimum entry requirement for M. Phil Home Science will be Master’s Degree in any of the following discipline with at least 2nd division

Food and Nutrition , Food Technology, Human Nutrition and Dietetics, Food Biotechnology, Biotechnology, Biochemistry , Public Health, Human Development, Psychology, Anthropology, Clothing and Textile, Textile Chemistry, Fashion Design/Technology, Extension Education , Agriculture, Horticulture, Resource Management, Hospital Management

Selection Process : Merit

Duration : M Phil – 3 Semesters

M.Phil + Ph.D

Significance – The ratio of students interested in Ph.D. and the number that can be accomadated in Ph.D. is speared. M. Phil will be a promising programme to retain all those students who are currently being denied admission in Ph.D.

M. Phil Home Science (Proposal)

Semester – I

Group A:				
1. Research Methodology	4	20	40	60
2. Statistics & Computer Application	4	20	40	60
Group B				

3. Specialization course I *	4	20	40	60
4. 3. Specialization course II*	4	20	40	60
		Aggregate Marks		240

Semester II

1. Specialization Course – III*	4	20	40	60
2. Review of Researches consisting of the following components a) Critical Evaluation of two original papers in the relevant b) Preparation of two Review paper related to dissertation Topic as part of literature review in area of study) c) Research report of the work of the candidate so far including pilot study & time plan for further work	4	20	40	60
3. Recent Trends in Specialization course	4	20	40	60
4. Reading Elective and term paper*	4	20	40	60
		Aggregate Marks		240
Semester III				
1. Dissertation (spread over II and III semesters				180
2. Reading Elective and term paper				60
		Aggregate Marks		240
Grand Total All Three Semester 240+240+240				720

Dissertation :

Phase –I Selection of topic to be defended before the faculty members of the concerned specialization – 10 Marks

Phase – II Presentation of synopsis before faculty members -- 20 Marks

Phase – III Progress Report 20 Marks

Phase IV (Before commencement of final semester examination)

Submission and internal Viva – Voce - 40 Mark

Phase – V (After Submission)

Dissertation to be sent for internal evaluation – 90 marks

* These course will be identified by the faculty subjected to approval of the course by academic council

Example of selected Specialization courses / reading elective for Human Development

- Adulthood dynamics
- Advances in family studies
- Ecology and Human Development
- Qualitative research methods
- Programme development for vulnerable families
- Cross-cultural perspectives in family studies
- Gender issues in human development and family relations
- Diversity, Disadvantage and inclusion for empowerment
- Literature, media and children
- Education for Human Development
- Modernization for social change
- Social entrepreneurship for Human Development
- Organization and management of programme for children and families
- Communication
- Appraisal of child and family welfare institutions
- Development of learning material and children's literature

Meeting ended with vote of thanks to the chair.

APPENDIX 1

Existing syllabus	Proposed syllabus	Remark
<p>B.A Home Science Paper-2.1 Introduction to Human Development Unit 1 Human Development : An Overview (a) What is Human Development? (b) Why do we need to study it ? (c) Human Development as multi disciplinary science (d) Scope of Human Development (e) Objectives of studying children, Major approaches and methods of child study.</p> <p>Unit 2 Orientation to Growth and Development (a) Understanding growth and development (definitions) (b) General principles of development (c) Constraints and facilitators in growth and development (influences of heredity and environment) - Genetic inheritance: (i) fertilization (ii) number of chromosomes, (iii) the unique third pair determines sex, (iv) Genotype and phenotype, (v) sex linked genetic effects. - Environmental pre-requisites: (i) Nutrition, (ii) opportunities - Interaction between environment and inheritance: (i) genes provide the predisposition, range and direction of development, (ii) environment determines the extent or limit (d) Maturation and learning (with reference to Gessell's maturational point of view and Watson and skinner's behaviorist point of view.)</p>	<p>B.A Home Science Paper-2.1 Introduction to Human Development</p> <p>Unit 1 Orientation to Human development (a) Concept, scope & significance of Human Development (b) Human Development as multi disciplinary Science (c) Methods of child study</p> <p>Unit -2 (a) Understanding growth and development (b) General principles of Development (c) Maturation and learning with reference to Gessell's maturational point of view and Watson and Skinner's behaviorist point of view</p> <p>Unit -3, 4 and 5 no change</p>	<p>Reorganized to make it concise and appropriate.</p>
<p>Paper- 3.1 Nutrition in Health and Disease</p> <p>Unit 1 1. Nutrition and Health – its relationship 2. Role of energy, protein and micronutrients in growth and development. 3. Considerations in fat intake – quantity and quality. 4. Animal and plant proteins, mutual supplementation, protein quality. 5. Malnutrition – Under and over nutrition, its relationship with nutrient intake (fundamental aspects)</p> <p>Unit 5 Basic overview of dietary management in – 1. Fevers (Acute, Chronic) 2. Diarrhoea</p>	<p>Paper- 3.1 Nutrition in Health and Disease</p> <p>Unit 1 1. Nutrition and Health – its relationship 2. Role of Nutrients in Health: Protein, Fat, Carbohydrate, Iron, Calcium, Sodium, Iodine & Potassium 3. Role of Nutrients in Disease conditions (PEM, obesity, Anemia, Diabetes Mellitus, Hypertension, Goitre Osteoporosis/ osteomalacia 4. Animal and plant proteins, mutual supplementation, protein quality. 5. Malnutrition – Under and over nutrition, its relationship with nutrient intake (fundamental aspects)</p> <p>Unit 5 Basic overview of definition, causes symptoms & dietary Management in –</p>	<p>Revised and rewritten to make it more specific</p>

<ol style="list-style-type: none"> 3. Constipation 4. Obesity 5. Diabetes Mellitus 6. Hypertension 	<ol style="list-style-type: none"> 1. Fevers (Acute, Chronic) 2. Diarrhoea 3. Constipation 4. Obesity 5. Diabetes Mellitus 6. Hypertension 	
<p>Paper -4.2 Life Span Development</p> <p>UNIT 1 (a) Prenatal Development:</p> <ol style="list-style-type: none"> 1. Stages of Prenatal Development. 2. Birth process 3. Influences of genetic and environmental factors. 4. Types of delivery 5. Factors affecting and complications during Pregnancy. 6. Hazards during prenatal development. <p>(b) Infancy:</p> <ol style="list-style-type: none"> 1. Definition, developmental tasks and milestones. 2. Physical, motor, emotional, social, language and cognitive development during infancy. 3. Hazards during infancy. <p>UNIT 2 Early childhood :</p> <ol style="list-style-type: none"> 1. Definitions, developmental tasks, characteristics. 2. Physical, motor, cognitive, social, language and emotional development during early childhood. <ul style="list-style-type: none"> - Role of Pre-school education. - Importance of play and creative activities during childhood - Hazards during early childhood. <p>UNIT 3 Middle childhood years :</p> <ol style="list-style-type: none"> 1. Definition, developmental tasks. 2. Physical, motor, social, cognitive and emotional development during middle childhood. 3. Role of parents, peers and siblings 4. Importance of schooling. 	<p>Paper -4.2 Life Span Development</p> <p>UNIT 1 (a) Prenatal Development:</p> <ol style="list-style-type: none"> 1. Stages of Prenatal Development 2. Birth process 3. Influences of genetic and environmental factors. 4. Types of delivery 5. Factors affecting and complications during Pregnancy. <p>(b) Infancy:</p> <ol style="list-style-type: none"> 1. Developmental tasks 2. Physical, motor, and language development during infancy, common emotions in infancy <p>UNIT 2 Early childhood :</p> <ol style="list-style-type: none"> 1. Developmental tasks. 2. Physical, motor, social and language development during early childhood. 3. Role of Pre-school education. 4. Importance of play and creative activities during childhood <p>UNIT 3 Middle childhood years :</p> <ol style="list-style-type: none"> 1. Developmental tasks. 2. Social development during middle childhood. 3. Role of parents, peers and siblings 4. Importance of schooling. 	<p>reorganized to make more relevant, avoid repetitions and of appropriate length emphasizing important development of each stage</p>

<p>UNIT 4 Adolescence Age :</p> <ol style="list-style-type: none"> 1. Definition; development tasks. 2. Concept of puberty, growth spurt 3. Physical, motor, social, cognitive and emotional development during adolescence. 4. Hazards and problems during adolescence. <p>UNIT 5 Adulthood & Old Age :</p> <ol style="list-style-type: none"> 1. Physical, social, emotional and psychological changes during adulthood. 2. Old Age: Physical, social, emotional, psychological changes and adjustments in old age. 	<p>UNIT 4 Adolescence :</p> <ol style="list-style-type: none"> 1. Developmental tasks. 2. Concept of puberty and growth spurt 3. Social and emotional development during adolescence. <p>UNIT 5 Adulthood & Old Age :</p> <p>1. Developmental Tasks</p> <ol style="list-style-type: none"> 2. Physical and psychological changes during adulthood. 3. Adjustment problems s in old age. 	
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APPENDIX 2

Existing syllabus	Proposed syllabus	Remark
HS4101 Introduction to Home Science	HS4101 Introduction to Home Science	Existing syllabus be revised and reorganized in four units and unit five on Entrepreneurship development in home science has been added to make this paper more appropriate and vocation oriented.
<p>Unit-I</p> <ul style="list-style-type: none"> (i) Definition, Philosophy and objectives of Home Science (ii) Historical development of the field of Home Science in India (in brief) (iii) Scope of Home Science – Educational and Vocational (iv) Integration of Home Science with population education, environmental education, women empowerment and its role in community development <p>Unit-II</p> <p>Home Science Curriculum and Courses</p> <ul style="list-style-type: none"> (i) Foundation Courses: Importance and their relationship with Home Science (ii) Supportive Courses: Importance and their relationship with Home Science (Physics, Chemistry, Biology, Education, Agriculture, Dairy Science, Philosophy and Computer Application.) (iii) Disciplinary Courses: Five Major Areas – basic concepts, principles, courses and significance <p>Unit-III Home Science: as it relates to Sociology</p> <ul style="list-style-type: none"> (i) Definition and Scope (ii) Sociological concepts – Society, individual and their relations, society and culture, primary and secondary groups. (iii) Economic and Political Institutions (iv) Social Change <p>Unit-IV Home Science: as it relates to Economics</p> <ul style="list-style-type: none"> (i) Definition and scope (ii) Market Definition and classification, price determination Concepts of utility, consumption, demand and supply (iii) Laws of utility, laws of consumption, laws of demand and supply <p>Unit-V Home Science: as it relates to Psychology</p> <ul style="list-style-type: none"> (i) Definition and scope (ii) Areas of Psychology (Developmental, Experimental, Comparative, Clinical, Social, Abnormal and Educational) (iii) Psychological Needs and its significance <p>References :</p>	<p>Unit-I</p> <p>Definition, Philosophy and objectives of Home Science Historical development of the field of Home Science in India (in brief) Role of Home Science for empowering women (through enhancing communication skills, presentation skills, personal skills and preparation for placement). Scope of Home Science - Educational and Vocational</p> <p>Unit –II</p> <p>Foundation Courses: Importance and their relationship with Home Science Supportive Courses: Importance and their relationship with Home Science (Physics, Chemistry, Biology, Education, Agriculture, Dairy Science, Philosophy and Computer Application). Disciplinary Courses: Five Major Areas- basic concepts, courses and significance</p> <p>Unit-III</p> <p>Social Sciences and Home Science Basic concepts of Sociology - Society, culture, primary and secondary groups, Social Change Basic concepts of economics- goods, utility, price, wealth, demand and supply Laws of utility, laws of demand and supply Market-Definition and classification</p> <p>Unit –IV Psychology and Home Science</p> <p>Definition and scope of Psychology , Areas of Psychology (Developmental, Experimental, Comparative, Clinical, Social, Abnormal and Educational) Psychological Needs Learning-Meaning and Importance of learning theories Memory, Sensation, perception, Thinking. (in brief)</p> <p>Unit-V Entrepreneurship Development and Home Science</p>	

	<p>Concept, definition and significance Entrepreneur- characteristics, challenges faced by Women Entrepreneur Formalities in Enterprise Setting – a. Preparation of project proposals b. Availing of licences, quotas, finance, subsidies c. Insurance, security, guarantee d. Registration</p> <p>References : 9. Bansal Indu & Kumari Chandra, (2010) : Home Science : An Introduction, Navjeevan publication, Newai 10. Jain, D. Women’s Employment, Possibilities of Relevant Research Institute of Social Studies, 1980 11. Gundry Lisa K. & Kickul Jill R., 2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth and Reinvention, SAGE Publications, Inc.</p>	<p>Some more reference added</p>
<p>HS4104 Introduction to Human Development</p> <p>Unit-I</p> <p>(a) What is Human Development ? (b) Why do we need to study it ? (c) Human Development as multi disciplinary science (d) Scope of Human Development (e) Objectives of studying children, Major approaches and methods of child study.</p>	<p>HS4104 Introduction to Human Development</p> <p>Unit-I</p> <p>(a) Orientation to Human Development (b) Concept, scope and significance of human development (c) Human Development as multi disciplinary science (d) Objectives of studying children, Major approaches and methods of child study.</p> <p>Unit - II to V - No change</p>	<p>Unit I be rewritten as</p> <p>Orientation to Human Development (a) Concept, scope and significance of human development (b) Human Development as multi disciplinary science (c) Objectives of studying children, Major approaches and methods of child study.</p> <p>Unit 2-5 no change</p>
<p>HS4202 Elements of Food Science</p> <p>Unit II</p> <p>1. Cereals - general composition and structure 2. wheat - composition, structure, milling , gelatinization, 3. Rice - composition , structure-, parboiling 4. Barley – composition, structure, milling 5. Starch - granular structure, gelatinization, dextrinization, gel formation, retrogradation 6. Sugar - types, manufacturing process of white and refined sugar, effects of heat on sugar, crystallization and caramelization</p>	<p>HS4202 Elements of Food Science</p> <p>Unit II</p> <p>1. Cereals - general composition and structure 2. wheat - composition, structure, milling , gelatinization, 3. Rice - composition, parboiling 4. Starch - granular structure, gelatinization, dextrinization, gel formation, retrogradation 5. Sugar - types, manufacturing process of white and refined sugar, effects of heat on sugar, crystallization and</p>	<p>Unit II 3. Delete word structure Delete 4 Barley - composition, structure, milling 5 and 6 be renumbered as 4&5 Unit III 5 word structure</p>

<p>Unit III 1. Milk - Composition, processing pasteurization, homogenization, sterilization, types of milk. 2. Milk products - Manufacturing and composition of cheese, milk powder, cream, butter ghee, yoghurt. 3. Pulses and legumes- composition, processing, anti nutritional, factors affecting cooking quality. 4. Egg. - structure, composition, quality, coagulation and denaturation of egg protein, uses in cooking. 5. Meat, fish and poultry - structure and composition, post mortem changes in meat.</p> <p>Unit IV 1. Vegetables and fruits - general composition, processing, enzymatic browning, pectic substances, nutritional aspects of raw and processed products. 2. Food adjuncts - spices, condiments, herbs, extracts, concentrates, essence. 3. Salt - types and uses.</p> <p>Unit V 1. Convenience food - role, types, advantages, contribution to diet 2. Leavening agents - biological chemical constituent's used in cooking and bakery. 3. Beverages - tea, coffee, cocoa, production, processing. Nutritional aspects.</p>	<p>caramelization</p> <p>Unit III 1. Milk - Composition, processing pasteurization, homogenization, sterilization, types of milk. 2. Milk products - Manufacturing and composition of cheese, milk powder, cream, butter ghee, yoghurt. 3. Pulses and legumes- composition, processing, anti nutritional, factors affecting cooking quality. 4. Egg. - structure, composition, quality, coagulation and denaturation of egg protein, uses in cooking. 5. Meat, fish and poultry - nutrition aspect, post mortem changes in meat.</p> <p>Unit IV 1. Vegetables and fruits - composition and nutrient content processin, enzymatic browning, pectic substances, processed products. 2. Food adjuncts - spices, condiments, herbs, extracts, concentrates, essence. 3. Salt - types and uses.</p> <p>Unit V 1. Convenience food - role, types, advantages, contribution to diet 2. Leavening agents - biological chemical constituent's used in cooking and bakery. 3. Beverages - tea, coffee, cocoa : Nutritional aspects.</p>	<p>and composition be replace with <u>nutrition aspect</u></p>
<p>HS4303 Introduction to Resource Management (Th.)</p> <p>Unit-I Management</p> <ol style="list-style-type: none"> 1. Definition, concept, importance 2. Systems approach to management 3. Introduction to family resource management as a system 4. Levels of Management 5. Schools of management — scientific method, classical organization, behavioral schools <p>Unit-II Process of management</p> <ol style="list-style-type: none"> 1. Planning — the planning system, dimensions of plan, affective and cognitive domain in planning 2. Controlling — checking (tote), adjusting, facilitating, energizing, coordinating 3. Evaluation — types, feedback 4. Management abilities — technical, conceptual and human <p>Unit- III Resources</p> <ol style="list-style-type: none"> 1. Importance, types and characteristics 2. Obstacles to the improvement of resource management — lack of awareness of resources and management, failure to evaluate results, seeking readymade answers, lack of information etc. 3. Resource constraints continuum 	<p>HS4303 Introduction to Resource Management (Th.)</p> <p>Unit I : Management</p> <ol style="list-style-type: none"> 1. Management: Concept and Importance 2. Systems Approach to Management 3. Family Resource Management as a system <p>Unit II : Philosophy of Management</p> <ol style="list-style-type: none"> 1 Resources- Meaning, Importance, Types and Characteristics 2. Guidelines to increase utility of Resources 3. Philosophy of Management 4. Values- Origin and Classification 5. Goals- Characteristics and Types 6. Standards- Characteristics and Types <p>Unit III : Approaches to Management</p> <ol style="list-style-type: none"> 1. Schools of Management Scientific School Classical Organization Theory Behavioral School 2. Levels of Management and Managerial Skills <p>Unit IV : Management Process</p>	<p>Be reorganized and rewritten</p>

<p>4. Guidelines to increase satisfaction from resources</p> <p>Unit-IV Decision Making</p> <ol style="list-style-type: none"> 1. Definition and concept of decision making 2. Types of decisions 3. Steps in decision making 4. Decision linkages—chain, series, radial 5. Decision tree 6. Cost benefit analysis <p>Unit-V Factors Motivating Management</p> <ol style="list-style-type: none"> 1. Values—sources, classification 2. Goals—types, characteristics 3. Standards—types, characteristics <p>References :</p> <ol style="list-style-type: none"> 5. Daecon, R.E., Firebaugh, F.M. (1975): <i>Contest and concepts of Management</i> Houghton Mifflin Company, USA 6. Vangundy, A.B. (1981): <i>Techniques of structured problem solveing</i> Van Nostrand Reinhold Company 	<ol style="list-style-type: none"> 1. Planning- The Planning System, Dimensions of Plans 2. Controlling- Energizing, Facilitating, Checking, Adjusting 3. Evaluation- Types, Feedback <p>Unit V : Decision Making- Process & Techniques</p> <ol style="list-style-type: none"> 1. Definition and Concept of Decision Making 2. Tools and Techniques for Decision Making 3. Steps in Decision Making Process 4. Classification of Decisions 5. Decision Tree and Cost Benefit Analysis <p>References :</p> <ol style="list-style-type: none"> 7. Luthans, F. (1998) <i>Organizational Behavior</i>, VIII Ed. Irwin McGraw Hill 8. Robbins, SP., Judge T., Sanghi, S. (2009) <i>Organization Behavior</i>, II Ed., Pearson Prentice Hall 9. Armstrong M. (2010) <i>A Handbook of Management Techniques</i>, Revised III Ed. Kogan Page 10. Robbins, S.P., Decenzo D.A., Bhattacharya, S. Agarwal, M.N. (2009) <i>Fundamentals of Management</i>, VI Ed. Pearson Prentice Hall 	
<p>HS4402 Communication Process (Th.)</p> <p>Unit-I Concept of communication</p> <ol style="list-style-type: none"> 1. Meaning and importance of communication 2. The purpose of communication 3. Types of communication 4. Factors affecting / helping communication <p>Unit-II Communication process</p> <ol style="list-style-type: none"> 1. One way, two way or interactive communication. 2. Gaps in Communication and their causes. 3. Importance of two way communication. 4. Basis of Interactive communication. 5. Information dissemination, education & propaganda—distinctions. <p>Unit-III Methods of communication to reach individual</p> <ol style="list-style-type: none"> 1. Individual Methods—interviews, home visits 2. Group Methods—lecture, group discussions, stimulations, trust building in groups, role plays, demonstrations, work-shops, camps. 	<p>HS4402 Communication Process (Th.)</p> <p>Unit-I Concept of communication</p> <p>Meaning and importance of communication, key elements of communication with special reference of Leganes model, The purpose of communication, Factors affecting / helping communication.</p> <p>Unit-II Communication process</p> <p>Types of communication - One way, two way or interactive communication, verbal and non verbal, intrapersonal and inter personal, formal and informal.</p> <p>Importance of two way communication</p> <p>Gaps in Communication and their causes,</p> <p>Unit-III Approaches of communication</p> <p>Selection and effective use of following methods and materials</p> <p>Individual – Home / farm visits, telephone calls, personal letters,</p>	<p>Be reorganized and rewritten</p>

<p>3. Mass Methods – broad casting, telecasting and printing.</p> <p>4. Selection and effective use of above methods and materials</p> <p>Unit-IV New Information technology</p> <ol style="list-style-type: none"> 1. Satellite Communication 2. Audio Cassettes 3. Teleconferences 4. Tele Printers 5. Inter Net 6. Fax 7. E-mail 8. E booth 9. Cyber Café <p>Unit-V Media for communication</p> <ol style="list-style-type: none"> 1. Folk Media : songs, stories, Street theater, puppet play, phad, karvad. 2. Print media : posters, charts, leaflets, books, articles/stories, cartoons 3. Audio visuals : audio tapes, radio broadcast, slides film strips, photographs, documentary film, video telecasts <p>References :</p> <p>Practical:</p> <p>Contact hrs. 4/wk Max Marks 30</p> <p>Exam. Duration 4hrs. CA - 10 SA -20</p> <p>Application of methods and media for communication in rural/urban areas</p> <ol style="list-style-type: none"> 1. Problem/need identification of a community. 2. Planning of an educational programme 3. Selection, preparation and effective use of Methods & media 4. Evaluation of media 	<p>Group - lecture, group discussions, meetings, role plays, demonstrations, work- shops, camps.</p> <p>Mass approach- electronic and print media</p> <p>Unit-IV</p> <p>Basic concepts related to information dissemination, education and propaganda. Modern technology : Basics and effective use</p> <p>Satellite Communication , Videoconferencing , Teleconferencing, Fax, Inter Net, E-mail , E-page , Cyber Café, cellular phone</p> <p>Unit-V</p> <p>Media for communication</p> <p>Folk Media - songs, stories, Street theater, puppet play, phad, kavad.</p> <p>Importance of Folk Media</p> <p>Print media- posters, charts, leaflets, books, articles/stories, cartoons</p> <p>Audio- Visual aids- meaning, classification, merits and limitations.</p> <p>References :</p> <p>7. Roy G. L. (1991) Extension Communication and Management, Naya Prakash, Calcutta</p> <p>Practical:</p> <p>Contact hrs. 4/wk Max Marks 30</p> <p>Exam. Duration 4hrs. CA - 10 SA -20</p> <ol style="list-style-type: none"> 1. Problem/need identification of a community. 2. Preparation and use of graphic Aids (Chart/ Graph/ Flash Cards/ Poster Leaflet/ Folder) 3. Selection and use of extension methods and media. 	
<p>HS4504 Assessment of Nutritional Status (Th.)</p> <p>Unit III</p> <p>Anthropometry indices</p> <p>Head and chest circumference for age, weight for age, weight for height, Brief introduction of reference data WHO, NCHS and ICMR.</p> <p>Evaluation of indices – Gomez, Waterlow and IAP</p>	<p>HS4504 Assessment of Nutritional Status (Th.)</p> <p>Unit III</p> <p>Anthropometry indices</p> <p>Head and chest circumference for age, weight for age, weight for height, Brief introduction of reference data WHO, NCHS and ICMR.</p> <p>Evaluation of indices- WHO classifications</p>	<p>Unit III last line Evaluation of indices – Gomez, Waterlow and IAP be replaced by Evaluation of indices- WHO classifications</p> <p>Practical: - Add 4. Growth chart</p>

<p>Practical: -</p> <ol style="list-style-type: none">1. Practice of anthropometry. Height, weight, MH, MUAC, head and chest circumference, waist and hip circumference, measurement of skin fold thickness.2. Determination of hemoglobin.3. Dietary survey	<p>Practical: -</p> <ol style="list-style-type: none">1. Practice of anthropometry. Height, weight, BMI, MUAC, Head and Chest circumference, waist and Hip Circumference Measurement of skin fold thickness.2. Determination of hemoglobin.3. Dietary survey4. Growth Chart	
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APPENDIX 3

Existing syllabus	Proposed syllabus	Remark
<p>HSHD5102 Research Methods in Human Development (Th.) Section A</p> <ul style="list-style-type: none"> ➤ Research – Meaning, objectives and importance ➤ Nature and Areas of research in Home-Science with special reference to Human Development ➤ Types of Research <ul style="list-style-type: none"> (i) Basic, Applied and Action research. (ii) Historical research (iii) Descriptive Research Methods – Survey, case study, correlational study, causal comparative. (iv) Analytic studies – Pre-experimental, experimental and quasi experimental research. (v) Qualitative research methods <ul style="list-style-type: none"> - Theory and design of qualitative research - Definition and types of qualitative methods: • Informal group discussion. • Interview : Key informant, indepth study • Observation • Social mapping • Participatory rapid assessment • Participatory learning assessment. <p>Section B</p> <ul style="list-style-type: none"> ➤ Definition and Identification of research problem – selection, justification, sources, basic assumptions, Limitation and Delimitations of the problems. ➤ Review of literature: Importance, sources of literature collection and presentation. ➤ Variables & their types ➤ Objectives and assumptions. ➤ Hypothesis – meaning, importance and ways of stating hypothesis. ➤ Sampling – meaning, importance, sampling techniques, sources of bias and methods of reducing bias. ➤ Basic principles of Research Design • Longitudinal and cross-section research • Purpose of Research design • Design for different types of research. <p>□ Outlining a research proposal (Introduction, review of literature,</p>	<p>HSHD5102 Research Methods in Human Development (Th.) Section A</p> <ul style="list-style-type: none"> ➤ Research – Meaning, objectives and importance ➤ Nature and Areas of research in Home-Science with special reference to Human Development ➤ Types of Research <ul style="list-style-type: none"> (i) Basic, Applied and Action research. (ii) Historical research (iii) Descriptive Research Methods – Survey, co relational study, causal comparative. (iv) Analytic studies – Pre-experimental, experimental and quasi experimental research. (v) Qualitative research methods <ul style="list-style-type: none"> - Theory and design of qualitative research - Definition and types of qualitative methods: • Informal group discussion. • Interview : Key informant, indepth study • Observation • Social mapping • Participatory rapid assessment • Participatory learning assessment. <p>Section B</p> <ul style="list-style-type: none"> ➤ Definition and Identification of research problem – selection, justification, sources, basic assumptions, Limitation and Delimitations of the problems. ➤ Review of literature: Importance, sources of literature collection and presentation. ➤ Variables & their types ➤ Objectives and assumptions. ➤ Hypothesis – meaning, importance and ways of stating hypothesis. ➤ Sampling – meaning, importance, sampling techniques, sources of bias and methods of reducing bias. ➤ Basic principles of Research Design <ul style="list-style-type: none"> • Purpose of Research design • Design for different types of research. 	<p>Reorganized to make it more specific Delete Writing for publication (Shifted to paper HSHD 5103)</p>

<p>significance of study, operational definition of terms and concepts, delimitations of study, basic assumptions/hypothesis, sampling, tool and procedure of collecting data, bibliography, time and budget schedule.)</p> <p>Section C</p> <ul style="list-style-type: none"> □ Primary and secondary data □ Methods and devices of data collection: <ul style="list-style-type: none"> (a) Survey, Observation, Interview, Questionnaire, Case study, Check list, Rating scale, Field studies. (b) Psychometrics : Meaning, characteristics of a good test, determination of reliability, validity, discrimination power. □ Data Analysis: Classification, coding and analysis, interpretation of data. □ Research Report :- <ul style="list-style-type: none"> □ General structure of reporting. □ Formal style of writing <ul style="list-style-type: none"> - Acknowledgements - Tables & Figures - Footnotes, Quotations - Appendices, Bibliography - Writing for publication. 	<p>Section C</p> <ul style="list-style-type: none"> ➤ Sources of Primary and secondary data collection Psychometrics : Meaning, characteristics of a good test, determination of reliability, validity, discrimination power. ➤ Data Analysis: Classification, coding and analysis, interpretation of data. ➤ Research Report :- <ul style="list-style-type: none"> General structure of reporting • Formal style of writing - Acknowledgements - Tables & Figures - Footnotes, Quotations - Appendices, Bibliography 	
<p>HSHD5103 Techniques of Studying Human Development and Scientific Writings (Th.)</p> <p>Section – A</p> <ul style="list-style-type: none"> • Human Development – Time span approach – longitudinal, cross sectional and sequential approach, ethnographical, correlational and experimental studies, approaches across the life span – Birth to old age. • Methods of studying Behaviour (preparation and administration, advantages and disadvantages of techniques) – Observation, Interview, Questionnaire, Case history. • Methods of Studying Growth and Body Size– Significance of Anthropometric measurements – Height, Weight, Mid upper arm circumference, Skin fold thickness, Head and Chest circumference, Waist and Hip circumference. <p>Section B</p> <ul style="list-style-type: none"> • Psychological Test –ways of constructing a good psychological test and steps for standardization. Limitations and ethical considerations in testing. • Measurement of Social and Emotional Development – Sociometric method and sociogram, Emotional intelligence and competencies – Uses and limitations • Personality Assessment – Rating Scales and Inventories – Purpose and developmental procedures • Projective Techniques – importance and limitations. • Assessment of Attitudes – Types and uses (Batteries and specific subject 	<p>HSHD5103 Techniques of Studying Human Development and Scientific Writings (Th.)</p> <p>Section – A</p> <ul style="list-style-type: none"> • Human Development study : Time span approach – longitudinal, cross sectional and sequential approach, ethnographical approach, life span approach – Birth to old age. • Methods of Studying Growth and Body Size– Significance of Anthropometric measurements – Height, Weight, Mid upper arm circumference, Skin fold thickness, Head and Chest circumference, Waist and Hip circumference • Psychological Test –ways of constructing a good psychological test and steps for standardization, limitations and ethical considerations in testing. <ul style="list-style-type: none"> • Personality Assessment – Purpose and developmental procedures. • Projective Techniques – importance and limitations • Planning and execution of symposium, seminars, workshops and panel discussion. <p>Section B</p> <ul style="list-style-type: none"> • Different tools to measure human attributes: importance, construction and administration, advantages and disadvantages - Observation schedule, Interview, Questionnaire, Case history • Scaling Techniques and construction: (The summated Rating, The Likert- type scale, The Thurstone Equal-Appearing Interval Scale, Guttman Scaling, The semantic Differential Technique, The Bogardus Social Distance Scale) 	<p>Syllabus for theory and practical be reorganized to make it more specific</p> <p>Add references 4 -8</p>

<p>test, attitudes of various persons towards various social issues).</p> <ul style="list-style-type: none"> • Planning and execution of symposium, seminars, workshops and panel discussion. <p style="text-align: center;">Section C</p> <p>A. Scientific writing as a means of communication</p> <ul style="list-style-type: none"> - Articles in journals, Research notes and reports, Review articles, monographs, Dissertation, Bibliographies, Book chapter and articles, Book review. <p>B. The writing Process</p> <ul style="list-style-type: none"> - Formulate outline as a guide for plan of writing and drafting - Brevity and precision in writing - Drafting and redrafting based on critical evaluation - Drafting titles, sub titles, tables, illustration, appendices <p>C. Writing for Grants</p> <ul style="list-style-type: none"> - Empirical and theoretical framework. - Presenting pilot study/ background information - Project designing and strategic planning, time frame budgeting - Available infra-structure and resources - Appraisal feedback and follow-up meetings - Executive summary <p>D. Communication and career- preparing C.V., facing interview, group discussion.</p> <p>References :</p> <p>Practical</p> <p>(1) Construction of different tools of assessment -</p> <ol style="list-style-type: none"> (i) Observation Schedule (ii) Interview Schedule (iii) Questionnaire (iv) Rating scale (v) Check list 	<ul style="list-style-type: none"> • Assessment of Attitudes – Types and uses (Batteries and specific subject test, attitudes of various persons towards various social issues) • Measurement of Social Development – Sociometric method and sociogram. • Emotional intelligence and competencies – Uses and limitations <p style="text-align: center;">Section C</p> <p>A. Scientific writing as a means of communication:</p> <p>Important points in scientific writing (brevity and precision in writing, drafting and redrafting based on critical evaluation)</p> <p>Writing for : Articles in journals, Research notes and reports, Review articles, monographs, Dissertation, Bibliographies, Book chapter and articles, Book review</p> <p>B. Outlining a research proposal (Introduction, review of literature, significance of study, operational definition of terms and concepts, delimitations of study, basic assumptions/hypothesis, sampling, tool and procedure of collecting data, analysis technique, references)</p> <p>C. Writing for Grants:</p> <ol style="list-style-type: none"> i. Writing proposal (empirical and theoretical framework presenting pilot study/ background information, time frame budgeting, available infra-structure and resources , appraisal feedback and follow-up procedure) ii. Presentation of report and executive summary <p>D. Preparing C.V., facing interview and group discussion.</p> <p>References :</p> <ol style="list-style-type: none"> 4. Santrock J. W. (1998) Child Development 8th ed. , Mc.Graw Hill, NY. 5. Laura.E.Berk (2006) Child Development, Prentice Hall, New Delhi 6. Bamji M.S., Prahlad Rao N., Reddy V. (Eds) (1996)Textbook of Human Nutrition, Oxford and IBH Publishing CO. Pvt. Ltd, New Delhi 7.Glatthorn A.A.& Joyner R.L. (2005) Writing the winning thesis or dissertation : A step by step guide (II Ed.) Corwin Press, California 8. Loke I.F., Spirduso W.W. and Silverman S.J. (2007) Proposals that work: A guide for planning dissertation & Grant proposals (5th Ed.) Sage Publication ND <p>Practical</p> <p>1) Construction of different tools of assessment -</p> <ol style="list-style-type: none"> (i) Observation Schedule (ii) Interview Schedule (iii) Questionnaire (iv) Rating scale 	
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<p>(vi) Sociometry and sociogram (vii) Case study Manual (2) Analysis of an Autobiography/Biography. (3) Case studies of Individuals and organization (4) To review articles from journals (5) To review articles from good magazines, News papers (6) To review chapter from books (7) Preparation of thesis abstracts</p>	<p>(v) Check list (vi) Sociometry and sociogram (vii) Case study Manual 2) To review articles from journals, magazines, News papers, chapter from books 3) Preparation of thesis abstracts 4) Writing articles for journals, magazines, News papers, books and monographs 5) Outlining a research proposal</p>	
<p>HSHD5104 Theories of Human Development (Th.)</p> <p>Section A</p> <ol style="list-style-type: none"> Theory : Meaning, Definition, Importance of theory. Brief Introduction to different perspectives and approaches of personality. Psychoanalytic theory of Sigmund Freud. Psychoanalysis and Neo Freudians <ol style="list-style-type: none"> Carl Gustav Jung – Analytical Psychology Alfred Adler – Individual Psychology Clinically based Neo-analytical theories. <ol style="list-style-type: none"> Erich Fromm – the Escape from freedom. Harry Sullivan- The interpersonal theory of Psychiatry Psycho – Social theory of Erick H. Erickson. <p>Section C</p> <ol style="list-style-type: none"> Learning theories - <ul style="list-style-type: none"> Pavlov - Classical conditioning B.F. Skinner - Operant Conditioning Bandura – Observation Learning Cognitive and Moral development. <ul style="list-style-type: none"> Jean Piaget – Theory of cognitive development. Vygotsky - Socio cultural perspective <ul style="list-style-type: none"> Bruner – Cognitive psychology 	<p>HSHD5104 Theories of Human Development (Th.)</p> <p>Section A</p> <ol style="list-style-type: none"> Theory : Meaning, Definition, Importance of theory. Brief Introduction to different perspectives and approaches of personality. Psychoanalytic theory of Sigmund Freud. Psychoanalysis and Neo Freudians <ol style="list-style-type: none"> Carl Gustav Jung – Analytical Psychology Alfred Adler – Individual Psychology Psycho – Social theory of Erick H. Erickson. <p>Section C</p> <ol style="list-style-type: none"> Learning theories - <ul style="list-style-type: none"> Pavlov - Classical conditioning B.F. Skinner - Operant Conditioning Bandura – Observation Learning Cognitive and Moral development. <ul style="list-style-type: none"> Jean Piaget – Theory of cognitive development. Vygotsky - Socio cultural perspective Bruner – Cognitive psychology Kohlberg -theory of moral 	<p>Reorganized to make it more specific Section A delete 5 Clinically based Neo analytical theories.</p> <p>(i) Erich Fromm – the Escape from freedom.</p> <p>(ii) Harry Sullivan- The interpersonal theory of Psychiatry since these theories are of not much importance in present context.</p> <p>Renumber 5 (iii) Psycho – Social theory of Erick H. Erickson. As 5</p> <p>Section C add Kohlberg -theory of moral development</p>
<p>HSHD5202 Early Childhood Care and Education (Th.)</p> <p>Section A</p> <p>Principles & historical trends</p> <ul style="list-style-type: none"> Need and preference of ECCE. Aims, objectives and problems of preschool education. Preschool program – the nursery school, laboratory school, parent co-operative, church – related program, the Montessori system. Child care program – Historical background, sources of child care funding, types of child care program, critical roles of care-givers, plan for care – 	<p>HSHD5202 Early Childhood Care and Education (Th.)</p> <p>Section A</p> <ul style="list-style-type: none"> Early child care and Education Nature , needs, aims and objectives Brief historical background- John Lock, Rousseau, Pestalozzi, Froebel, Maria Montessori, John Dewey, Lev Vygotsky, Rabidranath Tagore, Gandhiji , Giju bhai & Tarabai Modak Current Issues in Early childhood education - popularity, public interest, 	<p>Reorganized to make it more specific</p>

<p>giving qualities and characteristics of care givers.</p> <ul style="list-style-type: none"> □ Characteristics of quality ECCE Program. □ Safety in centre program. □ Issues in care of children. <p>Section B</p> <p>Methods for the education and development of child</p> <ul style="list-style-type: none"> □ Planning for effective education & development. □ Methods for educating and developing the very young—Task analysis, modeling, discovery learning, and direct teaching. □ Arranging environment & interest centers. □ Establishing and managing routines. □ Involving parents of the children we care for. □ Parents involvement activities. □ An initial code of ethics for early childhood educators. □ Professional training and personal development. <p>Section C</p> <ul style="list-style-type: none"> □ Theme teaching. □ Play –Types, Importance, play as teaching strategy, playground in ECCE, Indoor & outdoor, play, Block play, water play, puzzles , sand toys. □ Socio-emotional skill – Myself and other people. □ Sensory experiences – Nutrition & food, smell & taste, texture & touch sound and pitch. □ Aesthetic development – music & songs, Movement. □ Activities for ECCE: Goals, significance, objectives, criteria & selection of activities , teacher’s role related to- <ul style="list-style-type: none"> □ Language art. □ Art and craft activities □ Music □ Mathematics □ Science □ Social studies □ 3-Rs □ Program planning □ Planning: setting goals and objectives of plans—long term, short term , weekly and daily planning , routine and schedules. 	<p>families & ECE readiness, terminology of ECE</p> <ul style="list-style-type: none"> • Views about children: Miniature adults, the competent child, child as a sinful, blank, tablet, growing plant, property investment in future, children as person with rights, children as potential persons • Contemporary social issues – working parents, Rising Incomes, single parents families • Paradigm shift in ECE: family centered <p style="text-align: center;">Section B</p> <ul style="list-style-type: none"> • Child care: Meeting the needs of parents & children • Types of child care: Full service, child care family and relatives, family day care, before & after school care, Head start programme , latchkey children • Characteristics of quality child care programme – <ul style="list-style-type: none"> ➢ Child related characteristic ➢ Provider related characteristic ➢ Facility related • Qualities and characteristics of ECE professionals • Parent involvement in ECCE: Meaning approach, methods and problem <p style="text-align: center;">Section C</p> <ul style="list-style-type: none"> • Play –Types, Importance, play as teaching strategy, Play and creativity , play and disadvantaged , socio – dramatic play, play therapy . • Indoor & outdoor, play, Block play, water play, puzzles , sand toys. • Routine and scheduled activities for ECC - goals, significance, objectives, teacher’s role related to - <ul style="list-style-type: none"> ➢ Personal skills - health hygiene , Nutrition & food ➢ Socio-emotional skill – Myself and other people, mannerism ➢ Sensory experiences – Smell , taste, texture , touch, sound and pitch • Planning activity areas 	
	<p style="text-align: center;">HSHD5205 Contemporary Issues and Concerns in Human Development</p> <p>Since, the students are expected to get acquainted with various contemporary issues of the society, practicals related to collection of literature , preparation of monographs, writing articles, planning strategies for reduction or alleviation of</p>	<p style="text-align: center;">syllabus has been added</p>

	problems of burning issues will be conducted	
<p align="center">HSHD5302 and Counseling (Th.)</p> <p align="center">Section A</p> <ul style="list-style-type: none"> • Meaning, Concept, need, functions and scope of guidance and counseling. • Principles, philosophy, Basic assumptions, evolution of guidance and counseling movement in India. • Areas of Guidance: Educational, Vocational, Personal and social. • Aims & objectives of Guidance • Group Guidance-concept and techniques <p align="center">Section B</p> <ul style="list-style-type: none"> • Various techniques & tools used in guidance: Self Profile, report of test results and their communication, case study, observing client, visiting home, schools & place of work etc., conducting guidance interview, counseling. • Psychological tests on intelligence, creativity, personality, aptitude, attitude & values, their characteristics and uses. • Role of different personnel in guidance & counseling: Principal, teachers, career masters, guidance director, counselor, psychologist, psychiatrist, health specialists, physical instructor, parents, wardens and librarian. • Guidance services in schools : Orientation, information, placement and follow up. • Need of Public relations in Guidance. • Follow-up, Evaluation and research studies in Guidance. <p align="center">Section C</p> <ul style="list-style-type: none"> • Need and importance of counseling services. • Principles and procedures and different types of counseling: Education, Personal and crisis - facilitative, vocational, preventive, psychological, psychotherapeutic, clinical. • A brief review of approaches to counseling : Directive, Non-directive, Eclectic and Behavioral. • Emerging areas of guidance & counseling. 	<p align="center">HSHD5302 Introduction to Guidance and Counseling (Th.)</p> <p align="center">Section A</p> <ul style="list-style-type: none"> • Meaning, Concept, need, functions and scope of guidance and counseling. • Principles, Philosophy, Basic assumptions, evolution of guidance and counseling movement in India. • Areas of Guidance: Education, Vocational and Personal social. • Aims & objectives of Guidance • Group Guidance-concept and techniques <p align="center">Section B</p> <ul style="list-style-type: none"> • Various techniques & tools used in guidance: Self Profile, report of test results and their communication, case study <ul style="list-style-type: none"> - Observing client, visiting home, schools & place of work etc., conducting guidance/ counseling interview. • Psychological tests on intelligence, creativity, personality, aptitude, attitude & values, their characteristics and uses. • Role of different personnel in guidance & counseling: Principal, teachers, career masters, Guidance director, counselor, psychologist, psychiatrist, Health specialists, Physical instructor, Parent, Wardens and Librarian. • Need of Public relations in Guidance. • Evaluation and research studies in Guidance. <p align="center">Section C</p> <p>Guidance services: Need , importance, types and procedural details</p> <ul style="list-style-type: none"> - Orientation - Information - Placement - Follow up - Counseling <ul style="list-style-type: none"> • A brief overview of approaches to counseling : Directive, Non-directive, Eclectic and Behavioral • Emerging areas of counseling 	<p>Section B and C be reorganized to make it more specific and balanced</p>
<p align="center">HSHD5303 Curriculum for Early Years(Th.)</p> <p align="center">Section - A</p> <p>Early childhood matters</p> <ul style="list-style-type: none"> <input type="checkbox"/> Need and importance of early childhood development and ECCE <input type="checkbox"/> Principles of program planning for early years <input type="checkbox"/> Weekly and daily plan 	<p align="center">HSHD5303 Curriculum for Early Years(Th.)</p> <p align="center">Section - A</p> <p>Early childhood matters</p> <ul style="list-style-type: none"> • Need and importance of curriculum planning in early years • Principles of program planning for early years • Formulation of goals and objectives- long term and short term goals 	<p>Reorganized to make it more relevant</p>

<ul style="list-style-type: none"> <input type="checkbox"/> Formulation of goals and objectives- long term and short term goals <input type="checkbox"/> Need for curriculum planning in early years <input type="checkbox"/> Determinants of Child Survival and Development <input type="checkbox"/> Ensuring quality and effectiveness in ECD program <p style="text-align: center;">Section –B</p> <p>ECCE models and approaches</p> <ul style="list-style-type: none"> <input type="checkbox"/> Theoretical concepts, programme centered learning environment, role of teacher, role of learner and parents <input type="checkbox"/> ECCE models <input type="checkbox"/> Intervention models <input type="checkbox"/> Innovative prgrammes <input type="checkbox"/> Role of parents and community in ECD programmes <p style="text-align: center;">Section- C</p> <p>Value of contributions of Indian educators</p> <ul style="list-style-type: none"> <input type="checkbox"/> Indian educators and its implications for programme planning in Indian context, missionaries , Arundales <input type="checkbox"/> Indian innovation of western theories: Giju Bhai Badeka and Tara Bai Modak <input type="checkbox"/> Role of parents and community in curriculum development. <input type="checkbox"/> Importance and value of play <input type="checkbox"/> Play theories, criteria of selection, play and creativity , play and the disadvantaged, play therapy, socio-dramatic play <input type="checkbox"/> Activity areas– 3 Rs, books, concept development, science area, creative and art areas, music and dance area, physical & motor development areas, Block activity area <p>References:</p> <p>4. Kulkarni, S.(1988) Parent Education , perspectives and approaches. Jaipur: Rawat Pub</p> <p>7. Balsara, M.. (1996) New Education Policy and Development Challenge, New Delhi Kanishka.</p>	<p style="text-align: center;">Weekly and daily plan</p> <ul style="list-style-type: none"> • Determinants of Child Survival and Development • Ensuring quality and effectiveness in ECD program <p style="text-align: center;">Section –B</p> <p>ECCE models and approaches</p> <ul style="list-style-type: none"> <input type="checkbox"/> Theoretical concepts, programme centered learning environment, role of teacher, role of learner and parents <input type="checkbox"/> ECCE models <input type="checkbox"/> Intervention models <input type="checkbox"/> Innovative prgrammes <input type="checkbox"/> Role of parents and community in ECD programmes and curriculum planning. <p style="text-align: center;">Section- C</p> <p>Curriculum planning :</p> <ul style="list-style-type: none"> • Activities for ECCE: Goals, significance, objectives, criteria & selection of activities, teacher’s role related to- • Language art • Concept development • Art and craft activities • Music and dance • Mathematics • Science • Social studies • Reading / writing • Indoor and outdoor play • Theme teaching 	
<p style="text-align: center;">HSHD5304 Child in the Family (Th.)</p> <p style="text-align: center;">Section A</p> <p>Family in social context</p> <ul style="list-style-type: none"> • Sociological significance of family 	<p style="text-align: center;">HSHD5304 Child in the Family (Th.)</p> <p style="text-align: center;">Section A</p> <p>Family in social context</p> <ul style="list-style-type: none"> • Sociological significance of family 	<p>Section A delete ecological and sociological factors affecting the interpersonal relationships.</p> <p>Section B delete critical analysis of</p>

<ul style="list-style-type: none"> Approaches to the study of family : developmental, social , psychological and educational Family: structure, functions, roles and relationships. Influence of SES, culture, religion on family. Intergenerational conflict within the family. Family as an eco system - ecological and sociological factors affecting the interpersonal relationships Intrafamilial influences on the personality development – secure and insecure experiences, crisis in the family; death, divorce, alcoholism, illness, and unemployment. <p style="text-align: center;">Section B</p> <p>Role of the child in the family -</p> <p>Child and family interaction, emotional satisfaction</p> <p>Expansion of family interest.</p> <p>Opportunity and insight into the life process</p> <ul style="list-style-type: none"> Where and how the family helps the individual member through - <p>Shared responsibility</p> <p>Proper use of leisure hours</p> <p>Family customs</p> <p>Family rituals</p> <p>Sacraments</p> <p>Sound sex education</p> <ul style="list-style-type: none"> Critical analysis of contemporary theories in family and status of children. Mental health & hygiene: Meaning, definition, characteristics of good mental health. Role of parents in maintaining positive mental health. 	<ul style="list-style-type: none"> Approaches to the study of family : developmental, social , psychological and educational Family: structure, functions, roles and relationships. Influence of SES, culture, religion on family. Intergenerational conflict within the family. Family as an eco system. Intrafamilial influences on the personality development – secure and insecure experiences, crisis in the family; death, divorce, alcoholism, illness, and unemployment. <p style="text-align: center;">Section B</p> <p>Role of the child in the family -</p> <p>Child and family interaction, emotional satisfaction</p> <p>Expansion of family interest.</p> <p>Opportunity and insight into the life process</p> <ul style="list-style-type: none"> Where and how the family helps the individual member through - <p>Shared responsibility</p> <p>Proper use of leisure hours</p> <p>Family customs</p> <p>Family rituals</p> <p>Sacraments</p> <p>Sound sex education</p> <ul style="list-style-type: none"> Mental health & hygiene: meaning, definition, characteristics of good mental health, role of parents in maintaining positive mental health. 	<p>contemporary theories in family and status of children.</p>
<p>Group A : Guidance and Counseling</p> <p>HSHD5403A Principles & Procedures in Guidance and Counseling (Th)</p> <p style="text-align: center;">Section A</p> <ul style="list-style-type: none"> <input type="checkbox"/> Meaning, concepts and areas of guidance and counseling. <input type="checkbox"/> The Counselor-. <ul style="list-style-type: none"> - As person and as a professional- Personality and training of counselor. - Client rights and counselor responsibilities - Therapist competence: Ethical and legal aspects <input type="checkbox"/> Major theories of counseling – 	<p>Group A : Guidance and Counseling</p> <p>HSHD5403A Principles & Procedures in Guidance and Counseling (Th)</p> <p style="text-align: center;">Section A</p> <ul style="list-style-type: none"> • Meaning, concepts and areas of guidance and counseling. • The Counselor-. <ul style="list-style-type: none"> - As person and as a professional- Personality and training of counselor. 	<p>Reorganized to make it more specific Section A delete</p> <p>Cognitive</p> <p>Behavioral</p>

<ul style="list-style-type: none"> - Person centered - Gestalt - Psychodynamic - Cognitive - Trait factor - Behavioral 	<ul style="list-style-type: none"> - Client rights and counselor responsibilities - Therapist Competence: Ethical and legal aspects • Major theories of counseling – <ul style="list-style-type: none"> - Person centered - Gestalt - Psychodynamic - Trait factor 	
<p style="text-align: center;">HSHD5404A Guidance and Coping in Crisis (Th)</p> <p style="text-align: center;">Section A</p> <ul style="list-style-type: none"> □ Nature, concept, understanding of crisis situations <ul style="list-style-type: none"> - Effect of crises events on different age groups and role of the family in crisis situation - Skill for managing crisis situation □ Normal and abnormal events <ul style="list-style-type: none"> - Normal events / incidence in daily life. - Abnormal events of crises experiences at home, at school, and community — Normal coping process, common reactions and consequences of traumatic events — Protective and risk factors □ Special counseling challenges-working with ambivalent indifferent and oppositional clients, older adults ,children , mentally ill clients ,drugs or alcohol abusing clients □ Steps in crisis intervention <p style="text-align: center;">Section B</p> <p>Dealing with problem situations and guidance for vulnerable /special groups-</p> <ul style="list-style-type: none"> - Child abuse - Children of divorce families, step families, single – parent homes - Latchkey children, Homeless children - Counseling with children about death and dying - Counseling with children from different cultures <ul style="list-style-type: none"> - Children in alcoholic families- - Suicidal behaviors - Marital and sexual relationship concerns - Handling family differences — Survivals of sexual abuse — Counseling with exceptional children <p style="text-align: center;">Section C</p> <p>Counseling children in difficult circumstances</p> <p>Emotional problem – Frustration, inferiority, actual or imagined limitations and emotional instability, worrying, fantasy, frequent sad moods,</p>	<p style="text-align: center;">HSHD5404A Guidance and Coping in Crisis (Th)</p> <p style="text-align: center;">Section A</p> <ul style="list-style-type: none"> • Nature, concept, understanding of crisis situations- • Effect of crises events on different age groups and role of the family in crisis situation • coping process, common reactions and consequences of traumatic events • Steps in crisis intervention • Skill for managing crisis situation • Special counseling challenges-working with ambivalent indifferent and oppositional clients, older adults ,children , mentally ill clients ,drugs or alcohol abusing clients, exceptional children , clients from different cultures <p style="text-align: center;">Section B</p> <p>Dealing with problem situations and guidance for vulnerable /special groups-</p> <ul style="list-style-type: none"> - Marital and sexual relationship concerns - Handling family differences - Divorce families, step families, single – parent homes - Alcoholic families - Violence and abuse - Survivals of sexual abuse - Counseling about death and dying - Suicidal behaviors - Latchkey children, Homeless children <p style="text-align: center;">Section C</p>	<p>Reorganized</p>

indecisiveness, lack of self confidence, identity crises, feeling of insecurity, excessive fear

Adjustment problems – Aggression, low achievement, poor socialization, difficulty in maintaining friends, homesickness, feeling of loneliness, school phobia, short attention span, dependent and immature behavior

Children in conflict with others and with self-Fighting, verbal abusiveness, cruelty, destructiveness, tantrums, swearing, lying, stealing, truancy, abnormal sexual behavior, extreme sensitivity

References :

1. ~~Medicine Sans Frontiers (MSF).~~
 - (i) ~~Handbook for a monthly course on Trauma Related Problems. Trainers Manual, Oct. 1997~~
 - (ii) ~~Mental health Training Manual.~~
 - (iii) ~~Shocking Events and Stressful Situation – Their Emotional consequences. Amsterdam, April 1993~~
2. ~~Save the Children.~~
 - (i) ~~Helping Children in Difficult Circumstances. (A Teachers Manual) London, 1992~~
3. ~~Schauer, Margarete~~
 - (i) ~~Posttraumatic Stress (PTSD) and Extreme STRESS (DES).~~
 - (ii) ~~First aid kit for the Mental Health Team Providing psycho-social service for the severely traumatized Kosovo Albanians in the Refugee Camps. MSF Mental Health – Macedonia 1999.~~
4. ~~World Health Organization.~~
 - (i) ~~Mental Health of refugees, Geneva 1996.~~
5. ~~Hutchinson D. (2007), The Essential counselor process, skills and techniques, Lahaska press, Houston-Mifflin Company~~

Counseling children in difficult circumstances

Emotional problem – Frustration, inferiority, actual or imagined limitations, fantasy, frequent sad moods, lack of self confidence, feeling of insecurity, excessive fear anxiety and worrying,

Adjustment problems – Aggression, poor socialization, difficulty in maintaining friends, feeling of loneliness, excessive shyness and withdrawal
Educational difficulties- school phobia, low achievement, short attention span, truancy, extreme sensitivity

Children in conflict with others- Fighting, verbal abusiveness, cruelty, destructiveness, tantrums, swearing, lying, stealing

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1. Thompson Charles ,L. Linda B. Rudolph , Counseling children ,III Ed. Brooks / Cole Publishing Company, Pacific Grove, California.
2. Gummaer Jim, Counseling and Therapy for Children, New York, The Free Press.
3. Ivey, A.E. Ivey M.B and Downing L.S., Counseling and Psychotherapy- interpreting skills, Theory and Practice., New Jersey, Prentice Hall.
4. Dave Indu ,The basic essentials of counseling, STERLY Pub. Ltd. New Delhi.
5. Kenedy E., One becoming a counselor, A Basic Guide for non-professional counseling , Gill & Macmillan, Delhi.
6. Fasricha Prem, Counseling in Indian schools, NCERT Publication, New Delhi.
7. Barlci, B.C., Mukopadhyay B., Guidance & counseling: A manual, New Delhi.
8. Corey Gerald, Corey Marianne Schneider, Callanan Patridc , Issues and Ethics in the helping Professions , VII Ed, Thomson, Brooks/ Cole, Canada
9. Corey Gerald, Group counseling, Brooks / Cole engage leasing India Private Limited , New Delhi.
10. Jacoks Ede, Robust L ., Masson , Riley L. Harvill, Group Counseling strategies and skills , 6th Ed., Thomson Brooks/ Cole , USA.
11. Mite hall Marianne H., Gibson Robust L. , Introduction to Guidance, Pearson Education Pvt. LTD. Delhi.
12. Jones Richard Nelson, The Theory and Practice of counseling Psychology.
13. Patterson L.E. , The counseling process, V Ed., Brooks/ Cole.
14. Hutchinson D., The Essential counselor process, skills and techniques, Lahaska press, Houston Mifflin Company
15. Schaefer, C.E. & Millman, H.L., How to help children with common problems, Van Nostrand Reinhold Company, New York.

<p>Group B: Early Childhood Education HSHD5403B Innovative Programmes & Curriculum Planning for ECE Centers(Th.)</p> <p style="text-align: center;">Section A</p> <p>The context and need for innovative program</p> <ul style="list-style-type: none"> <input type="checkbox"/> Change in orientations towards ECCE centers at international and national level (human rights, child rights, elimination of discrimination, equity and equality). <input type="checkbox"/> Policies and latest five year plans for ECCE. <input type="checkbox"/> Special needs of special groups of people (tribal children, children with special need , refugees, children in urban slums). <input type="checkbox"/> Availability of resources. <input type="checkbox"/> Issues of sustainability and outreach <p style="text-align: center;">Section B</p> <p>Historical overview of innovative approaches.</p> <ul style="list-style-type: none"> <input type="checkbox"/> The kosabad experience <input type="checkbox"/> Mobile crèche, New Delhi. <input type="checkbox"/> Bodh trust , Rajasthan <input type="checkbox"/> A detailed overview of selected innovative programs. <ul style="list-style-type: none"> - URMUL TRUST - CHETNA - International context – community resource centers for ECE Programme (Australia/ Canada). - Innovative program in regional context – Bodh siksha Trust, WDP (Rajasthan-Tilonia). <p style="text-align: center;">Section C</p> <ul style="list-style-type: none"> <input type="checkbox"/> Creativity at ECCE Centers. <input type="checkbox"/> Dramatization at ECCE Centers. <input type="checkbox"/> Use of locally available resources. <input type="checkbox"/> Equipments at ECCE centers. <input type="checkbox"/> Low cost equipments from local resources. <input type="checkbox"/> Community pre-school centers for rural poor. <p>Reference:</p>	<p>Group B: Early Childhood Education HSHD5403B Innovative Programmes & Curriculum Planning for ECE Centers(Th.)</p> <p style="text-align: center;">Section A</p> <p>The context and need for innovative program</p> <ul style="list-style-type: none"> • Change in orientations towards ECCE centers at international and national level (human rights, child rights, elimination of discrimination, equity and equality). • Policies for ECCE in India • Latest five year plan for ECCE • Special needs of special groups of people (tribal children, children with special need , refugees children , children in urban slums). • Availability of resources • Issues of sustainability and outreach <p style="text-align: center;">Section B</p> <ul style="list-style-type: none"> • Overview of innovative approaches (History, Programme Philosophy and other information) • International context – community resource centers for ECE Programme (Australia/ Canada). • Indian context - Kosabad experience , Mobile crèche, New Delhi, URMUL TRUST , CHETNA • Innovative program in regional context – WDP Tilonia Rajasthan, Bodh trust Rajasthan, <p style="text-align: center;">Section C</p> <ul style="list-style-type: none"> • Innovative techniques used in ECE classrooms <ul style="list-style-type: none"> - Smart classroom - Interactive whiteboards • -classroom computers /projectors • -You Tube videos • -Text, images, Audio, Video, Animation • -Role Playing 	<p>B and C and references be reorganized</p>
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	<ul style="list-style-type: none"> • -E-Learning • -STEM for beginners • -Engagement in Purposeful Play • -Library in ECE classroom <p>Reference:</p> <p>9 SubGroup Report –ECE in the 12th Five Year Plan(2012-2017) Ministry of Women and Child Development,New Delhi</p> <p>10. ECCE Experiences in India(Govt. of India Report)</p> <p>11. Govt. of India (1992) National Policy Of Children,1986. National Program of Action,1992,New Delhi. Department of Education,Ministry of Human Resource.</p> <p>12. Govt. of India (1996)ICDS ,New Delhi: Department of Women and Child Development,Ministry of HRD</p> <p>13 The State of World’s Children: 2006,New York ,UNICEF</p>	
<p>HSFN5204 Problems in Human Nutrition (Th)</p> <p style="text-align: center;">Section C</p> <p>A. Obesity— Definition, etiology, health risks , metabolic effects, treatment through diet, very low calorie diet, behaviour therapy.</p> <p>B. Diabetes Mellitus— Definition of type I and type II diabetes, diagnosis, Chemical pathology and metabolic changes:— Nutritional Management of type I and type II diabetes</p> <p>C. Cardiovascular risk factors and their nutritional determinants</p> <p style="padding-left: 20px;">1) Coronary Heart Disease Pathogenesis and nutritional management</p> <p style="padding-left: 20px;">2) Hypertension— Classification and nutritional management.</p> <p>D. Nutritional recommendations for high risk individuals (for CVD)</p>	<p>HSFN5204 Problems in Human Nutrition (Th)</p> <p style="text-align: center;">Section C</p> <ul style="list-style-type: none"> • Risk factors and etiology, metabolic changes, diagnosis, preventive measures, treatment, nutrition and diet related management of- obesity, type 1 and 2 diabetes mellitus, cardiovascular diseases and hypertension. Use and health effects of very low calorie diet, DASH diet and prudent diet. • Functional Foods and Nutraceuticals • History, definition and concept. Classification of nutraceuticals and functional foods. Significance and relevance of nutraceuticals and functional foods in the management of diseases. Natural occurrence of phytochemicals- Antioxidants and flavonoids, omega -3 fatty acids, carotenoids, dietary fiber, phytoestrogens, glucosinolates, organosulphur compounds. Health benefit with adequate safety 	<p>Section C be revised and rewritten</p>
<p>HSFN5302 Advanced Nutrition (Th) Section –A</p>	<p>HSFN5302 Advanced Nutrition (Th) Section –A</p>	<p>Section A (iii) be rewritten as (iii) Evaluation of protein quality :In</p>

<p>(iii) Evaluation of protein quality in vitro evaluation chemical score, Biological values (BV), Net protein utilization (NPU), Protein efficiency ratio (PER), NDP caloric percent.</p> <p style="text-align: center;">Section – B</p> <p>(ii) Perspectives in human nutritional requirements. Different methods of estimating nutritional requirements and their critical evaluation</p>	<p>(iii) Evaluation of protein quality : In vitro evaluation- Chemical score, Protein digestibility coefficient, PDCAAS In vivo evaluation- Biological value (BV), Net protein utilization (NPU), Protein efficiency ratio (PER), NDP caloric percent.</p> <p style="text-align: center;">Section – B</p> <p>(ii) Perspectives in human nutritional requirements. Different methods of estimating nutritional requirements and their critical evaluation. Estimation of Energy, Protein, Fat, Iron, Calcium, vitamin A and vitamin C requirements</p>	<p>vitro evaluation- Chemical score, Protein digestibility coefficient, PDCAAS In vivo evaluation- Biological value (BV), Net protein utilization (NPU), Protein efficiency ratio (PER), NDP caloric percent. Section B (ii) Estimation of Energy, Protein, Fat, Iron, Calcium, vitamin A and vitamin C requirements.</p>
<p>HSFN5304 Nutrition in Specific Diseases and Disorders Section A Nutrition in Cancer and AIDS</p> <ol style="list-style-type: none"> 1. Cancer <ul style="list-style-type: none"> <input type="checkbox"/> Introduction <input type="checkbox"/> Dietary components associated with cancer <input type="checkbox"/> Nutritional care 2. AIDS <ul style="list-style-type: none"> <input type="checkbox"/> Introduction <input type="checkbox"/> Signs and symptoms <input type="checkbox"/> Transmittal routes <input type="checkbox"/> Nutritional care <p>Section B</p> <ol style="list-style-type: none"> 1. Inborn Errors of Metabolism Metabolic defect, clinical symptoms and management of - <ul style="list-style-type: none"> <input type="checkbox"/> Phenylketonuria <input type="checkbox"/> Galactosemia <input type="checkbox"/> Maple syrup urine disease <input type="checkbox"/> Homocysteineuria <input type="checkbox"/> Familial hypercholesterolemia 2. Etiology, clinical symptoms and dietary management of malabsorption syndrome 3. Chronic Alcoholism <ul style="list-style-type: none"> <input type="checkbox"/> Nutritional effects of alcohol <input type="checkbox"/> Complications <input type="checkbox"/> Nutritional therapy <p>Section C</p> <ol style="list-style-type: none"> 1. Food Allergies <ul style="list-style-type: none"> <input type="checkbox"/> Clinical features <input type="checkbox"/> Mechanism of diagnosis <input type="checkbox"/> Treatment 	<p>HSFN5304 Nutrition in Deficiency and Other Diseases and Disorders Section A Nutrition in Cancer, AIDS and Disabling Diseases</p> <ol style="list-style-type: none"> 1. Cancer <ul style="list-style-type: none"> • Introduction • Dietary components associated with cancer • Nutritional care 2. AIDS <ul style="list-style-type: none"> • Introduction • Signs and symptoms • Transmittal routes • Nutritional care 3. Nutritional support in Disabling Disease <ul style="list-style-type: none"> • Rheumatoid arthritis • Osteo arthrits <p>Section B</p> <ol style="list-style-type: none"> 1. Inborn Errors of Metabolism Metabolic defect, clinical symptoms and management of - <ul style="list-style-type: none"> • Phenylketonuria • Galactosemia • Maple syrup urine disease • Homocysteineuria • Familial hypercholesterolemia 2. Nutritional management of malabsorption syndrome, food intolerance and allergy 3. Metabolism of alchol, nutritional effects metatobism of alchohol and nutritional therapy in chronic alcoholism <p>Section C</p> <p>Prebiotics, probiotics and symbiotics – Probiotics : Definition, types and</p>	<p>Be reorganized</p>

<p>2. Nutritional Support in Disabling Disease</p> <p>□ Special needs of older disabled persons</p> <p>□ Special disabling conditions requiring supportive nutritional care</p> <p>(i) Rheumatoid arthritis</p> <p>(ii) Osteoarthritis</p> <p>3. Nutritional Care of the Terminally ill.</p> <p>□ The dying process</p> <p>□ Palliative versus curative care</p> <p>□ Dietary management for symptom control</p>	<p>relevance; Usefulness in gastro intestinal health and other health benefits; development of probiotic products; Prebiotics: Prebiotic ingredients in foods; types of prebiotics and their effects on gut microbes; health benefits of prebiotics; Symbiotics.</p> <p>Development of functional foods, use of bioactive compounds in appropriate form with protective substances and activators; Research frontiers in functional foods; delivery of immunomodulators / vaccines through functional foods. Nutrigenomics- concept of personalized diet. Use of nanotechnology in functional food industry.</p>	
<p>HSFN 5303 Applied and Community Nutrition</p> <p>Section B</p> <p>5. Operations research and its contribution to nutrition programme management.</p>	<p>HSFN 5303 Applied and Community Nutrition</p> <p>Section B</p> <p>5. Operations research – Definition and its application in nutrition programme management .</p> <p>An overview of response surface methodology (RSM) as a technique of process optimization</p>	<p>Section B 5 <i>be rewritten as</i> Operations research – Definition and its application in nutrition programme management .</p> <p>An overview of response surface methodology (RSM) as a technique of process optimization .</p>
<p>HSFN5402- Nutrition for Health and Physical Fitness</p> <p>Section B</p> <p>1. Nutrition in sports: Sports specific requirements Diet manipulation pre and post game meal. Diet for person with high energy requirements, stress, fracture and injury.</p> <p>2. Water and electrolyte balance: Loss and their replenishment during exercise, effect of dehydration, sports drinks.</p> <p>3. Effect of work environment on health, safety, and performance adaptive responses</p> <p>(i) physical factors-heat, cold, noise, vibration and light.</p> <p>(ii) nutritional factors (water, electrolyte, energy, foods, protein, vitamin, essential trace minerals),</p> <p>(iii) Environmental contaminants (dust, gases, fumes, chemical)</p> <p>Section C</p> <p>1. Significance of physical fitness and nutrition in the prevention and management of:-</p> <p>weight</p> <p>obesity</p> <p>diabetes mellitus</p> <p>C V disorders</p>	<p>HSFN5402- Nutrition for Health and Physical Fitness</p> <p>Section B</p> <p>Dietary supplements and ergogenic aids</p> <p>1. Nutrition in sports: Sports specific requirements Diet manipulation pre and post game meal. Diet for person with high energy requirements, stress, fracture and injury.</p> <p>2. Water and electrolyte balance: Loss and their replenishment during exercise, effect of dehydration, sports drinks.</p> <p>3. Effect of work environment on health, safety, and performance adaptive responses</p> <p>(i) physical factors-heat, cold, noise, vibration and light.</p> <p>(ii) nutritional factors (water, electrolyte, energy, foods, protein, vitamin, essential trace minerals),</p> <p>(iii) Environmental contaminants (dust, gases, fumes, chemical)</p> <p>Section C</p> <ul style="list-style-type: none"> Fuelling muscles before, during and after exercise Planning a pre exercise diet – Best time to eat before training, amount of carbohydrate to be eaten, best foods before exercise Planning a performance diet – Relationship between GI of a meal and 	<p>Section B and C be reorganized</p>

<p>2. Nutrition and exercise regimes for pre and post natal fitness</p> <p>3. Alternative systems for health and fitness like ayurveda, yoga, meditation, vegetarianism and traditional diets</p> <p>Practical (Common for Paper 1 & Paper 2)</p>	<p>performance solid foods V/s Fluids, carbohydrate requirement during training, best times and best foods and drinks during exercise</p> <ul style="list-style-type: none"> Planning a post exercise diet – Duration of refueling, high carb V/s low carb diet for recovery, fitness and refueling efficiency, calculation of carbohydrate amount and timing of intake after training, best meals after exercise, necessity of combining carbs and protein <p>Practical (Common for Paper 1 & Paper 2)</p>	
<p>(Techniques and Instrumentation in Nutrition Research & Nutrition for Health and Physical Fitness)</p> <p>Contact hrs.4/wk Max. Marks30</p> <p>Exam.Duration 4 hrs. CA 10 SA 20</p> <ol style="list-style-type: none"> Standardization of a colourimetric and spectrophotometric method and working on this instrument. Standardization of a fluorimetric method and working on this instrument. To study the working of an Atomic absorptiometer. Separation of the various components of a mixture using a suitable chromatographic method. To study the working of a electrophoresis set-up. To determine protein efficiency and food efficiency ratios by animal experimentation using albino rats as experimental animals. Assessment of nutritional status - <ul style="list-style-type: none"> Anthropometric tools and measurement of height, weight, mid upper arm circumference and skin fold thickness Diet survey and diet calculations 	<p>(Techniques and Instrumentation in Nutrition Research & Nutrition for Health and Physical Fitness)</p> <p>Contact hrs.4/wk Max. Marks30</p> <p>Exam.Duration 4 hrs. CA 10 SA 20</p> <ol style="list-style-type: none"> Standardization of a colourimetric and spectrophotometric method and working on this instrument. Standardization of a fluorimetric method and working on this instrument. To study the working of an Atomic absorptiometer. Separation of the various components of a mixture using a suitable chromatographic method. To study the working of a electrophoresis set-up. Assessment of nutritional status - <ul style="list-style-type: none"> Anthropometric tools and measurement of height, weight, mid upper arm circumference and skin fold thickness Diet survey and diet calculations 	<p>Practical (Common for Paper 1 & Paper 2)</p> <p>Delete Exercise 6</p> <p>Exercise 7 be renumbered as 6</p>
<p>HSCT5304 Textile Merchandising (Th.)</p> <p>Section A</p> <p>History, development, present status, problems, and export – import trends in cotton, wool, silk, jute, and man made textile industries.</p>	<p>HSCT5304 Textile Merchandising (Th.)</p> <p>Section A</p> <ol style="list-style-type: none"> History, development, present status, problems, and export – import trends in cotton, wool, silk, jute, and man made textile industries. Policies for import and export market , Organizations for promoting export in textile and garment industries 	<p>Add 2 Policies for import and export market, Organizations for promoting export in textile and garment industries</p>
<p>HSCT5403 CAD in Textile and Garment Designing (Th.)</p>	<p>HSCT5403 CAD in Textile and Garment Designing</p>	<p>be reorganized</p>

Section A

THEORY BASED ON COMPUTER

- RGB colour model.
- Monitor Resolution.
- Tools for multimedia data.
- Hardware devices; Scanner, digital Camera, microphone.
- Software devices: Flash, Photoshop.
- Graphics , Image file formats
 - Pixels
 - Bitmap
 - Monochrome bitmap image
 - Grayscale bitmap image
 - 24 bit colour image
 - 8 bit colour image
- Standard system independent formats GIF, JPEG , TIFF.

Section B

**CAD IN TEXTILE DESIGNING AND FASHION DESIGNING
INTRODUCTION TO CAD**

- Uses of CAD in textile industry
- Selection of hardware and software for CAD
- Basics of software
 - Starting software
 - Beginning a new drawing
 - Creating a basic prototype drawing
 - Basic Commands and its application
 - Creating and storing slopers in CAD
 - Theories of drawing figures
 - Textiles design drawing
 - Drawing drape on figure
 - Scope and importance of CAD in industry and daily life.

Section C

CAM IN TEXTILES

- Creation of a new pattern from a spec sheet.
- Digitizing of basic pattern.
- Grading of Patterns.

Section A

- RGB colour model
- Brief overview of CMYK model
- Monitor Resolution
- Image file -
- Pixels
- Bitmap
- Monochrome bitmap
- Grayscale bitmap image
- 24 bit colour image
- 16 bit colour image
- 8 bit colour image
- Standard system independent formats- GIF, JPEG , TIFF

Section B

- Scope and importance of CAD in industry
- Use of CAD in textile industry- Weaving, printing, knitting, embroidery, fashion designing, pattern making, grading and marker making
- Hardware for CAD- Computer: overview of system devices, memory and storage devices, input device, output devices, communication devices, Printer, Scanner.
- Basics of software- Overview of system software, application software
- CAD modules: Draw, Edit, Data output, System control, Data storage
- Types of CAD software: generic vs dedicated, 2D, 3 D, Wireframe etc
- Factors to be considered while selecting CAD software
- Creating a basic prototype drawing, Drawing drape on figure
- Basic Commands and its application
- Creating and storing slopers in CAD
- Theories of drawing figures

Section C

- Creation of a new pattern from a spec sheet
- Digitizing of basic pattern
- Grading of Patterns
- Marker function, making marker interactively, making markers automatically
- Plotters and their function

References :

1. Aldrich, W.(1994): CAD in clothing and textiles , Back well

<p><input type="checkbox"/> Marker function, making marker interactively, making markers automatically.</p> <p><input type="checkbox"/> Plotters and their function.</p> <p>References :</p> <ol style="list-style-type: none"> 1. Veisinet, D.D.(1987) : Computer aided drafting and design : Concept and application . 2. Winifred, A (1990) Metric pattern cutting for men's wear : Including design unisex casual clothes and computer aided design, BSP Professional books, oxford. 3. Corklin, PG (1990) : Pattern grading for women's clothes, The technology of signing, BSP professional book oxford. 4. Aldrich, w.(1994): CAD in clothing and textiles , back well science ltd . 5. Chase RW: CAD for fashion, PHI. 6. Gray S: CAD / CAM in clothing and textiles , grouse publication. 7. Beazley Alison and brand tssy (2003): Computer aided pattern design and prudent development, black well publishing . 8. Firtz Anne and cant Jennifer (1988): consumer textiles, oxford 	<p>science ltd</p> <ol style="list-style-type: none"> 2. Gray S: CAD / CAM in clothing and textiles, Grouse Publication. 3. Beazley A. and Brandtssy (2003): Computer aided pattern design and product development, Black well Publishing 4. Conigan J. (1994) Computer Graphics secrets and solutions BAB Publication, New Delhi 5. Villamil JC and Fernandej LE(1998) Multimedia Graphics , Prentice Hall, New Delhi 	
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Verified

 Offg. Secretary
 Banasthali Vidyapith
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The meeting started with a welcome of the members, by the convener of Board of Studies for Home Science, Prof. Indu Bansal, Dean, Home Science, Banasthali Vidyapith, Rajasthan

1. The Board confirmed the minutes of the meeting of the Board of Study held on 24th April' 2016 and pre BOS held on 2nd April' 2018.
2. Panel of Examiners for each examination up to and inclusive of Master's Degree Examination has been prepared in the prescribed format, separately for theory and practical examinations, keeping in view the Vidyapith Bye-laws. It has been submitted in secrecy section along with soft copy.
3. The Board reviewed the Study/Curricula, Scheme of examination in various courses of study, keeping in view the curriculum structure of the Vidyapith for Undergraduate and postgraduate courses.

Learning outcomes for each and every course of study (including practical course where prescribed) have been incorporated to explain focus and approach of the course. References have been updated and presented in APA format. Syllabuses of all the courses have been properly formatted, correcting spelling and punctuation errors.

The Board recommended courses of Study, Curricula and scheme of examination as follows-

B.A

i.	First Semester	No Change in scheme and syllabus
ii.	Second Semester	No Change in scheme and syllabus
iii.	Third Semester	No Change in scheme and syllabus
iv.	Fourth Semester	No Change in scheme and syllabus
v.	Fifth Semester	Minor Change
vi.	Sixth Semester	Minor Change

Learning outcomes, References and E-resources for BA is attached and marked as **Annexure-I a and b** .

B.Sc. (Home Science) Programme

i.	First Semester	Minor Change ^{a b}
ii.	Second Semester	No Change
iii.	Third Semester	Minor Change ^c
iv.	Fourth Semester	No Change
v.	Fifth Semester	Minor Change ^{d e}
vi.	Sixth Semester	Minor Change ^e

- (a) The Board recommended that in B.Sc. (Home Science) I Semester in course Elementary Human Physiology (Course Code: HSC103) 'structure of kidney' should

be deleted since it is part of organs of excretory system and there is no need to mention it separately

- (b) The Board reviewed the syllabus of Fundamentals of Biochemistry and Microbiology (Course Code: HSC106), of B.Sc. (Home Science) I Semester and it was found that syllabus is too elaborate for B.Sc. I Sem. students, hence, recommended that content should be rewritten to make it more concise. Besides, students do in- depth study in course Nutritional Biochemistry in VI semester.
- (c) The Board reviewed the content of practical of B.Sc. (Home Science) III Semester Fundamentals of Clothing Construction (Course Code: HSC207 L) and recommended that content should be elaborated to make it clear and unambiguous and to avoid repetition (deleted part is already in the syllabus of Family Clothing (Course code: HSC202L). These changes be made applicable from session 2019-2020 onwards
- (d) The Board reviewed the course content of Introduction to Work Study (Course Code: HSC 309) of B.Sc. (Home Science) V Semester and recommended that topics in unit I, II and V should be elaborated for clarity and Unit III and IV be redesigned to balance the units. These changes be made applicable from session 2019-2020 onwards.
- (e) The Board also suggested some new Discipline Electives along with those already running ; syllabus for which have been developed..

Learning outcomes, proposed revised (if any) / new syllabi, References and E-resources is attached and marked as **Annexure-II a and b** .

M.Sc. (Home Science Human Development/ Food Science and Nutrition)

i.	First Semester	Minor Change ^a
ii.	Second Semester	No Change
iii.	Third Semester	Minor Change
iv.	Fourth Semester	Minor Change

- (a) M.Sc. Human Development II Semester Course Contemporary Issues and Concerns in Human Development (Course Code: HSC 406) burning issues have been added and some part has been deleted because of repetitions in other courses.
- (b) M.Sc. Food Science and Nutrition IV Semester Course Clinical Nutrition and Dietetics (Course Code: HSC509) ; two new methods have been added in section A .
Suggested revisions (if any), learning outcomes, References and E resources is attached and marked as **Annexure-III a and b** .
- (c) In the light of the discussions with honorable Vice Chancellor, the Board recommended some new reading elective courses focusing on recent advances in the field of specialization and of contemporary importance for development of self study / reading habits in P.G. students.

Pattern: Each course will be of two credits. There will be end semester exam only. These courses will not be alternative to regular course. Every M.Sc. student has to opt for at least two reading electives.

It was also suggested by the Board that reading electives should start from II semester itself (instead of III semester), **subjected to the approval of Academic Council**. In fourth semester, PG students have to finish their project work along with 4/5 course of study and will have less time for reading. Moreover, this will also increase scope for those students who want to opt for more than two electives. Besides, it will provide more time to those students who may not clear electives in first attempt.

List of Reading Electives (Newly Introduced)

1. Safe and Healthy Environments For Young Children
2. Nanotechnology in Textile
3. Introduction to Nutrigenomics Online course in lieu - Nutrigenomics for Disease Prevention and Intervention https://www.nutrigenomics.arizona.edu/home.html
4. Textile Conservation
5. Onconutrition
6. Colour Science and Instrumentation
7. Inclusive Education
8. Novel Technologies for Food Processing and Shelf Life Extension Online course in lieu - Novel Technologies For Food Processing and Shelf –Life https://nptel IIT, Kharagpur Management
9. Food Biotechnology
10. Science of Clothing Comfort Online course in lieu - Science of Clothing Comfort http://swayam.gov.in I I T, Delhi
11. Ergonomic Applications in Interior Design
12. Functional Clothing
13. Content Development and Food Labelling
14. Emerging Technologies for Personalized Nutrition
15. Sports Nutrition

Content for reading electives along with course outcomes and suggested reading material have been given in Annexure IV.

4. No Home Science courses are running in the other programs of the Vidyapith except foundation and vocational courses. Foundation /Vocational Courses run by faculty have also been reviewed in the light of discussion with Foundation course committee. To bring uniformity in credits of foundation courses, the Board recommended that all courses will be of 2 credits. Accordingly content has been revised as per **Annexure V**.

5. Most of the examiners reported answers as satisfactory and to the point which helps to conclude that most students demonstrated their understanding of the key knowledge of their respective subject. Few (around 10%) examiners reported the answers to be vague and diffused, Very few (5%) suggested that answers should be more focused/ use of technical language/ improvement in language/ better articulation. **Annexure VI**

6. Total 105 Question papers of last five years were evaluated for their appropriateness. The overall quality of question papers was found to be good, so as to judge an average student's knowledge and skill. The distribution of marks was found suitable for the content of the question drafted. All the question papers were found to cover all the contents of the syllabus evenly. The pattern followed in drafting the papers at undergraduate level was mostly conventional, and questions were mainly direct and information based, requiring descriptive and subjective answers. Some of the UG papers had a limited number of application based questions. The questions were found to be framed in simple and easy to understand language. A considerable portion of question papers of postgraduate programmes was found to have both application based and analytical questions, suitable enough to require a good amount of mental effort by the students while answering them, providing them opportunities to utilize their competence, not just the content knowledge. The content of the questions has changed slightly from being information based to application based over the years. The overall quality of question papers was found to be consistent and no deterioration observed through the years. **Annexure VI I**

Meeting ended with vote of thanks to the chair.

Annexure I (a)

Programme Scheme: B.A.

Semester I

Existing					
Course Code	Course Name	L	T	P	C
HSC101	Basics of Home Science and Resource Management	6	0	0	6
HSC108 L	Interior Decoration Lab	0	0	4	2
	Total	6	0	4	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC101	Basics of Home Science and Resource Management	6	0	0	6
HSC108 L	Interior Decoration Lab	0	0	4	2
	Total	6	0	4	8

Semester II

Existing					
Course Code	Course Name	L	T	P	C
HSC102	Basics of Human Development	4	0	0	4
HSC107	Fundamentals of Foods and Nutrition	4	0	0	4
	Total	8	0	0	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC102	Basics of Human Development	4	0	0	4
HSC107	Fundamentals of Foods and Nutrition	4	0	0	4
	Total	8	0	0	8

Semester III

Existing					
Course Code	Course Name	L	T	P	C
HSC215	Nutrition in Health and Disease	6	0	0	6
HSC205L	Food and Nutrition Lab	0	0	4	2
	Total	6	0	4	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC215	Nutrition in Health and Disease	6	0	0	6
HSC205L	Food and Nutrition Lab	0	0	4	2
	Total	6	0	4	8

Semester IV

Existing					
Course Code	Course Name	L	T	P	C
HSC210	Introduction to Community Nutrition and Extension	4	0	0	4
HSC212	Life Span Development	4	0	0	4
	Total	8	0	0	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC210	Introduction to Community Nutrition and Extension	4	0	0	4
HSC212	Life Span Development	4	0	0	4
	Total	8	0	0	8

Semester V

Existing					
Course Code	Course Name	L	T	P	C
HSC308	Introduction to Textiles	4	0	0	4
HSC305	Family Dynamics and Parent Education	4	0	0	4
	Total	8	0	0	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC308	Introduction to Textiles	4	0	0	4
	Discipline Elective -I	4	0	4	6
	Total	8	0	0	8

Semester VI

Existing					
Course Code	Course Name	L	T	P	C
HSC307	Introduction to Clothing	4	0	0	4
HSC312L	Textile Care and Clothing Construction Lab	0	0	8	4
	Total	4	0	8	8

Proposed					
Course Code	Course Name	L	T	P	C
HSC312L	Textile Care and Clothing Construction Lab	0	0	8	4
	Discipline Elective -II	4	0	4	6
	Total	4	0	8	8

Course code	List of discipline electives
HSC305	Family Dynamics and Parent Education
	Family and Child Welfare (Newly Introduced)
HSC307	Introduction to Clothing
	Fundamentals of Family Clothing (Newly Introduced)

Annexure I (b)

Programme : B.A.

S. N.	Course List	Learning Outcome	Existing Syllabus	Suggested Syllabus	Remarks
1	HSC101 Basics of Home Science and Resource Management	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Interpret concept and scope of Home Science discipline • Develop an insight into fundamentals of resource and their management 	-----	<p>References:</p> <ol style="list-style-type: none"> 1. Bansal, I., & Kumari, C. (2010). <i>Home Science: An Introduction</i>. Newai (Raj) : Navjeevan Publishers. 2. Chandra, A. (1978). <i>Introduction to Home Science</i>. New Delhi: Metropolitan Book Company, Ltd. 3. Daecon, R.E., & Firebaugh, F.M. (1975). <i>Context and concepts of Management</i>. USA: Houghton Mifflin Company. 4. Gross, I.H., & Crandall, E.W. (1980). <i>Management for modern families</i> (3rd ed.). New Jersey: Prentice Hall Inc. Engle Wood Cliffs. 5. Jain, V. (2002). <i>Grih Prabandh, Sadhan Vyavastha awem aantrik sazza</i>. Jaipur: Abhishek Publication. 6. Koontz, H., & Wehrich, H. (2009). <i>Essentials of Management</i>. New Delhi: Tata McGraw Hill Publishing Co. Ltd. 7. Patni, M., & Sharma, L. (2017). <i>Grih prabandh</i> (25thed.). Agra: Star Publication. 8. Stoner, J.,Freeman,R., & Gilbert, D. (1995). <i>Management</i> (6thed.). New Delhi: Prentice Hall of India Pvt. Ltd. 9. Tripathy, P.C., & Reddy, P.N. (2001). <i>Principles of Management</i>. New Delhi: Tata McGraw Hill Publishing Co. Ltd. 10. Wangundy, A.B. (1981). <i>Techniques of structured problem solving</i>. New York :Van Nostrand Reinhold Company. 	

	HSC108 L Interior Decoration Lab	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Design and draw floor plans to meet a given set of requirements • Apply informed judgments in designing interiors 			
	HSC102 Basics of Human Development	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Get insight into concept and various aspects of Human Development • Appraise concerns and issues related to parenting and development aspects • Relate theories to developmental aspects 		References : <ol style="list-style-type: none"> 1. Gupt Ram Babu (1996). <i>Vikasatmak Monovigyan</i>, Agra : Ratan Prakashan Mandir, 2. Hurlock Elizabeth B. – Bal Manovigyan (5th & 6th Edition), New Delhi: Tata Mc Graw Hill. 3. Hurlock Elizabeth B. (1978). <i>Child Development</i> (6th ed.). New Delhi : Mc. Graw Hill Publishers Ltd.. 4. Laura.E.Berk (2013). <i>Child Development</i>. Illinois : Pearson. 5. Musson P., Conger J.J., Kegan J. and Haston A.C. (1990). <i>Child Development and Personality</i>. New York: Harper & Row. 6. Singh Vrinda <i>Manav Vikas evam Parivarik Sambandh</i>. Jaipur: Panchsheel Parkashan. 7. Verma, Priti, & Srivastava, D.N. (1996). <i>Bal Manovigyan – Bal Vikas</i>. Agra : Vinod Pustak Mandir,. 	
	HSC107 Fundamentals of Foods and Nutrition	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Describe the functions of food and role of various nutrients, dietary requirement of various nutrients, and effect of deficiencies and excesses • Explain the methods of food preparation and principles applied in food preservation. • Apply and incorporate the knowledge of nutritional requirement in various life stages. 		References: <ol style="list-style-type: none"> 1. Khanna, K., Gupta S, Mahna R, Puri S, Seth R and Passi SJ. (1997).<i>Text book of Nutrition & Dietetics</i>. New Delhi : Phoenix Publishing House Pvt. Ltd.. 2. Mehtab, S. Bamji, K. Krishnawamy and GNV Brahmam.(1996).<i>Text Book of Human Nutrition</i>, New Delhi : Oxford & IBH Publishing Co. Pvt. Ltd.. 3. Sharma,V .(1995) .<i>Food & Nutrition Science(2nd ed.)</i>. Meerut : Loyal Book House. 4. Singh,V. (2006).<i>Food & Nutrition Science (3rd ed.)</i>. Jaipur: Panchsheel Prakashan. 5. Srilakshmi, B. (2004). <i>Nutrition Science</i>, New Delhi: New Age International Pvt. Ltd. 6. Swaminathan, M. (1985). <i>Essentials of Foods and Nutrition Vol.1</i> Madras : Ganesh and Co. 7. Wilson, E.D., Fisher K. H. & Fuqua M.E. (1975). <i>Principles of Nutrition</i>. Canada : John Wiley and Sons. 	

				<p>E- resources:</p> <ul style="list-style-type: none"> • Function of food, food groups, food chart https://www.slideshare.net/chefkaushal84/food-56547837 • Methods of cooking https://www.slideshare.net/laurahuang/methods-of-cooking-ppt-5914731 • Importance of nutrition, consumer rights, special diets, menu panning https://www.slideshare.net/itchomecare/8-nutrition-and-food-preparation-15193848 	
	HSC 205 L Food and Nutrition Lab	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Plan and prepare different types and specific nutrient rich diets using different cooking methods • Plan and prepare diets for various disease conditions • Prepare food products using various preservation methods 			
	HSC215 Nutrition in Health and Disease	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Describe the role of nutrition and nutrients in health, disease and various life stages • Explain the causes of food spoilage and types of food preservation • Apply and incorporate the knowledge of therapeutic diet for various disease conditions 		<p>References :</p> <ol style="list-style-type: none"> 1. Khanna, K, Gupta S.,Mahna R,Puri S,Seth R and Passi SJ. (1997).<i>Text book of Nutrition & Dietetics</i>. New Delhi: Phoenix Publishing House Pvt. Ltd.. 2. Sharma,V. (1995). <i>Food & Nutrition Science (3rd ed.)</i>. Meerut: Loyal Book House. 3. Singh,V. (2006). <i>Food & Nutrition Science (3rd ed.)</i>. Jaipur : Panchsheel Prakashan . 4. Srilakshmi, B. (2004). <i>Nutrition Science</i>. New Delhi : New Age International Pvt. Limited. 5. Swaminathan, M. (1985). <i>Essentials of Foods and Nutrition Vol.2</i> Madras: Ganesh and Co.. <p>E- resources :</p> <ul style="list-style-type: none"> • Causes of food spoilage, sources, factors and its prevention https://www.slideshare.net/MAMATHESH/food-spoilage-microbiology • Therapeutic diet in various diseases https://www.slideshare.net/sapnamanger/therapeutic-diet • Basic nutrition https://www.slideshare.net/jinulazer/ppt-on-nutrients 	

	HSC210 Introduction to Community Nutrition and Extension	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Explain the linkages between nutrition, environment, health and disease • Recognize the importance of malnutrition as a conditioning factor in relation to many diseases in community • Get acquainted with the roles of national & international agencies in community nutrition • Explain importance of extension programmes for the betterment of QOL in rural areas and develop skills for effective communication 		References: <ol style="list-style-type: none"> 1. Bamji, M. S., Rao, P.N., & Reddy, V. (1996). <i>Text book of Human Nutrition</i>. New Delhi : Oxford and IBH publishing Co Pvt. Ltd. 2. Bhargava, B. (1999). <i>Parivarik Swastha avm samajik Kalyan</i> (2nd ed.). Jaipur: University Book House Pvt. Ltd. 3. Dhama, O.P., & Bhatnagar, O.P. (2010). <i>Education and communication for development</i>. New Delhi: Oxford & IBH Publishing Co. 4. Harpilini, B.D. (1994). <i>Grahavigyan mai Prasar Shiksha</i>. Agra: Star Publication. 5. Kalla, P. N., & Gakkhar, A. (2010). <i>New Dimension of Extension and Communication</i>. Jaipur: University Book House. 6. Kalla, P.N., & Gakkhar, A. (2005). <i>Prasar Shiksha ke naye Aayam</i>. Jaipur: Hindi Granth Academy. 7. Singh, V. (2005). <i>Food and Nutrition Science</i> (3rd ed.). Jaipur : Panchsheel Prakashan. 	
	HSC212 Life Span Development	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Understand important aspects of development during the whole life span • Understand the issues faced and adjustments required at each stage across the life span 		References: <ol style="list-style-type: none"> 1. Cole, M., & Cole, S. (1995). <i>The Development of Children</i>. New York, NY: Freeman & Co. 2. Craig, G. (1999). <i>Human Development</i>. New Jersey, NJ: Prentice Hall. 3. Gupt, R. (1998). <i>Matra Kala Shishu Palan avem Bal Vikas</i>. Agra: Ratan Prakashan Mandir. 4. Hurlock, E.B. (1978). <i>Child Development</i> (6th ed.). New York: McGraw Hill Ltd. 5. Hurlock, E.B. (1980). <i>Developmental Psychology – A life span Approach</i> (5th ed.). New York, NY: Tata McGraw Hill Publishing Co. Ltd. 6. Hurlock, E.B. (1990). <i>Vikas Manovigyan</i>. Pratham Khand/Dutiya Khand, Hindi Madhyam Karyanvay Nideshalaya, Delhi University Dwara Prakashit. 7. Verma, P. & Srivastava, D.N. (1996). <i>Bal Manovigyan – Bal Vikas</i>. Agra: Vinod Pustak Mandir. E-resources: <ul style="list-style-type: none"> • Life Span Development www.pdfdrive.com/life-span-development-e33437743.html 	

				<ul style="list-style-type: none"> Life-Span Human Development www.pdfdrive.com/life-span-human-development-e58160481.html Life-Span Human Development 7th Edition www.pdfdrive.com/life-span-human-development-7th-ed-e901075.html 	
	HSC308 Introduction to Textiles	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> Get basic knowledge about different fibers used in textile Industry, their physical and chemical characteristics and end use Identify different methods of yarn and fabric manufacturing and their characteristics and utility Analyze different techniques used to enrich the surface of fabric through dyeing and printing and finishing Discuss the use of different types of washing methods , equipments and different agents used in care and maintenance of fabric Evaluate different practices involved in Textile Industry and at household level 		<p>References :</p> <ol style="list-style-type: none"> Corbman, B. P. (1985). <i>Textile Fibres to Fabric</i>. New Delhi: Gregg Division - Mc. Graw Hill Inc. Dantyagi, S. (1967). <i>Fundamentals of Textiles and Their Care</i>. New Delhi: Orient Longman. Deolkar, D. (1971). <i>Household Textiles and Laundry Work</i>. New Delhi: Atmaram and sons. Hollen, N. & Saddler, J. (1964). <i>Textile</i>. (5th ed.). New York, NY: Mc. Millan Publishing Co. Joseph, L. M. (1986). <i>Introductory Textile Science</i>. America: Halt, Rinehart and Winston. Kadolph, S. J. & Langbord, A. L. (11th ed.). (2014). <i>Textiles</i>, New Jersey: Prentice - Hall Inc. Tortora, P.G. (1978). <i>Understanding Textiles</i>, New York, NY: Macmillan Publishing Company. 	
	HSC312 L Textile care and clothing construction Lab.	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> Learn basic garment construction and embroidery skills Use learned skills in garment construction for different age groups and figure types Learn basic knitting stitches and their use for knitting different garments Apply theory in taking care of household textiles and garments 			

	<p>HSC305 Family Dynamics and Parent Education</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Gain information about importance, problems and adjustment in marriage life and family • Attain knowledge about role of parents and their involvement for overall development of the child • Get awareness about parent and community education for betterment of society 		<p>References:</p> <ol style="list-style-type: none"> 1. Bhushan V, & Sachdeva R. (1983). <i>Introduction to Sociology</i>. Allahabad: Kitab Mahal. 2. Gupt R.B. (1996). <i>Vikasatmak Manovigyan</i>. Agra: Ratan Prakashan Mandir. 3. Mukharjee, R.K. (1979). <i>Indian Society</i>. Jaipur, Chaura Rasta: College Book Centre. 4. Rice F.P. (1983). <i>Marriage and Family</i>. Boston: Allyn & Bacan. 5. Schaefer, C.E., & Millman, H.L. (1981). <i>How to Help Children with Common Problems</i>. New York, NY: New American Library. 6. Tomar, R. B. (1976). <i>Parivarik Samaj Shastra</i>. Agra: Shree Ram Mehra & Co. <p>E-resources:</p> <ul style="list-style-type: none"> • Building Stronger Marriages and Families https://www.pdfdrive.com/building-stronger-marriages-and-families-e22030924.html • Community Education as a Home for Family Support and Education Programs. https://www.pdfdrive.com/community-education-as-a-home-for-family-support-and-education-programs-e36264845.html • Handbook of Parenting Volume 1 Children and Parenting https://www.pdfdrive.com/handbook-of-parenting-volume-1-children-and-parenting-e19245564.html • Marriage and Family https://www.pdfdrive.com/marriage-and-family-e26425302.html • Parenting With Love and Logic: Teaching Children Responsibility https://www.pdfdrive.com/parenting-with-love-and-logic-teaching-children-responsibility-e60737122.html • Principles of Marriage and Family Ethics https://www.pdfdrive.com/principles-of-marriage-and-family-ethics- 	
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				<p>e27057361.html</p> <ul style="list-style-type: none"> The Conscious Parent: Transforming Ourselves, Empowering Our Children <p>https://www.pdfdrive.com/the-conscious-parent-transforming-ourselves-empowering-our-children-e60737120.html</p>	
	<p>Family and Child Welfare</p>	<p>Learning outcomes: Upon completion of the course students will be able to</p> <ul style="list-style-type: none"> Get an insight into the family as a social system Understand about the family disharmony due to changing socio-economic conditions in the country. Gain an understanding of the needs and problems of children, youth, women, the aged and the family as a whole. Acquire knowledge about welfare services for family and children India 		<p style="text-align: center;">Unit- I</p> <ol style="list-style-type: none"> Changing pattern of family in India : <ul style="list-style-type: none"> Structural and functional changes as result of modernization Causes and effects of family disharmony Implications of family changes: <ul style="list-style-type: none"> Female headed households, Single –parent families, Families with working women DINK families <p style="text-align: center;">Unit- II</p> <p>Problems and needs of families in specific situations</p> <ul style="list-style-type: none"> Families affected by natural calamities – earthquake, flood, famine. Families affected by war, riots and terrorism. Families with chronically ill patients and disabilities Families in extreme poverty conditions Families with marital discord. Migrant families Families with adopted children <p style="text-align: center;">Unit –III</p> <ol style="list-style-type: none"> Issue related to children- Health and nutrition, literacy and education, drop outs, recreation, self help and vocational training. Children in difficult circumstances – Gender disparities, latch key children, homeless children, abused children, young offenders Children in conflict with self and others : emotional and psychological aspects 	

				<p style="text-align: center;">Unit – IV</p> <ol style="list-style-type: none"> 1. Situation of women in India : health , reproductive health and nutrition, education, employment, sexual harassment and domestic violence, role of conflict in women, marginalization of women – widows , divorced, deserted women , women with dependent children 2. Problems of adolescents and youth : substance abuse , unemployment , antisocial active 3. Specific problems of aging population : health and medical care, housing and family support and financial assistance <p>Unit V</p> <ol style="list-style-type: none"> 1. Welfare programmes : meaning , need and status in India 2. Different types of welfare programme pertaining to family in India: <ul style="list-style-type: none"> ➤ Maternal and child help services ➤ Institutional services for women and children in distress ➤ Services for children with disabilities and youth ➤ Services for aged <p>References :</p> <ol style="list-style-type: none"> 1. Augustine, J.S. (Ed) (1992) : The Indian family in transition, New Delhi : Vikas Publishing House, Unit I & II (entire book) 2. Bhatia, M.S. (1993) Ageing and Society, Udaipur: Arya’s Book Centers. Unit IX. Chapter III to VIII, pp40-208 3. Desai, K.G. (Ed.) (1988): Ageing in India, Bombay: Tata institute of Social Sciences. Unit IX (entire book) 4. Desai, N. and Krishnaraj, M(1987) : Women and society in India, Delhi: Ajanta Publications, Unit IV (entire book). 5. NIPCCD (1994): Child in India: A statistical profile, New Delhi NIPCCD 6. Sinha, J.M.P. (1989): Problems of Ageing, New Delhi : Classical Publishing company, Unit IX, Chapter V pp 63-98 7. TISS (1991): Research in Families with problems in India, Volume I and II Bombay : TISS Unit V, Part IV pp147-187, 204-246, Vol II Part I, pp 269-289, 299-312 8. UNICEF (1990) : Children and Women in India: A Situation Analysis Unit VI, VII. 9. Choudhary D.P. (1985) : Child welfare development , Atma Ram & Son Delhi 	
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				10. Acchpal, B and Verma, A (1988): Towards better Families : An intergrated approache to Family Life Education, Baroda	
	HSC307 Introduction to Clothing	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Understand the basic essentials of clothing construction • Assess the various steps involved in the process of garment making • Gain the skills required for apparel construction 		<p>References :</p> <ol style="list-style-type: none"> 1. Bendell, P. & Reader's Digest (1995). <i>Complete guide to sewing</i>. Montreal. Canada: Penguin printing trade Ltd. 2. Doongaji, (2002). <i>Basic processes of clothing construction</i>. Delhi: Raaj Prakashan. 3. Mc-Call's (1963). <i>Sewing Book</i>. New York: Random House, Inc. 4. Smith, A. (1981). <i>Sew simple : A step by step guide to dress making</i>. Hutchinson, MA: English Sewing Ltd. . 	
	Fundamentals of Family Clothing	<p>Learning outcomes: Upon completion of the course, the students will be able to:</p> <ul style="list-style-type: none"> • Describe the selection factors for fabrics and clothes of individuals of different age group. • Understand specific property of fabric required for different types of garments. • Elaborate various functions of clothing. • Use different principles and elements of art while selecting or designing dress for different figure types. 		<p>Unit I Selection of fabric for different garments. Garment type and their selection- outer garments and under garments. Readymade and home made garments.</p> <p>Unit II Family clothing decisions- steps and factors. Family wardrobe principles- community, budget, occasion, climate, occupation, interest, size, composition of the family, fashion, quality and accessories.</p> <p>Unit III Body measurements and proportion, figure types. Principles and elements of art in clothing design. Preparation of fabric for garment cutting. Layout types and cutting of the fabric.</p> <p>Unit IV Sociological, physical and psychological aspect of clothing. Factors influencing consumption of textiles</p> <p>Unit V Children's clothes: selection of fabrics, design, colour for children garments according to age. Clothing for adolescence, middle age and old age.</p> <p>References:</p> <ul style="list-style-type: none"> • Tate, M.T. and Glisson, O. (1967). <i>Family clothing</i>. New York: John Wiley and Sons. • Lewis, D.S. & Bowers, M.G. (1960). <i>Clothing construction and wardrobe planning</i>. New York: Macmillan Book Company. • Wingate, Isabel B. (1965). <i>Textile Fabrics and Their Selection</i>. London: Prentice-Hall, INC. • Alexander (1972). <i>Textile Products, Selection, Use and Care</i>. London: Miffen Co. • Frings, G.S. (1999). <i>Fashion from concept to Consumer</i>. New Jersey: Prentice Hall. 	

Name of the programme : B.sc. (Home Science)

HOME SCIENCE PROGRAMME

The quality of life of society and the family determines positive functioning. Home Science has a vital role to play in increasing the capacity of the family and the community. At Banasthali Vidyapith, the faculty of Home Science strives to work dedicatedly towards women's empowerment through socially-relevant, holistic, interdisciplinary education, in keeping with its unique philosophy of Panchmukhi Shiksha (Five fold education). Home Science curriculum is offered in a composite form as per the development trends incorporating multi-disciplinary skills, linking the general studies with professional courses integrating theory and practice, and flexibility to the credit based system to meet the challenges in Indian ethos and global context. The curriculum is continually innovated to make it globally valuable, locally relevant and responsive to the changing times and needs. The course sensitizes students to the needs of others, especially of those less advantaged, and fosters a service orientation. The faculty also aims to contribute to the national and international knowledge base in Home Science and allied fields. Due emphasis has always been given to the skill development and enhancement in the students. The degrees offered by the faculty include B.Sc. (Home Science) and M.Sc. (Home Science) in Food Science and Nutrition, Human Development and Clothing and Textile. PhD is awarded in all the five branches of Home Science. Home Science is also offered as a subject in B. A. programme.

Program Educational objectives:

Objectives of the Home Science programme are

- To acquaint students with interdisciplinary nature of Home Science as an integrated body of knowledge, all interwoven to enhance the quality of life, and multidisciplinary nature of subjects dealing with art and science of living
- To provide education through integrated approach of combining theory, practical, and field work emphasizing gender neutral, family focus , region specific and career perspective
- To prepare students to become actively involved in local and regional professional service activities which allow continuous initiative for empowering the individual, family and community
- To inculcate scientific thinking to undertake research projects of national and international recognition and publish multidisciplinary papers

Programme Outcomes:

PO1 Knowledge – Have knowledge and holistic understanding of the core courses related to Home Science including Human Development, Foods and Nutrition, Clothing and Textile, Human Management, Extension Education and Communication; and basic courses

associated with discipline of Home Science, including Social Sciences, Biological sciences, Physical sciences, Technology and Management.

PO2 Planning Abilities- Apply skills in designing, implementing, monitoring and evaluating programmes effectively for individuals, family, community, and for vulnerable groups of society.

PO3 Problem Analysis- Solve problems concerning home ,family , and society for ensured physical and mental health in the changing socio-economic scenario viz. dietary problems, behavioral problems, clothing problems, social problems by applying scientific methods ; through critical thinking, assessing, analyzing, finding appropriate solutions and taking decisions

PO4 Modern Tool Usage- ability to select and use appropriate methods and procedures; tools and equipments; raw materials and other resources for knowledge, skill enhancement, designing and creation of new products, assessment and evaluation

PO5 Leadership Skills- apply leadership skills; inspiring, taking responsibility, delegating tasks while working in a team, communicating with other teams, providing guidance to lesser skilled in various settings be it family, industry or institutions or carrying out research projects

PO6 Professional Identity- Take various professional roles in industries, govt./non-govt. organizations, institutes as educators, entrepreneurs, counselors, social workers, consultants, designers, researchers and exhibit competencies & skills

PO7 Ethics- Apply ethical practices while data collection, and conducting experiments ; involving human beings as well as animals, delivering professional responsibilities

PO8 Communication- Use soft skills for clear , accurate, unambiguous effective communication using verbal and non-verbal skills at inter / intra personal and professional level

PO9 Home Science and Society- Apply knowledge and competencies developed as graduates to impart knowledge, identify, analyze and address family and societal issues to improve quality of life of individual, family and society as a whole, also covering marginalized and vulnerable groups of society.

PO10 Environment and Sustainability- Critically evaluate impact of household and industrial practices on environment. Appreciate use of sustainable practices for improved physical, emotional, social, psychological environment at micro / macro level

PO11 Life Long learning – ability to reason out, learn and improve oneself in the changing dynamic scenario by strengthening the strength and weakening of weaknesses for sustainable developmental needs , technological changes, career requirements and new avenues.

PO12 Project- Provide opportunity to students to get acquainted with innovative projects and develop skills to plan and undertake intervention projects.

Program specific outcomes:

Upon graduation the students will be able to

- Apply academic knowledge for commercial application with an entrepreneurial base
- Transfer knowledge from class room to laboratory and from laboratory to field
- Extend their competencies and work to the community and vulnerable group thus leading to social and economic development
- Apply multiple investigative skills with a spirit of inquiry for a wider options to choose from higher studies to variety of career options

Programme Scheme:

B.Sc. (Home Science)

Semester : I

Existing					
Course Code	Course Name	L	T	P	C
BVF 004	Modern English Language	2	0	0	2
BVF 003	Indian Heritage	2	0	0	2
HSC 111	Introduction to Home Science	4	0	0	4
HSC 106	Fundamentals of Bio-Chemistry and Microbiology	4	0	0	4
HSC 106L	Fundamentals of Bio-Chemistry and Microbiology-	0	0	2	1
HSC 103	Elementary Human Physiology	4	0	0	4
HSC 103L	Elementary Human Physiology	0	0	2	1
HSC 112	Introduction to Human Development	4	0	0	4
HSC 114	Textiles and Their Care	4	0	0	4
HSC 114L	Textiles and Their Care	0	0	4	2
	Total	24	0	8	28

Proposed					
Course Code	Course Name	L	T	P	C
	General English	2	0	0	2
	Indian Cultural Heritage	2	0	0	2
HSC 103 / 103L	Elementary Human Physiology	4	0	2	5
HSC 106 / 106L	Fundamentals of Bio-Chemistry and Microbiology	4	0	2	5
HSC 111	Introduction to Home Science	4	0	0	4
HSC 112	Introduction to Human Development	4	0	0	4
HSC 114 / 114L	Textiles and Their Care	4	0	4	6
	Total	24		8	28

Semester : II

Existing					
Course Code	Course Name	L	T	P	C
BVF 005	Modern Hindi Language	2	0	0	2
BVF 002	Environment Studies	2	0	0	2
HSC 110	Introduction to Extension Education	4	0	0	4
HSC 104	Elements of Food Science	4	0	0	4
HSC 104L	Elements of Food Science	0	0	4	2
HSC 113	Life Span Development -I (Prenatal to Early Childhood)	4	0	0	4
HSC 109	Interior Designing and Decoration	4	0	0	4
HSC 109L	Interior Designing and Decoration	0	0	4	2
HSC 105	Fabric Construction	4	0	0	4
	Total	24	0	8	28

Proposed					
Course Code	Course Name	L	T	P	C
	General Hindi	2	0	0	2
BVF 002	Environment Studies	2	0	0	2
HSC 104 / 104L	Elements of Food Science	4	0	4	6
HSC 105	Fabric Construction	4	0	0	4
HSC 109 / 109L	Interior Designing and Decoration	4	0	4	6
HSC 110	Introduction to Extension Education	4	0	0	4
HSC 113	Life Span Development -I (Prenatal to Early Childhood)	4	0	0	4
	Total	24	0	8	28

Semester : III

Existing					
Course Code	Course Name	L	T	P	C
BVF 007R	Selected Writing for Self Study- I	2	0	0	2
BVF 001	Elements of Management	3	0	0	3
HSC 206	Food Preservation and Protection	4	0	0	4
HSC 209	Human Nutrition and Meal Planning	4	0	0	4
HSC 209L	Human Nutrition and Meal Planning- Laboratory	0	0	4	2
HSC 211	Introduction to Resource Management	4	0	0	4
HSC 207	Fundamentals of Clothing Construction	4	0	0	4
HSC207L	Fundamentals of Clothing Construction-	0	0	4	2
HSC 213	Life Span Development- II (Middle Childhood to Old Age)	4	0	0	4
	Total	25	0	8	29

Proposed					
Course Code	Course Name	L	T	P	C
BVF 006	Parenthood and Family Relation	2	0	0	2
	Elective Foundation Course - I	2	0	0	2
HSC 206	Food Preservation and Protection	4	0	0	4
HSC 207 / 207L	Fundamentals of Clothing Construction	4	0	4	6
HSC 209 / 209L	Human Nutrition and Meal Planning	4	0	4	6
HSC 211	Introduction to Resource Management	4	0	0	4
HSC 213	Life Span Development- II (Middle Childhood to Old Age)	4	0	0	4
	Total	24	0	8	28

Semester : IV

Existing					
Course Code	Course Name	L	T	P	C
BVF 008R	Selected Writing for Self Study- II	2	0	0	2
BVF 009	Women in Indian Society	3	0	0	3
HSC 214	Nutrition for Vulnerable Groups	4	0	0	4
HSC 201	Communication Process	4	0	0	4
HSC 201L	Communication Process- Laboratory	0	0	4	2
HSC 202	Family Clothing	4	0	0	4
HSC 202L	Family Clothing- Laboratory	0	0	4	2
HSC 203	Family Dynamics	3	0	0	3
*HSC 203L	Family Dynamics- Laboratory	0	0	2	1
HSC 208	Guiding Child Behaviour	3	0	0	3
*HSC 208L	Guiding Child Behaviour- Laboratory	0	0	2	1
	Total	23	0	12	29

Proposed					
Course Code	Course Name	L	T	P	C
BVF 009	Women in Indian Society	2	0	0	2
	Elective Foundation Course - II	2	0	0	2
HSC 201 201L	Communication Process	4	0	4	6
HSC 202 / 202L	Family Clothing	4	0	4	6
HSC 203 / 203L	Family Dynamics	3	0	2	4
HSC 208 / 208L	Guiding Child Behaviour	3	0	2	4
HSC 214	Nutrition for Vulnerable Groups	4	0	0	4
	Total	22	0	12	28

*Common practical examination for HSC 203L and HSC 208L.

Semester : V

Existing					
Course Code	Course Name	L	T	P	C
	Vocational Elective - I	2	0	0	2
HSC301	Assessment of Nutritional Status	4	0	0	4
HSC301 L	Assessment of Nutritional Status	0	0	4	2
HSC303	Dyeing, Printing and Finishing	3	0	0	3
HSC309	Introduction to work Study	4	0	0	4
HSC310	Methods and Material for child Study	4	0	0	4
HSC310 L	Methods and Material for child Study	0	0	4	2
HSC313	Textile Designing	3	0	0	3
HSC315 L	Surface Ornamentation techniques for textile	0	0	4	2

Proposed					
Course Code	Course Name	L	T	P	C
	Vocational Course - I	2	0	0	2
	Selected Writings of Great Authors - I	2	0	0	2
HSC301 / 301L	Assessment of Nutritional Status	4	0	4	6
HSC303	Dyeing, Printing and Finishing	3	0	0	3
HSC313	Textile Designing	3	0	0	3
HSC315 L	Surface Ornamentation Techniques for Textile Lab	0	0	4	2
HSC310 /310 L	Methods and Material for child Study	4	0	4	6
	Discipline Elective I	4	0	0	4
	Total	22	0	12	28

Semester : VI

Existing					
Course Code	Course Name	L	T	P	C
	Vocational Elective - II	2	0	0	2
HSC302	Diet Therapy	4	0	0	4
HSC302L	Diet Therapy	0	0	2	1
HSC304	Early Childhood Education	4	0	0	4
HSC304L	Early Childhood Education	0	0	4	2
HSC306	Fashion Dynamics & illustration	3	0	0	3
HSC306 L	Fashion Dynamics & illustration	0	0	4	2
HSC311	Nutritional Biochemistry	4	0	0	4
HSC311L	Nutritional Biochemistry	0	0	2	1
HSC314	Welfare Programmes	3	0	0	3
	Total	20	0	12	26

Proposed					
Course Code	Course Name	L	T	P	C
	Vocational Course - II	2	0	0	2
	Elective Foundation Course - III	2	0	0	2
HSC 302/ 302L	Diet Therapy	4	0	2	5
HSC304 /304L	Early Childhood Education	4	0	4	6
HSC306/ 306L	Fashion Dynamics & Illustration	3	0	4	5
HSC314	Welfare Programmes	3	0	0	3
	Discipline Elective II	4	0	2	5
	Total	22	0	12	28

*Common practical examination for HSC 302L and HSC 311L.

List of Discipline Electives					
Course code	Course Name	L	T	P	C
HSC309	Introduction to work Study	4	0	0	4
	Behaviour Change Communication (Newly Introduced)	4	0	0	4
	Community Health Management(Newly Introduced)	4	0	0	4
HSC311/ HSC311L	Nutritional Biochemistry	4	0	2	5
/	Ergonomics and Space Management(Newly Introduced)	4	0	2	5
/	Programme Planning and Management(Newly Introduced)	4	0	2	5

* **L - Lecture hrs/week; T - Tutorial hrs/week;**

P - Project/Practical/Lab/All other non-classroom academic activities, etc. hrs/week; C - Credit Points of the Course **Course**
Details : (See annexure II b)

Annexure II b

Name of the Programme : B.Sc. (Home Science)

S. N0.	Course/ List	Learning Outcome	Existing Syllabus	Suggested Syllabus	Remarks
1	HSC 103/ HSC 103 L Elementary Human Physiology	Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Describe the functioning of various body organs and integrated functioning of all systems in human body • Examine some basic parameters of human fitness • Apply the knowledge of First Aid in different situations 	Unit II (a) Digestive system- Organs of digestive system and their physiology; Role of enzymes in digestion of carbohydrate, protein and fat (b) Excretory System-Organs of excretory system, structure of kidney , formation of urine and its composition	Unit II (a) Digestive system- Organs of digestive system and their physiology; Role of enzymes in digestion of carbohydrate, protein and fat (b) Excretory System-Organs of excretory system, formation of urine and its composition References : 1. Ross & Wilson (1996). <i>Foundations of Anatomy and Physiology</i> (8 th ed.). New York: Churchill Livingstone, Elsevier 2. Sanghani, P. B. (2012). <i>Human Anatomy and Physiology with health education</i> . New Delhi:Tata Mc Graw Hill Education Private Limited. 3. Sears,W.G.,&Winwood,R.S.(1982). <i>Anatomy and Physiology for Nurses</i> , London: Edwards Arnold Publishing Co.Ltd. 4. Tortora,G. J., & Derrickson, B. (2006). <i>Principles of Anatomy and Physiology</i> . USA: John Wiley & Sons. Inc. 5. Waugh, A., & Grant, A. (2014). <i>Anatomy and Physiology in Health and Illness</i> (12th ed.). New York; Churchill Livingstone, Elsevier. E resources <ul style="list-style-type: none"> • Diagram of human body organs - https://in.pinterest.com/pin/429390145695727907/ 	Structure of kidney is a part of organs of excretory system

				<p>• The human body: Anatomy ,facts and functions https://www.livescience.com/37009-human-body.html</p>	
	HSC 106 /HSC 106L Fundamentals of Bio - Chemistry and Microbiology	<p>Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> Analyze principles of Biochemistry (as applicable to human nutrition) Explain chemistry and functions of major nutrients in human body Discuss nature and role of microbiology Apply and practice learned information in qualitative analysis of major nutrients, micro organisms in food 	<p>Unit I Introduction and scope of Biochemistry, organic chemistry as related to biochemistry - functional groups - alcohol, aldehyde, ether, esters, amine, and carboxylic group (Examples from Biochemistry). Carbohydrate: Classification and Nomenclature, chemical structure, properties and functions of mono, di and polysaccharides, colour reactions of Carbohydrates.</p> <p>Lipids: Classification, structure, properties and functions of fatty acids, triglycerides, sterols and phospholipids.</p> <p>Unit II Amino Acids: Properties, structures, classification and functions of essential amino acid Proteins: Classification, structure and fundamental properties of proteins and Functions of Proteins.</p> <p>Unit III Vitamins and Minerals: Elementary idea about chemistry and functions of vitamins A, D, E, K, vitamin B complex (Thiamine, Riboflavin, Niacin, Pyridoxine, Biotin, Folic acid, vitamin B12) and Vitamin C</p>	<p>Unit –I Introduction of Biochemistry Introduction to organic functional groups with examples from biochemistry – alcohol, aldehyde, ether, ester, amine and carboxylic groups</p> <p>Carbohydrate: Classification and nomenclature, chemical structure and functions of mono, di & polysaccharides</p> <p>Carbohydrates as sweeteners</p> <p>Lipids : Chemical structures and functions of lipids</p> <p>Unit II Amino Acids : Classification, structure and functions of Essential Amino Acids</p> <p>Proteins : Classification , structure and functions</p> <p>Unit III Vitamins and Minerals:</p> <p>Chemical names and functions of Fat soluble and Water soluble vitamins - A, D, E and K, Vitamin B Complex (Thiamin , Riboflavin, Niacin, Pyridoxine, Biotin, Folic Acid, Vitamin B₁₂) and vitamin C (only Basic information)</p>	content has been rewritten to make it more concise

			<p>Elementary idea about major elements and trace elements and their functions (Calcium, Phosphorus, Iron, Iodine, Zinc, Magnesium, Sodium and Chlorine)</p> <p>Unit IV</p> <p>A. Microorganisms - Classification (Elementary idea) and their general characteristics.</p> <p>B. Microorganisms: Benefits and hazards (a brief discussion)</p> <p>C. Introductory account of Air and water Microbiology.</p> <p>Unit V</p> <p>A. Infection: Kinds of infectious diseases - mode of transfer of infections.</p> <p>B. Resistance - Natural resistance (the first line of defense, the second line of defense).</p> <p>C. Immunity - types of immunity, an introduction to antigens and antibodies, Prophylactic measures (Antiserum and vaccines)</p>	<p>Minerals and trace elements (Macro and Micro Minerals) : Calcium, Phosphorus, Magnesium, Sodium, Chloride, Iron, Iodine, Zinc and Selenium</p> <p>Unit IV Introduction to microorganisms: basic structure of bacteria, virus and fungi (only elementary idea) and general characteristics</p> <p>Benefits and hazards of Microorganisms</p> <p>Introduction to Microorganisms found in air and water</p> <p>Unit V Concept of infectious diseases and their mode of transfer</p> <p>Resistance – Natural resistance (the first line of defense and second line of defense)</p> <p>Immunity - Definitions of innate , acquired, active and passive immunity</p> <p>Concept of immunization, Immunization schedule for children Importance of cold chain vaccine management</p>	
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	HSC 111 Introduction to Home Science	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Discuss concept, , historical background and relationship between Home Science with foundation and supportive courses • Explain the scope of different areas of Home Science • Utilize information in designing and developing skills needed for further specialization and entrepreneurship 	-----	<p>References:</p> <ol style="list-style-type: none"> 1. Aggarwal, J. C. (2004). <i>Educational Psychology</i>. New Delhi: Vikas Publishing House Pvt. Ltd. 2. Bansal, I.& Kumari, C. (2009). <i>Home Science: An Introduction</i>. Banasthali: Navjeevan Press. 3. Bhushan, B. & Sachdeva, R. (1983). <i>Sociology</i>. , Allahabad: Kitab Mehal. 4. Chandra, A. (1978). <i>Introduction to Home Science</i>. New Delhi: Metropolitan Book Company, Ltd. 5. Chauhan, S.S. (1983). <i>Advanced Educational Psychology</i>. (5th ed.). Agra: Vikas Publishing House, Pvt. Ltd. 6. Devdas, R.P. (1978). <i>Methods of Teaching Home Science</i>. New Delhi: NCERT. 7. Devdas, R.P. (1978). <i>The meaning of Home science</i>. New Delhi: NCERT. 8. Khanka, S.S.(1999). <i>Entrepreneurial Development</i>. New Delhi: S. Chand and Company, Ltd. 9. Sharma, K.R. (2007). <i>Fundamental of Sociology</i> .Chennai: Atlantic Publishers. 10. Verma, S. & Deshpandey, A. (1997). <i>Parivarik Vitt</i>. Shri Saraswati Sadan Mansuri, New Delhi: Hindi Granth Academy. 11. Vidyalankar, S. (1976). <i>Samajshastra</i>. Jaipur: Hindi Granth Academy. 	
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	HSC 112 Introduction to Human Development	<p>Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Discuss concept and various aspects of Human Development • Explain growth and development of children • Appraise concern and issues related to parenting and development aspects • Relate theories to developmental aspects 	-----	<p>Reference Book :</p> <ol style="list-style-type: none"> 1. Gupt, Ram Babu (1996). <i>Vikasatmak Monovigyan</i>. Agra: Ratan Prakashan Mandir 2. Hurlock, Elizabeth B. (1984). <i>Bal Manovigyan</i> (6th ed.). New Delhi : Tata Mc Graw Hill. 3. Hurlock, Elizabeth B. (1978). <i>Child Development</i> (6th ed.). New Delhi: Mc Graw Hill Publishers Ltd. 4. Mussen, P., Conger J.J., Kagan J. and Haston AC (1990). <i>Child Development and Personality</i>. New York: Harper & Raw. 	
	HSC 114/ HSC 114L Textiles and Their Care	<p>Learning outcomes:</p> <p>Upon completion of the course students will be able to</p> <ul style="list-style-type: none"> • Select and evaluate textile material critically for the specific end use. • Differentiate among various types of fiber, yarns and fabrics that would meet the requirement of garment and textile industries. • Use various types of materials, reagents, equipments and processes involved in care of textiles. • Demonstrate good base knowledge for higher degree program 		<p>References :</p> <ol style="list-style-type: none"> 1. Corbman, B.P. (1983). <i>Textiles: Fiber to Fabric</i> (6th ed.). New York: McGraw Hill Publication. 2. Dantiyagi, S. (2006). <i>Fundamentals of Textiles and their Care</i> (5th ed.). Delhi: Orient Longman private ltd. 3. Deulkar, D. (1982). <i>Household textiles and Laundry Work</i>. Delhi: Atma ram and Sons. 4. Gohl, E. P. G. & Vilensky, L. D. (1981). <i>Textiles-for modern living</i>. Melbourne: Longman Cheshire. 5. Hollen, N. & Saddler, J. (1979). <i>Textiles</i> (5th ed.). New York: MacMillan Publishing Co. 6. Joseph, M. L. (1986). <i>Introductory Textile Science</i>. New York: Holt, Rinehart and Winston. 7. Tortora, G. P. (1978). <i>Understanding Textiles</i>. New York: MacMillan publishing Co. <p>E-resources</p> <ol style="list-style-type: none"> 1. Textile fibers classification https://www.textileschool.com/2782/comprehensive-list-of-textile-fibers/ 2. Fancy yarns https://nptel.ac.in/courses/116102038/42 	

				<ol style="list-style-type: none"> 3. Handbook of textile fibers https://www.scribd.com/doc/23984852/Handbook-of-Textil-Fibers 4. Textile fibers: Classification and properties pdf http://bieap.gov.in/Pdf/CGTPaperII.pdf 5. Textile science book http://cbseacademic.nic.in/web_material/Curriculum/Vocational/2018/Textile%20DesignT&P_XI_829.pdf 6. Textile fibers, dyes, finishes and processes https://www.scribd.com/document/25717442/Textile-Fibers-Dyes-Finishes-and-Processes 	
	HSC 104 / HSC 104 L Elements of Food Science	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Explain the chemistry underlying the properties of various food components • Explain functions of food and identify good sources of nutrients • Know the basic concept of food science • Apply the various methods of cooking in daily life • To make informed judgments in use of different commodities in various food preparations 	-----	References : <ol style="list-style-type: none"> 1. Mudambi, S., Shalini R.S.& Raw, M. (2007). <i>Food Science</i>, New Delhi: Wiley East limited, 2. Shadak, S.M.&Manay, N.S. (1996). <i>Food Facts & Principles</i>, Wiley Eastern Ltd. New Delhi. 3. Srilakshmi, B. (1996) .<i>Food Science</i>, New age international Pvt.Ltd. New Delhi. 4. Swaminathan, M. (1987). <i>Food Science Chemistry and Experimental Foods</i> .The Bangalore Printing and publishing Co. ltd. Bangalore. 	

	<p>HSC 105 Fabric Construction</p>	<p>Learning outcomes: Upon completion the course students will be able to:</p> <ul style="list-style-type: none"> • Know different yarn manufacturing process and their effect on properties • Understand and relate various fabric construction methods with properties and end use • Describe preparatory processes for weaving and develop concept of color and weave effects • Explain different simple and compound weaves 	<p>-----</p>	<p>References:</p> <ol style="list-style-type: none"> 1. Blinov, I. and Belay, S. (1988): <i>Design of Woven Fabrics</i>. Moscow: Mir Publishers 2. Corbman, B. P. (1985). <i>Textile Fibres to Fabric</i>. New Delhi: Gregg Division - Mc. Graw Hill Inc. 3. Grosicki, Z. J. and Watson. (1988). <i>Textile Design and Colour</i>, London: Newness, Butterworth 4. Hall, A. J. (1975). <i>The Standard Hand Book of Textiles</i>. London: Newness, Butterworth 5. Hollen, N. and Saddler, J. (1964). <i>Textile</i>. 5th ed. New York, Mc. Millan Publishing Co. 6. Kadolph, S. J. and Langbord, A. L. (2014). <i>Textiles</i>, 11th ed. New Jersey: Prentice - Hall Inc. 7. Tortora, P.G., (1978). <i>Understanding Textiles</i>, New York: Macmillan Publishing Company <p>E- resources :</p> <ul style="list-style-type: none"> • Fabric Construction, http://download.nos.org/srsec321newE/321-E-Lesson-24.pdf • Yarn and classification, http://cms.gcg11.ac.in/attachments/article/87/CLASSIFICATION%20OF%20YARN.pdf 	
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<p>HSC 109/ HSC 109 L Interior Designing and Decoration</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Compare and relate objects in terms of their aesthetic potentials • Analyze factors that create beauty and eloquence in different types of interiors • Synthesize elements of art based on principles of design in order to achieve the objectives of design and decoration 	<p>-----</p>	<p>References:</p> <ol style="list-style-type: none"> 1. Faulkner and Faulkner (1977). <i>Inside Today's Home</i>. (4th ed.). New York: Reinhart & Winston 2. Kurtz, D. (1987). <i>Visual imagination: An introduction to Art</i>. New Jersey: Prentice Hall Inc. Engle Wood Cliffs 3. Sardana, S.C. (2001). <i>Vaastu Shastra</i>. New Delhi: New Allied Publishers 4. Sutton & Whelan (2004). <i>The Complete Color Harmony</i>. USA: Rockport Publishers Inc. <p>E- resources</p> <ul style="list-style-type: none"> • Elements and Principles of Art Design https://study.com/academy/lesson/elements-and-principles-of-art-design.html • Basic Elements of Design https://creativemarket.com/blog/10-basic-elements-of-design • Using Illusions in Interior Designing http://www.hamstech.com/blog/using-illusions-in-interior-designing • Vaastu http://www.vaastuinternational.com 	
<p>HSC 110 Introduction to Extension Education</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Understand meaning, philosophy and principles of Extension Education and its role in national development • Explain Extension models in practice and their scope in facilitating development • Design plan of work for need based program 	<p>-----</p>	<p>References:</p> <ol style="list-style-type: none"> 1. Chauhan, J. (1996). <i>Prasar Shiksha Aur Soochana Tantra</i>. Agra: Isha Publication. 2. Dahama, O.P., & Bhatnagar, O.P. (2010). <i>Education and Communication for Development</i>. New Delhi: Oxford and I BH Publishing Co., Pvt. Ltd. 3. Dubey, V.K., & Bishnoi, I. (2008). <i>Extension Education and Communication</i>. New Delhi: New age International Publishers. 4. Jalihal, K. (2007). <i>Fundamentals of Extension Education and Management in Education</i>. New Delhi: Concept Publishing Company 5. Kalla, P.N., & Gakkhar, A. (2005). <i>Prasar Shiksha Ke Naye</i> 	

		<ul style="list-style-type: none"> Ready to be part of various developmental programs 		<p>Ayam. Jaipur: Hindi Granth Akadami.</p> <p>6. Kalla, P.N., & Gakkhar, A. (2010). <i>New Dimension of Extension and Communication</i>. Jaipur: University Book House.</p> <p>7. Maximun, N. (2006). <i>Understanding Extension Education</i>. New Delhi: Gyan Publishing House</p> <p>8. Mohanty, S.R. (2017). <i>Home Science Extension Education and Rural Development</i>. Germany: Anchor Academic Publishing.</p> <p>9. Rajsingh, A., & Saxena, A. (2008). <i>Prasar Siksha me Sampreshan va Nirdesh Takneek</i>. Jaipur: University Book House, Pvt. Ltd.</p> <p>10. Sandhu, A.S. (1993). <i>Text book on Agricultural Communication : Process and Methods</i>. Calcutta: Oxford and IBH Publishing Co. Pvt. Ltd.</p> <p>11. Sharma, O.P. (2013). <i>Programme Planning and Participatory approaches in Extension</i>. Udaipur: Agrotech Publishing Academy.</p> <p>12. Singh, U., & Nayak, A. (2007). <i>Extension Education</i>. , New Delhi: Commonwealth Publishers. ISBN 817169442.</p> <p>13. Supe, S.V. (2005). <i>An Introduction to Extension Education</i>. Oxford & IBH Publishing Co. Pvt. Ltd.</p> <p>14. Vaghmare, S.K.(1980). <i>Teaching Extension Education</i>. Vallabhvidyanagar Gujarat: Prashant Publishers.</p>	
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	<p>HSC 113 Life Span Development -I (Prenatal to early childhood years)</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Understand various aspects of development from prenatal to early childhood years • Assess the issues faced and adjustments required during these years 	<p>-----</p>	<p>References :</p> <ol style="list-style-type: none"> 1. Berk, L.E. (1996). <i>Child Development</i>. New Delhi: Prentice Hall. 2. Cole, M., & Cole, S. (1995). <i>The Development of Children</i>. NY: Freeman & Co. 3. Hurlock, E.B. (1978). <i>Child Development</i> (6th ed.). New York: Tata McGraw Hill Publishing Company Limited. 4. Hurlock, E.B. (1980). <i>Developmental Psychology - A Life Span Approach</i> (5th ed.). New York: Tata McGraw Hill Publishing Company Limited. 5. Rice, F.P. (1965). <i>Human Development – A Life Span Approach</i>. New Jersey, NJ: Prentice Hall. 6. Santrock, J.W. (2008). <i>Life Span Development</i>. New Delhi: Tata McGraw Hill Companies Pvt. Ltd. <p>E-resources:</p> <ul style="list-style-type: none"> • Early childhood development and cognitive development https://www.pdfdrive.com/early-childhood-development-and-cognitive-development-e63805631.html • Early childhood development and cognitive development in developing countries https://www.pdfdrive.com/early-childhood-development-and-cognitive-development-in-developing-countries-e124334421.html • Effects of Prenatal Stress and Poverty on Fetal Growth https://www.pdfdrive.com/effects-of-prenatal-stress-and-poverty-on-fetal-growth-e21046301.html • Influence of prenatal stress and postnatal maternal behaviour on child temperament and coping with stress https://www.pdfdrive.com/influence-of-prenatal-stress-and-postnatal-maternal-behaviour-on-child-temperament-and-coping-d57252917.html • Prenatal Book 	
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				<p>https://www.pdfdrive.com/prenatal-book-e35457151.html</p> <ul style="list-style-type: none"> • Prenatal maternal stress and child motor development https://www.pdfdrive.com/prenatal-maternal-stress-and-child-motor-development-1-understanding-the-d53948640.html • Prenatal, Perinatal & Postnatal Aspects https://www.pdfdrive.com/prenatal-perinatal-postnatal-aspects-e54138046.html 	
	<p>HSC 206 Food Preservation and Protection</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Identify and describe causes, principles and methods of food preservation • Describe personal hygiene requirements for food handlers for preparing food safely. • Know the principles and objectives of various food laws, standards and authority required for safe food marketing. 	-----	<p>References :</p> <ol style="list-style-type: none"> 1. Desrosier, N.W.(1977). <i>Elements of food Technology</i>. Connecticut USA: AVI Publishing Co. 2. Frazier, W.C., Westhoff D.C.(2014). <i>Food Microbiology</i>. New York :Mc Graw Hill Book Company. 3. Gould, G.W.(1994). <i>New Methods of food Preservation</i>. London : Black lie Academic and Professional. 4. Swaminathan, M. (1987) <i>Food Science Chemistry and experimental foods</i>. Bangalore : The Bangalore Printing and Publishing Co. Ltd. 	

	<p>HSC 207 / HSC 207 L Fundamentals of Clothing Construction</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Understand basic essentials of clothing construction and process of garment making • Use acquired garment construction skills for different age groups and figure types 	<p>HSC207 Fundamentals of Clothing Construction</p> <p>-----</p>	<p>References :</p> <ol style="list-style-type: none"> 1. Ajaonkar, D.B.(1998). <i>Knitting Technology</i>. Mumbai : Universal Publication Corp. 2. Doongaji.(2002). <i>Basic Processes of Clothing Construction</i>. Delhi : RaajPrakashan. 3. Lewis, D.S. (1960). <i>Clothing Construction and Wardrobe Planning</i>. New York : The Macmillan Company. 4. Mazumdar,L. and Vatsala, R.(2004). <i>Text book of Fundamentals of Clothing Construction</i>. New Delhi : Indian Council of Agricultural Research. 5. Mullick, P. (2002). <i>Garment Construction Skills</i>. New Delhi : Kalyani Publishers. 	
			<p>HSC207L Fundamentals of Clothing Construction Lab. Hand and Machine stitches, Basic embroidery stitches, seams and seam finishes, Disposal of fullness, Plackets and fastener, Yokes, Sleeves, Pockets, Trimmings, Knitting Patterns. • Stitching of Apron, Sari Petticoat, <u>Sari blouse</u> • Collars, <u>Baby Layette, Romper</u>•Mending.</p>	<p>Syllabus:</p> <ul style="list-style-type: none"> •Hand Stitches- Running, basting, back, buttonhole, hemming, overcasting, .picko. • Machine Stiches/seams – Plain and it’s finishing, french, lapped, run and fell, decorative seams- slot, piped. • Disposal of fullness- darts, pleats, tucks, gathers, smoking, shirring. • Pockets- patch, inseam,welt. • Plackets and fasteners. • Trimmings, mending, • Sleeves- plain, cap, flared, gathered, puffed,. • Collar – baby, cape, Chinese / mandarian/stand/, peterpan, sailor, shirt • Yokes- straight, round, V shape, U shape. • Stitching of apron and petticoat • Embroideries- blanket, buttonhole, bullion knot, chain, 	<p>Content has been elaborated to make it clear and unambiguous and to avoid repetition (deleted part is already in the syllabus of family clothing HSC202L)</p>

				<p>couching, french knot, fly, feather, herringbone, lazy daisy, running, stem, satin</p> <p>Knitting patterns</p>	
	<p>HSC 209 / HSC 209 L Human Nutrition & Meal Planning</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> To describe the functions and sources of nutrients Assess the dietary requirement of various nutrients and effects of deficiencies and excesses. Apply the knowledge in planning and preparation of meals of improved nutritional quality for different groups Evaluate acceptability and serving of food. 	-----	<p>References:</p> <ol style="list-style-type: none"> 1. Khanna, K, Gupta S, Mahna R, Puri S, Seth R. and Passi S.J.(1997). <i>Text book of Nutrition & Dietetics</i>. New Delhi: Phoenix Publishing House Pvt. Ltd. 2. Mudambi, S.R. (2007). <i>Fundamental of foods , Nutrition and Diet Therapy</i>. Delhi: New age international (P) Ltd.. 3. Robinson, C.H. (1986). <i>Normal and Therapeutic Nutrition(17th ed.)</i>. New York: McMillan Publishing Company. 4. Sharma, S. (2000). <i>Human Nutrition and Meal Planning</i>. New Delhi : Jnanda Publishers. 5. Srilakshmi , B. (2004). <i>Nutrition Science</i>. New Delhi : New Age, International (P) Limited. <p>E resources:</p> <ul style="list-style-type: none"> • Classification of food, balanced diet https://www.slideshare.net/JasminaSangani/meal-planning • Types of food services and their advantage https://www.slideshare.net/iamrealmelissa/food-service-67652942 • Dietary requirement for various age groups https://www.slideshare.net/aneeshajaiswal/dietary-guidelines-11405034 	

				<ul style="list-style-type: none"> • Preparation of nutrient rich dishes such as: Protein, Vitamin A, Thiamine, Riboflavin, Niacin, Ascorbic acid, Calcium and Iron • Preparation of food products for the use of PEM children • Planning and preparing (in groups) balanced diet for different activity levels. • Meal serving practice • Table setting – Modern and traditional 	
	HSC 211 Introduction to Resource Management	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Describe the concepts of management • Differentiate various approaches to management • Understand process and techniques of decision making 	-----	References: <ol style="list-style-type: none"> 1. Armstrong, M. (2010). <i>A Handbook of Management Techniques</i>. (Revised 3rd ed.). London : Kogan Page Publishers. 2. Daecon R.E.& Firebaugh F.M. (1975). <i>Context and concepts of Management USA</i> : Houghton Mifflin Company. 3. Gross I.H. & Crandall, E.W. (1980). <i>Management for modern families</i> (3rd ed.) . New Jersey : Prentice Hall Inc. Engle Wood Cliffs. 4. Luthans F.(1998). <i>Organizational Behavior</i>. (8th ed.). New York : Ervin-McGraw Hill. 5. Robbins S.P., Decenzo D.A. (2009). <i>Fundamentals of Management</i>. (6th ed.). New Jersey : Pearson Prentice Hall. 6. Robbins, S. & Judge, T.A. (2013). <i>Organizational Behavior</i> (15th ed.). US : Prentice Hall. 7. Stoner, J., Freeman R. & Gilbert D. (1995). <i>Management</i>. (6th ed.). New Delhi: Prentice Hall of India Pvt. Ltd.. E- Resources: <ul style="list-style-type: none"> • Management Theory http://www.technofunc.com/index.php/leadership-skills-2/leadership-a-management/item/management-theories 	

				<ul style="list-style-type: none"> Motivation Theories https://www.tankonyvtar.hu/hu/tartalom/tamop412A/2011-0023_Psychology/030300.scorml 	
	HSC213 Life Span Development - II : (Middle Childhood to Old age)	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> Acquire knowledge related to various aspects of development in different stages of life span. Understand adjustment issues and requirements of different stages from middle childhood to old age. 	-----	References: <ol style="list-style-type: none"> Berk, L.E. (1996). <i>Child Development</i>, New Delhi: Prentice Hall. Cole, M. & Cole, S. (1995). <i>The Development of Children</i>. New York, NY: Freeman & Co. Craig, G. (1999). <i>Human Development</i>. New Jersey, NJ: Prentice Hall. Gardiner, H.W., Mutter, J.D., & Kosmitzki. (1998). <i>Lives Across Cultures</i>. Boston: Allyn & Bacon. Gupta, R. (1998). <i>Matra Kala Shishu Palan avm Bal Vikas</i>. Agra: Ratan Prakashan Mandir. Hurlock, E.B. (1980). <i>Development Psychology: A Life Span Approach</i> (5th ed.). New York: Tata McGraw Hill Publishing Co. Ltd. Hurlock, E.B. (1990). <i>Vikas Manovigyan</i>. Pratham Khand/Dutiya Khand, Hindi Madhyam Karyanvai Nideshalaya, Delhi University Dwara Prakashit. Rice, F.P. (1965). <i>Human Development : A life Span Approach</i>. New Jersey, NJ: Prentice Hall. Santrock, J.W. (2008). <i>Life Span Development</i>. New York: Tata McGraw Hill Companies, Inc. E-resources: <ul style="list-style-type: none"> Ageing and old age as a task https://www.pdfdrive.com/ageing-and-old-age-as-a-task-e38334984.html Aging, Economic Growth, and Old-Age Security in Asia https://www.pdfdrive.com/aging-economic-growth-and-old-age-security-in-asia-e34443523.html 	

				<ul style="list-style-type: none"> Chapter 16 Middle Adulthood: Emotional and Social Development https://www.pdfdrive.com/chapter-16-middle-adulthood-emotional-and-social-development-e7909382.html Factors contributing to life satisfaction in early and middle adulthood https://www.pdfdrive.com/factors-contributing-to-life-satisfaction-in-early-and-middle-adulthood-e32013339.html Physical and Cognitive Development in Middle Adulthood https://www.pdfdrive.com/physical-and-cognitive-development-in-middle-adulthood-e59558323.html 	
	HSC 201 / HSC 201 L Communication Process	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> Explain concept and different types of communication Distinguish different approaches of communication Create effective messages to relevant audiences <p>Use appropriate media in different approaches of communication</p>	-----	<p>References:</p> <ol style="list-style-type: none"> Chauhan, J. (1996). <i>Prasar Shiksha Aur Soochana Tantra</i>. Agra, Isha Publication. Dahama, O.P., & Bhatnagar, O.P. (2010). <i>Education and Communication for Development</i>. New Delhi, Oxford and I BH Publishing Co., Pvt. Ltd. Harpalani, B.D. (1994). <i>Grih Vigyan Mein Prasar Shiksha</i>, Agra, Star Publication. Joseph, M.K. (1996). <i>Modern Media and communication, Sociology and Communication Revolution</i>. (Vol.- 1), New Delhi, Anmol Publication Pvt. Ltd. Joshi, U.J. (2000). <i>Textbook of Mass Communication</i>. New Delhi, Anmol Publishers. Kalla, P. N., & Gakkhar, A. (2010). <i>New Dimension of Extension and Communication</i>. Jaipur, University Book House. Malhan, P.N. (1992). <i>Communication Media Yesterday, Today and Tomorrow</i>. New Delhi, Ministry of Information and Broadcasting. 	

				8. Mody, B. (1991). <i>Designing messages for Developmental Communication</i> , New Delhi, SAGE Publications. 9. Raines, C., & Williamson, L. (1995). <i>Using Visual Aids- the effective use of type, colour and graphics</i> . New Delhi, Viva books private Ltd. 10. Rajsingh, A., & Saxena, A. (2008). <i>Prasar Siksha me Sampreshan va Nirdesh Takneek</i> . Jaipur, University Book House. 11. Ray, G.L. (1991). <i>Extension Communication & Management</i> . Calcutta, Naya Prakash. 12. Raydu, C.S. (1993). <i>Media and Communication Management</i> . Bombay, Himalaya Publishing House. 13. Sandhu, A. S. (1993). <i>Textbook on agricultural communication, Process and Methods</i> . Culcutta, Oxford and IBH Pub. Co. Pvt. Ltd. 14. Singh, R.P., & Rana, G. (2005). <i>Communication</i> . New Delhi, Ravi Books.	
	HSC 202 / HSC 202 L Family Clothing	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Select fabrics and clothes for different age groups. • Intelligently buy and care garments and house hold textile materials. • Understand the consumer problems and their rights 		References : 1. Chahar(2007). <i>Consumer protection movement in India : problems and prospects</i> . New Delhi : Kanishka Publishers. 2. Lewis, D.S. & Bowers, M.G.(1960). <i>Clothing construction and wardrobe planning</i> . New York : Macmillan Book Company. 3. Tate, M.T., and Glisson, O. (1967). <i>Family clothing</i> . New York : John Wiley and Sons. 4. Wingate, Isabel B. (1965). <i>Textile Fabrics and Their Selection</i> . London : Prentice-Hall,INC.	

	HSC202 L Family Clothing Lab			Drafting, cutting and stitching of clothing for: <ul style="list-style-type: none"> • Infant- Baby layette, Romper. • Children- Frock, Shirt/Bushirt, Shorts (Designing and construction with emphasis on growth, comfort, self help features). • Adult- Blouse, Kalidar / Simple Kurta, Salwar / Churidar pyjama, Gent's pyjama. 	
	HSC 203 / HSC 203 L Family Dynamics	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Analyze different aspects of marriage and family in the context of changing socio-economic scenario in the country • Intelligently deal with economic and social issues • Solve family disharmony issues and have positive attitude towards marital and family counseling 		References : <ol style="list-style-type: none"> 1. Augustine, J.S. (1982). <i>The Indian Family in Transition</i>, New Delhi : Vikas Publishing House. 2. Bhatia, H. S. (1983). <i>Aging and society: A sociological study of retired public servants</i>. Udaipur Arya's Book Centre. 3. Chaudhary, J.N. (1988). <i>Divorce in Indian Society</i>. Jaipur : Printwell Publishers. 4. Desai, N. & Krishnaraj, M. (1987). <i>Women and society in India</i>. New Delhi: Ajanta Publications. 5. Devdas, T.S. (1979). <i>Hindu Family and marriage</i>, Madras: University of Botany. 6. Jain, B. S. (1984). <i>Indian society</i>. Jaipur: College Book Center. 7. Kapadia, K.M. (1990). <i>Marriage and family</i> (3rd Ed). Calcutta : Oxford University Press 8. MacIver & Page Charles H. (1952). <i>Society -An introduction analysis</i>. London : Macmillan Co. Ltd. 9. Mukherjee, R. (1979). <i>Indian Society</i>. Jaipur: College Book Center. 10. Rice F. Philips (1983). <i>Marriage and Family</i>. : N.J. : Prentice Hall 11. TISS. (1991). <i>Research in families with problems in India Mumbai</i>: BookPublisher T.I.S.S. 991Description: xvi,587 p.. 	

				12. Vidya, B. & Sachdeva, D.R. (1984). <i>Introduction to sociology</i> . New Delhi : Kitab Mahal.	
	HSC 208/ HSC 208 L Guiding Child Behavior	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Underline different rearing practices and their implications • Analyze various behavioral problems and habit disorders under difficult circumstances and exceptionalities • Analyze a problem, identify appropriate guidance strategies and effectively handle the problems 		<p>References:</p> <ol style="list-style-type: none"> 1. Harvey, D. (1975). <i>Baby Book</i>. London : Marshall, Cavendish. 2. Hetherington, E. Mavis & Parke, Ross D. (1993). <i>Child Psychology : A Contemporary View Point</i>. NY: McGraw Hill. 3. Heward, W. L. & Orlansky, M. D. (1992). <i>Exceptional Children</i>. NY: Meryll Publishers. 4. Kumar, R.N. (1993). <i>Baby & Child care</i>. New Delhi: UBS Publishers. 5. Lynch, Eleemon W & Lewis Rena B. (1988). <i>Exceptional children and adults - An introduction to special education</i>. Glenview: Scott Foresman and Co. 6. Schaefer, C.E. & Millman, H.L. (1981). <i>How to help children with common problems</i>. New York, NY: Van Nostrand Reinhold Company. 7. Spock, Benjamin (1976). <i>Baby and Child Care</i>. New York : Pocket books. 	

	HSC 214 Nutrition for Vulnerable Groups	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Have sufficient content – related knowledge base of nutritional requirements of vulnerable groups of society • Apply the knowledge to design , implement and evaluate solutions to meet requirements of given set of vulnerable groups with available range of food sources 		References: <ol style="list-style-type: none"> 1. Gupta, S. (2006). <i>Text Book of Pediatric Nutrition</i>. New Delhi : Peepee Publishers and Distribution P. Ltd. Ed. 2. Khanna, K. Gupta, S. Mahna, R, Puri, S. Seth, R. and Passi, SJ.(1997).<i>Text book of Nutrition & Dietetics</i>. New Delhi: Phoenix Publishing House Pvt. Ltd.. 3. Robinson, CH. and Lawler, MR. (1994). <i>Normal and Therapeutic Nutrition</i>. New York: Macmillan. 	
	HSC 301 / HSC 301 L Assessment of Nutritional Status	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Use skills in anthropometric measurements and assessment of nutritional status • Conduct dietary surveys in the community • Get Employment in different NGO's and government agencies working in the field of nutrition • Work independently in the field of community nutrition 		References: <ol style="list-style-type: none"> 1. Bamji, M.S., Rao, P.N., and Reddy, V. (1996) .<i>Text Book of Human Nutrition</i>. New Delhi:Oxford & IBH Publishing Co. Pvt. Ltd. 2. Gibson, R.S. (2005). <i>Assessment of Nutritional Status</i>. New Delhi:Oxford University Press. 3. Jelliffe, D. B. (1966). <i>Assessment of Nutritional Status of the Community</i>. W.H.O. E-resources : <ul style="list-style-type: none"> • Anthropometry procedures Manual_CDC http://www.cdc.gov/nchs/data/nhanes_07_08/manual_an.pdf • WHO Child Growth Standards - World Health Organization http://www.who.int/child/growth/standard 	

	<p>HSC 303 Dyeing, Printing and Finishing</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Analyze basic elements and principles of various dyes, prints and finishes. • Apply knowledge of different dyes, finishes, and style of printing to design various fabrics • Extend and expand their ideas and creativity in designing • Reason about eco-friendly aspects in relation to textile industries and provide solutions at multiple level of production 		<p>References:</p> <ol style="list-style-type: none"> 1. Alexander (1972). <i>Textile Products: Selection, use and care</i>. London, UK: Miffin Company. 2. Corbman, B.P. (1983). <i>Textiles: Fiber to Fabric</i> (6th ed.). New York, NY: McGraw Hill Publication. 3. Gohl, E. P. G. & Vilensky, L. D. (2005). <i>Textile Science</i> (2nd ed.). New Delhi, India: CBS Publishers. 4. Hall, A.J. (1980). <i>The standard Handbook of Textiles</i> (8th ed.). London, UK: Newness Butterworth. 5. Hess, K.P. (1959). <i>Textile fibers and their use</i> (6th ed.). New Delhi, India: Oxford and IBH Publication co. 6. Shenai, V. A. (1985). <i>Technology of Printing: Technology of textile processing</i> Mumbai, India: Sevak Publication. 7. Shenai, V. A. (1997). <i>History of Textile designs</i>. Mumbai, India: Sevak Publicatios. 8. Vidyasagar, P.V. (1998). <i>Handbook of textiles</i>. New Delhi, India: Mittal Publication. 9. Watson & William (1998). <i>Textile Design & Colour</i>. Mumbai, India: Bombay University Publication. <p>E-resources:</p> <ul style="list-style-type: none"> • Textile fibers, dyes, finishes and processes https://www.scribd.com/document/25717442/Textile-Fibers-Dyes-Finishes-and-Processes • Textile dyeing and Printing https://www.scribd.com/doc/54185948/Textile-Dyeing-and-Printing • Classification of dyes https://www.textileschool.com/383/types-of-dyes-classification-based-on-chemical-structure/ • Method of printing http://eacharya.inflibnet.ac.in/index.php/content/index/57206af18ae36c6 	
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				<p>781c073ae</p> <ul style="list-style-type: none"> • Style of printing http://eacharya.inflibnet.ac.in/index.php/content/index/57206af18ae36c6781c073ae • Textile dyeing industry and environmental hazard https://file.scirp.org/pdf/NS20120100003_72866800.pdf • Impact of dyeing process on environment http://cdn.intechopen.com/pdfs/41411/InTech-Textile_dyes_dyeing_process_and_environmental_impact.pdf • Indian textile industry and environmental issues https://pdfs.semanticscholar.org/7761/d7fca806e9f6fb64d5b1e7aed3e44a032bbf.pdf 	
	HSC 313 Textile Designing	<p>Learning outcomes: Upon completion the course students will be able to:</p> <ul style="list-style-type: none"> • Plan and develop various textile designs using basic elements and principles of design • Explore inspiration sources of design for basic sketching and painting • Differentiate and develop various types of motifs • Use creative and technical skills for designing textiles with special emphasis on applied design • Use concept, theories and specification of color in selection of apparels for men, women and children 		<p>References :</p> <ol style="list-style-type: none"> 1. Cole, D. (2007). <i>Patterns new surface design</i>. London: Laurence King Publication, 2. Corbman, B.S (1985). <i>Textile fiber to fabric</i>. New Delhi: Mc. Graw Hill Publication 3. Hess, K. P. (1959). <i>Textile fibers and their use</i>. New Delhi: Oxford and IBH Publication company 4. Naik S. D. and Wilson . J. (2006): <i>Surface designing and Textile fabrics</i>. New Delhi:_New age international (P) Limited Publishers 5. Shenai, V. A. (1997). <i>History of Textile Designs</i>. Mumbai: Sevak Publications 6. Terry, A. G. (1979). <i>Printed textile A guide to creative design fundamentals</i>. New Jersey, England: Prentice hall inc. 7. Vidyasagar, P.V.(1998). <i>Handbook of textiles</i>. New Delhi: Mittal Publication 8. Watson and William. (1998). <i>Textile Design and Colour</i>. Mumbai: Bombay University Publication 	

				<p>E – resources :</p> <ul style="list-style-type: none"> • Elements and principles of design-Slide share, https://www.slideshare.net/admecinstitute/principles-of-design-30520900 • Indian Heritage - Textiles of India, http://www.indian-heritage.org/alangaram/textiles/textiles.html • How colour notion works – Munsell color system, https://munsell.com/about-munsell-color/how-color-notation-works/ 	
	<p>HSC 315 L Surface Ornamentation Techniques for Textile</p>	<p>Learning outcomes: Upon completion the course students will be</p> <ul style="list-style-type: none"> • Apply knowledge of different dyes, finishes, and style of printing to design various fabrics • Use creative and technical skills for designing textiles with special emphasis on applied design 			

	HSC 310 / HSC 310 L Methods and Materials for Child Study	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Explain characteristics and requirements of different groups of children • Explain major methods and approaches of child study • Design and create play materials and plan learning experiences for promoting various concepts and commutative skills in children 		References : <ol style="list-style-type: none"> 1. Santrock W. J. (2008). <i>A tropical approach to Life -Span Development(3rd. ed)</i>. New Delhi : Tata Mc Graw-Hill Publication Company Ltd. 2. Papalia E. Diane (2004). <i>Human Development (9th ed.)</i>. New Delhi : Mc Graw Hill Education (India) Private Ltd. 3. Levine E. Laura (2011). <i>Child Development :An Active Learning Approach</i>. Los Angeles: Sage Publications. 	
	HSC 302/ HSC 302 L Diet Therapy	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Identify the nutritional needs in various diseases • Formulate therapeutic diet according to disease using principles of diet therapy • Apply the knowledge of therapeutic diet for counseling of patients • Demonstrate the nutritional care in community 		References : <ol style="list-style-type: none"> 1. Antia, F.P. & Abraham, P. (1973).<i>Clinical dietetics and nutrition</i>. New Delhi: Oxford University Press. 2. Khanna, K., Gupta, S., & Passi, S.J. (1997) . <i>Textbook of Nutrition and Dietetics</i> ., New Delhi : Phoenix Publishing House Pvt. Ltd. 3. Passmore, R. ., & Eastwood, M. A.(1986). <i>Davidson and Passmore Human Nutrition and Dietetics</i> .Churchill Livingstone. 4. Robinson, C.H., & Lawler, M. (1982). <i>Normal and Therapeutic Nutrition, New Delhi: Oxford IBH Publishing Co.</i> 5. Sharma, S. (2000). <i>Human Nutrition and Meal Planning</i>. New Delhi: Jnanda Publishers 6. Srilakshmi, B. (2002). <i>Dietetics: New Age Interantional (p) Ltd.</i> 7. Swaminathan, M.(1985). <i>Fundamentals of Food and Nutrition, (Vol.II)</i>. Bangalore: Bangalore Printing and Publishing Co Ltd 8. Williams, S.R.(1993). <i>Nutrition and Diet Therapy</i>. St. 	

				<p>Louis:Times Mirror Mosby College Publishing.</p> <p>E resources</p> <ul style="list-style-type: none"> Indian chronic kidney disease guidelines http://isn-india.org/images/CKD_1.pdf Dietary Guidelines for Indians http://ninindia.org/DietaryGuidelinesforNINwebsite.pdf ICMR guidelines for management of type 2 diabetes 2018 https://medibulletin.com/wp-content/uploads/2018/05/ICMR.diabetesGuidelines.2018.pdf 	
	<p>HSC 304 / HSC 304 Early Childhood Education</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> Explain significance of early childhood years, historical development and philosophical ideas related to early childhood education Get proficiency in planning programmes and curriculum including various components to promote all round development of young children Analyze problems , identify various contemporary issues in ECE and plan innovations 		<p>References :</p> <ul style="list-style-type: none"> Grewal, J.S. (1995). <i>Early Childhood Education</i>. Agra: National Psychological Corporation. Lawton, J.T. (1988). <i>Introduction to Childcare & Early Childhood Education</i>. London : Scott Freeman Co. Morrison, G.S. (1976). <i>Early Childhood Education Today</i>.USA: Merrill Publications. Read, K.H. (1996). <i>Nursery School Relationship Laboratory</i>. Calcutta: Oxford and IBM. Swaminathan, M. (1984). <i>Play Activities for Young Children</i>. New Delhi: UNICEF. <p>E-resources</p> <ul style="list-style-type: none"> पाश्चात्य शे क्षक वचार व वचारक 4MB https://drive.google.com/open?id=0Bwk5FIsI0ctxQmJYQXJhVkJYWHM अध्यापन-अ धगम तथा मूल्यांकन 2MB https://drive.google.com/open?id=0Bwk5FIsI0ctxSlg1d2RoaFRzYjg पाठ्यचर्या तथा अनुदेश 17MB https://drive.google.com/open?id=0Bwk5FIsI0ctxejNMUFZxbTI6MGc 	

				<ul style="list-style-type: none"> अ धगम के लए मार्गदर्शन 6MB https://drive.google.com/open?id=0Bwk5FIsI0ctxRXNHR011T3JWaFU 	
	HSC 306 /HSC 306 L Fashion Dynamics & Illustration	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> Recognize basic concepts of fashion dynamics, fashion movement and its development. Interpret and learn to operate practices involved in fashion business. Find out designers of international and national fame and explore their contribution to the fashion of today Design and sketch fashion illustrations for different purposes 		References: <ol style="list-style-type: none"> Abling, B. (1993). <i>Fashion Sketchbook</i>. New York: Fairchild publication Abling, B. (2017). <i>Fashion Flats and Technical Drawing</i>. New York: Bloomsbury Publication Abling, B. (2nd ed.). (2005). <i>Marker Rendering for fashion, Accessory and Home Fashion</i>. New York: Fairchild Publication. Castelino, M. (1994). <i>Fashion Kaleidoscope</i>. Calcutta: Rupa and co. Diamond, J. & Diamond, E. (V ed.). (2013). <i>The World of Fashion</i>. New York, NY: Bloomsbury Publishing Inc. Frings, G. S. (1999). <i>Fashion from Concept to Consumer</i>. New Jersey: Prentic Hall Ireland, P.J. (1995). <i>Fashion Design Illustration for Children</i>. London: B. T. Batsford Ltd. Ireland, P.J. (2005). <i>Figure Templates for Fashion Illustration</i>, Singapore: Page One Publishing Pvt.Ltd. Leach, R. (2012). <i>The Fashion Resource Book : Research for Design</i>. London: Thames & Hudson Ltd. Rouso, C. (2012). <i>Fashion Forward : A Guide to Fashion Forecasting</i>. New York: Fair child Books Inc. Stone, E. (2004). <i>The Dynamics of Fashion</i>. New York: McGraw Hill Book Company Tain, L. (3rd ed.). (2010). <i>Portfolio Presentation : for Fashion Designers</i>. New York: Fairchild Books Inc. 	

	HSC314 Welfare Programmes	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Discuss welfare services for family and children in India • Interpret various types of services to meet the needs of family and children • Analyze the institutional services for women and children; old age and children with special need • Summarize the role of international agencies in child welfare 		References: <ol style="list-style-type: none"> 1. Alfred, K. (1980) . <i>Child Welfare Services</i> . New York : Mc-Millan Publishers. 2. Choudhary, D.P. (1985) . <i>Child Welfare Development</i>, Delhi: Atma Ram & Sons . 3. Fonseca, M.B. (1991) . <i>Counselling for Marital Happiness</i>, Bombay : Manaktalas . 4. Verma, V.S. & Singh, M. (1988). <i>Legal Rights for Women and Families</i> . New Delhi:Women’s Legal Aid Centre 	
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Discipline Electives

	HSC 309 Introduction to Work Study	Learning outcomes: Upon completion of the course students will be able to: <ul style="list-style-type: none"> • Analyze changes in human body at work • Analyze and reason out concept of Ergonomics and its applications to develop user-centered approach • Develop human centered approach to work and workplace designing 	Unit – I Work Study 1. Concept and importance 2. Work Study Techniques - Formal and Informal 3. Mundell's classes of change Unit – II The Worker-Costs of work 1. Affective Component 2. Cognitive Component 3. Temporal Component 4. Physical Component Unit – III The Work 1. Tasks, Activities, Events & Milestones	Unit – I Work Study 1. Components of Work Study- Time Study and Method Study 2. Work Study Techniques - Formal and Informal 3. Mundell's classes of change Unit – II Costs of work 1. Affective Component- Motivation 2. Cognitive Component- Guilford’s model of Intellect 3. Temporal Component - Work Curve, Rest Periods and Fatigue 4. Physical Component- Principles of Biomechanics, Indicators of Physical Stress (Heart Rate, VO2 max), Work Physiology (Static and Dynamic Work) Unit – III 1. Functional design for Seated and Standing Workers 2. Workstation Analysis- User-Machine-Environment Interface	
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		<ul style="list-style-type: none"> Analyze the indoor climate components for ergonomic designing 	<p>2.The Job description & Job Specification 3.Job Characteristics Model Unit – IV The Workplace 1.Functional design for Seated and Standing Workers 2.Workstation Analysis 3.Environmental factors in workplaces 4.Noise 5.Illumination 6.Quality of Air- Humidity and Temperature Unit –V Ergonomics - Human Factors 1.Meaning, Areas of study in Ergonomics 2.Bio-Mechanics/Kinesiology (a) Motion Economy (b) Work physiology – static and dynamic work 3. Man-Machine Environment System</p>	<p>Unit – IV Indoor Climate in Workplace 1. Illumination- Principles of Good Lighting 2. Noise Levels and their control in workplaces 3. Quality of Air- Humidity and Temperature Unit –V Ergonomics - Human Factors 1.Meaning, Areas of study in Ergonomics, Criteria to assess Ergonomic Fit 2. Relationship between Optimal Design and Performance 3. Man Machine Environment System References : 1. Bridger R.S. (2009). <i>Introduction to Ergonomics</i>. New York :Mc Graw Hill Inc. 2. Galer I. (1987). <i>Applied Ergonomics Handbook (2nd ed.)</i>. London:Butterworth & Co. Publications Ltd . 3. Salvendy G. (2006). <i>Handbook of Human Factors and Ergonomics</i>. New York:John Wiley & Sons. 4. Sanders M., McCormick E. (1993). <i>Human Factors in Engineering and Design</i>. New York:McGraw Hill. E- Resources <ul style="list-style-type: none"> Human Factors https://www.fac.ksu.edu.sa/sites/default/files/human_factors.ppt </p>	
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	<p>Behaviour Change Communication</p>	<p>Learning outcome: Upon completion of the course students will be able to</p> <ol style="list-style-type: none"> 1. State the meaning, theories and principles of behaviour change communication 2. Explain Steps necessary in designing a behaviour change communication strategy 3. Design effective communication strategies 		<p>Unit I: Introduction to Behavior Change Communication</p> <ol style="list-style-type: none"> a) Defining behaviour change, behaviour change communication b) The behaviour change process c) Behaviour change theories d) Guiding principles for BCC e) Characteristics of effective behaviour change communication programs <p>Unit II : Designing Behavior Change Communication Programs</p> <ol style="list-style-type: none"> a) Defining the problem b) Identify target audience c) Conduct formative assessment d) Segment target population e) Define communication and behaviour change objectives f) Select communication channels g) Design key messages and materials h) Pre-test materials and messages <p>Unit III: Dissemination, implementation, monitoring and evaluation of BCC programs</p> <ol style="list-style-type: none"> a) Message dissemination b) Monitoring of BCC programs c) Evaluation and re- planning d) Evaluation of message effect <p>Unit IV: Designing a Communication Strategy</p> <ol style="list-style-type: none"> a) Steps in designing a communication strategy b) Key elements of a communication strategy <p>Unit V: 7 C's of Effective Communication</p> <ol style="list-style-type: none"> a) Command attention b) Cater to the heart and head c) Clarity of message d) Consistency checks e) Communicate a benefit 	
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				<p>f) Create trust g) Call for action</p> <p>References</p> <p>Gainforth, Brown, West, Campbell, & Michie (2014). ABC of Behaviour Change Theories. Silverback Publishing, ISBN 1291886672, 9781291886672</p> <p>Gainforth, Brown, West, Campbell, & Michie (2014). The Behaviour Change Wheel: A Guide to Designing Interventions. Silverback Publishing, ISBN 1291846050, 9781291846058</p> <p>McKee, Becker & Bockh (2014). Social and Behavior Change Communication. Wiley Online Library, Online ISBN: 9781118505328, Print ISBN: 9781118505311</p> <p>Woods N., Lisa (2006). Behaviour Change Communication In Emergencies: A Toolkit. United Nations Children's Fund. ISBN 99946-896-1-4</p> <p>e-resources</p> <p>Introduction to Behaviour Change Communication. Retrieved from https://slideplayer.com/slide/5727280/</p> <p>Health Communication Capacity Collaborative (n.d.). Designing a Social and Behavior Change Communication Strategy. Retrieved from https://sbccimplementationkits.org/courses/designing-a-social-and-behavior-change-communication-strategy/</p> <p>IFRC (n.d.). Introduction to Behaviour Change Communication. Retrieved from http://www.rcrc-resilience-southeastasia.org/document/introduction-to-behavior-change-communication-bcc/</p>	
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				<p>Introduction to Behaviour Change Communication. Retrieved from https://slideplayer.com/slide/5727280/</p> <p>Naqeeb, B.(2006). Behaviour Change Communication .Retrieved from https://www.slideshare.net/bilalnaqeeb/behavior-change-communication</p> <p>Rao, S.(n.d.) Behaviour change communication. Retrieved from https://www.slideshare.net/drsrinivasraod/behavioural-change-communication</p> <p>Avis, W.(2016). Methods and approaches to understanding behaviour change. Retrieved from https://gsdrc.org/wp-content/uploads/2016/08/HDQ1389.pdf</p>	
	Community Health Management	<p>Learning outcome: Upon completion of the course students will be able to</p> <ol style="list-style-type: none"> 1) Understand the concept of health from the individual and community perspective 2) Know the factors affecting health and nutritional status of individual and community and promoting aspects to improving community health. 		<p>Unit 1: Health and dimensions of health</p> <p>Physical health, mental health, emotional health, spiritual health and social health. Characteristics of mental health. Positive health versus absence of diseases</p> <p>Unit 2: Community and its organization</p> <p>Concept of community ,types of community, factors affecting health of the community-environmental, social, cultural, dietary, organizational, economic, political. Vulnerable groups/ needs of specials population.</p> <p>Unit 3: Communicable and infectious Disease control</p> <p>Nature of communicable and infectious diseases, infection, contamination, disinfections, discontamination, transmission-direct and indirect, vector born disease, infecting organisms and causative agents.</p>	

				<p>Principles of disease control.</p> <p>Unit 4: Community Water and Waste management</p> <p>Importance of water to the community, etiology and effects of toxic agents, water born infectious agents, sources of water, safe drinking water/potability and tests for potability. Community waste and waste disposal-sewage disposal and treatment, solid waste and disposal, liquid waste disposal.</p> <p>Unit 5: Life style and Community health</p> <p>Preventive and promotive aspects, public education and action, alcohol, cigarette smoking, drugs, AIDS,STD diet and chronic diseases.</p> <p>References:</p> <p>Clark,J,J Henderson,J.(1983):Community Health,Churchilli Livingstone.</p> <p>Park, K. (2017):Park’s Textbook of Prevention and Social Medicine 24Th Edition.Banaingstone. Bhanot Publishers,Jabalpur.</p> <p>e-resources:</p> <p>Infectious disease retrieved from https://www.who.int</p> <p>factors affecting health of the community retrieved from https://www.slideshare.net</p>	
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	<p>HSC 311 / HSC 311 L Nutritional Bio- Chemistry</p>	<p>Learning outcomes: Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • Get thorough knowledge about the metabolism of nutrients and their functions in the body • Gain insight into functions and interrelationship between nutrients and their importance in the maintenance of health • Estimate some nutrients, detect adulteration in foods, • Assess the chemical characteristics of foods 		<p>References:</p> <ol style="list-style-type: none"> 1. Conn, E. E. & Stump, P. K. (1987). <i>Outlines of Bio-chemistry</i>. New York: John Wiley & Sons Inc. 2. Deb, A. C. (1998). <i>Fundamentals of Bio-chemistry</i>. Calcutta: New Central Book Agency,. 3. Martin, D.W., Mayes, P.A. & Rodwell, V.W. (20033) <i>Harper's Review Bio-chemistry</i>. USA: Lange Medical Publication. Los Altos California. 4. Pant, M. C. (2005) <i>.Essential of Bio-chemistry</i>. Meerut : Kedarnath Ramnath & Co.. 5. Plummer, D.T. (2017). <i>An Introduction to Practical Biochemistry</i>. New Delhi : McGraw Hill Education. 6. Rao, A.V.S.S.R. (2006). <i>Text Books of Bio-chemistry</i>. Tahuku (AP) : UBS Publishers Distributers Pvt. Limited. 7. Sharma S. (1993). <i>Practical Biochemistry</i>. Jaipur : Classic Publishing House. 8. Sharma, S. (2007). <i>Experiments and Techniques in Biochemistry</i>. New Delhi : Galgotia Publishing. 9. Talwar, G. P., Srivastava, L. M.(2004).<i>Text Book of Bio-chemistry & Human Biology</i>. New Delhi : Prentice Hall of India Pvt. Ltd. 	
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	<p>HSC /HSC L Ergonomics and Space Management</p>	<p>Learning Outcomes:</p> <p>Upon the completion of this course, the students will be able to</p> <ul style="list-style-type: none"> • Understand the concepts of Ergonomics and Proxemics in context to each other • Apply ergonomic approaches to designing of spaces and products • Evaluate different workspaces and furniture on functional grounds 		<p style="text-align: right;">L T P C 4 0 2 5</p> <p style="text-align: center;">Unit I</p> <p>a) Concept and Importance of Ergonomics b) Proxemics and its applications c) Anthropometrics- Concept and Applications in design</p> <p style="text-align: center;">Unit II</p> <p>Design Techniques in Space Planning and their applications</p> <p>a) Proportioning Systems- The Golden Section and Fibonacci Series b) Oriental Grid Systems c) Corbusier.s Modular System</p> <p style="text-align: center;">Unit III</p> <p>Ergonomic Approaches to the design of</p> <p>a) Residential Buildings b) Office Layouts c) Computer Workspaces d) Equipments e) Laboratories</p>	
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				<p style="text-align: center;">Unit IV</p> <ul style="list-style-type: none"> a) Principles of Ergonomic Interior Design b) Ergonomic Assessment of Workspace Design- Reactive & Proactive Approach c) Multi-Unit and Adjustable Furniture <p style="text-align: center;">Unit V</p> <ul style="list-style-type: none"> a) Landscape Designing on aesthetic and functional grounds b) Principles of Sustainable Workplace Design c) Furniture Design Guidelines for Fit & Function <p style="text-align: center;">Ergonomics and Space Management Lab</p> <ul style="list-style-type: none"> 1. Ergonomic Evaluation of Computer Workstation 2. Anthropometric considerations for seated and standing workers 3. Assessment of User-Chair fit: Comparison of at least two types of chairs 4. Postural Analysis of seated and standing workers 5. Analysis of workplace factors- Illumination, Noise levels, Air Quality 6. Analysis of ZCR (Zone of Comfortable Reach) for seated and standing workers <p>References:</p> <ul style="list-style-type: none"> 1. Openshaw, S. (2006). Ergonomics and Design: A Reference Guide. Allsteel Inc. 	
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				<ol style="list-style-type: none"> 2. Soares, M.M. & Rebelo, F. (2016). Ergonomics in Design: Methods and Techniques. CRC Press 3. Postell J. (2012). Furniture Design. John Wiley & Sons 4. Soares, M.M. & Rebelo, F. (2018) (Ed). Advances in Ergonomics in Design. Springer, Cham 5. Pheasant, S. & Haslegrave, C.M. (2005). Bodyspace: Anthropometry, Ergonomics and the Design of Work. III ed., CRC Press 6. Penick, P. (2013). Lawn Gone!. Ten Speed Press 	
	<p>HSC / HSC L Programme Planning and Management</p>	<p>Learning outcomes:</p> <p>Upon completion of the course students will be able to</p> <ul style="list-style-type: none"> • State the meaning, nature and importance of programme planning • Explain programme planning process and extension management • Design plan of work for need based program <p>Apply techniques of participatory planning- RRA, PRA and PLA</p>		<p>Unit I Programme Planning in Extension</p> <ol style="list-style-type: none"> 1) Meaning and nature of programme planning 2) Importance of programme planning 3) Need of Programme Planning 4) Abilities needed by Planners <p>Unit II Programme planning process</p> <ol style="list-style-type: none"> 1) Community Study 2) Local Leaders and Participation 3) Need Assessment 4) Framing Objectives 5) Plan of work 6) Programme Implementation 7) Evaluation 8) Reconsideration <p>Unit III Participatory planning</p>	

				<ol style="list-style-type: none"> 1) Concept and importance of participatory planning 2) Process of participatory planning 3) Techniques of participatory planning- RRA, PRA and PLA and their application in extension approaches of participatory planning – cooperative, democratic, bottom up and down <p>Unit IV Extension Management</p> <ol style="list-style-type: none"> 1) Concept and meaning of management and extension management 2) Principles and importance of extension management 3) Competencies required by extension managers 4) Problems in extension management <p>Unit V Extension Management process</p> <ol style="list-style-type: none"> 1) Planning 2) Organizing 3) Staffing 4) Directing 5) Communicating 6) Co-ordination 7) Controlling 8) Monitoring 9) Evaluation. <p>References:</p> <ol style="list-style-type: none"> 1. Adhikary, MM. (2006). Participatory Planning & Project Management in Extension Sciences. Agrotech Publ.Academy. 	
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				<ol style="list-style-type: none"> 2. Burton, G. & Hanab, T. (1997). Management Today, Tata Mc Graw Hill Publishing Company, New Delhi. 3. Chandan, J. S. (1997). Management- Concepts and Strategies. Vikas Publishing House, New Delhi. 4. Dale, R. (2004). Evaluating Development Programmes and Projects. New Delhi, Sage Publications. 5. Govind, S. Tamilselvi, G. & Meenambigai, J. (2011). Extension Educational and Rural Development, Agrobios, Jodhpur. 6. Koontz & Heinz, W. (1990). Essentials of Management, McGraw-Hill, New Delhi. 7. Kumar & Hansra. (1997). Extension Education for Human Resource Development. New Delhi: Concept Publishers. 8. Mikkelsen, B. (2002). Methods for Development Work and Research. New Delhi, Sage Publications 9. Prasad, M.L. (1999). Principles and Practice of Management, Sultan Chand & Sons, New Delhi. 10. Rajpurohit, R, Sharma, S. & Gupta, A. (2013). Management, Ajmer book company Publishers, Jaipur. 11. Ray, G.L. (2006). Extension Communication and Management. Kalyani Publishers, New Delhi. 12. Sandhu, A.S. (1994) Extension Programme Planning. Oxford & IBH Publishing Company Private Limited, New Delhi. 13. Supe, S.V. (2018). Introduction to Extension Education. Oxford Publishers, New Delhi. 14. Tripathi, P.C & Reddy, P.N. (1993). Principles of Management, Tata McGraw Hill, New Delhi. <p>E-resources :</p> <p>Extension Program Planning: Meaning, Definition, Objectives, Importance and principles</p>	
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				<p>Retrieved from https://eggp.inflibnet.ac.in/ahl.php?csrno=827</p> <p>Steps in Program Planning Retrieved from https://eggp.inflibnet.ac.in/ahl.php?csrno=827</p> <p>PRA I and PRA II Retrieved from https://eggp.inflibnet.ac.in/ahl.php?csrno=827</p> <p>Planning and Developing Extension Programme Retrieved from http://egyankosh.ac.in/handle/123456789/9171</p> <p>HSC L Programme Planning and Management Lab</p> <ol style="list-style-type: none">1) Assessing needs and problems of a target group in a community2) Development of a plan of action for the problem identified3) Conducting the planned programme4) Evaluation and reporting5) Suggestion and follow-up.	
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Name of the programme : M.Sc. (Home Science)

HOME SCIENCE PROGRAMME

The quality of life of society and the family determines positive functioning. Home Science has a vital role to play in increasing the capacity of the family and the community. At Banasthali Vidyapith, the faculty of Home Science strives to work dedicatedly towards women's empowerment through socially-relevant, holistic, interdisciplinary education, in keeping with its unique philosophy of Panchmukhi Shiksha (Five fold education). Home Science curriculum is offered in a composite form as per the development trends incorporating multi-disciplinary skills, linking the general studies with professional courses integrating theory and practice, and flexibility to the credit based system to meet the challenges in Indian ethos and global context. The curriculum is continually innovated to make it globally valuable, locally relevant and responsive to the changing times and needs. The course sensitizes students to the needs of others, especially of those less advantaged, and fosters a service orientation. The faculty also aims to contribute to the national and international knowledge base in Home Science and allied fields. Due emphasis has always been given to the skill development and enhancement in the students. The degrees offered by the faculty include B.Sc. (Home Science) and M.Sc. (Home Science) in Food Science and Nutrition, Human Development and Clothing and Textile. PhD is awarded in all the five branches of Home Science. Home Science is also offered as a subject in B. A. programme.

Program Educational objectives:

Objectives of the Home Science programme are

- To acquaint students with interdisciplinary nature of Home Science as an integrated body of knowledge, all interwoven to enhance the quality of life, and multidisciplinary nature of subjects dealing with art and science of living
- To provide education through integrated approach of combining theory, practical, and field work emphasizing gender neutral, family focus , region specific and career perspective
- To prepare students to become actively involved in local and regional professional service activities which allow continuous initiative for empowering the individual, family and community
- To inculcate scientific thinking to undertake research projects of national and international recognition and publish multidisciplinary papers

Programme Outcomes:

PO1 Knowledge – Have knowledge and holistic understanding of the core courses related to Home Science including Human Development, Foods and Nutrition, Clothing and Textile, Human Management, Extension Education and Communication; and basic courses associated with discipline of Home Science, including Social Sciences, Biological sciences, Physical sciences, Technology and Management.

PO2 Planning Abilities- Apply skills in designing, implementing, monitoring and evaluating programmes effectively for individuals, family, community, and for vulnerable groups of society.

PO3 Problem Analysis- Solve problems concerning home ,family , and society for ensured physical and mental health in the changing socio-economic scenario viz. dietary problems, behavioral problems, clothing problems, social problems by applying scientific methods ; through critical thinking, assessing, analyzing, finding appropriate solutions and taking decisions

PO4 Modern Tool Usage- ability to select and use appropriate methods and procedures; tools and equipments; raw materials and other resources for knowledge, skill enhancement, designing and creation of new products, assessment and evaluation

PO5 Leadership Skills- apply leadership skills; inspiring, taking responsibility, delegating tasks while working in a team, communicating with other teams, providing guidance to lesser skilled in various settings be it family, industry or institutions or carrying out research projects

PO6 Professional Identity- Take various professional roles in industries, govt./non-govt. organizations, institutes as educators, entrepreneurs, counselors, social workers, consultants, designers, researchers and exhibit competencies & skills

PO7 Ethics- Apply ethical practices while data collection, and conducting experiments ; involving human beings as well as animals, delivering professional responsibilities

PO8 Communication- Use soft skills for clear , accurate, unambiguous effective communication using verbal and non-verbal skills at inter / intra personal and professional level

PO9 Home Science and Society- Apply knowledge and competencies developed as graduates to impart knowledge, identify, analyze and address family and societal issues to improve quality of life of individual, family and society as a whole, also covering marginalized and vulnerable groups of society.

PO10 Environment and Sustainability- Critically evaluate impact of household and industrial practices on environment. Appreciate use of sustainable practices for improved physical, emotional, social, psychological environment at micro / macro level

PO11 Life Long learning – ability to reason out, learn and improve oneself in the changing dynamic scenario by strengthening the strength and weakening of weaknesses for sustainable developmental needs , technological changes, career requirements and new avenues.

PO12 Project- Provide opportunity to students to get acquainted with innovative projects and develop skills to plan and undertake intervention projects.

Program specific outcomes:

M.Sc. (Home Science Human Development)

Focus on developing knowledge and competence for:

- teaching and research in academic and other institutions
- Planning and conducting intervention , guidance and advocacy for empowerment of families and communities
- Supervisory, training and consultancy roles and responsibilities in Government and non-government agencies/institutions.
- Entrepreneurship in specific areas of human development
- Orientation to the socio-cultural and economic environment for planning, monitoring and evaluation of various programmes for children and families.
- Advocacy and policy related roles

M.Sc. (Home Science Food Science and Nutrition)

Focus on developing knowledge and competence for:

- Academic and research institutions
- Prepare professional to work with government and non-government organization , hospitals, food service institutes, and industry in various capacity
- Planning, Mentoring and evaluation of nutrition and health programmes Training and IEC activities of regional and national programmes
- Ensuring food safety and quality for consumers.
- Advocacy, consultancy and Entrepreneurial ventures.

M.Sc. (Home Science Clothing and Textile)

Focus on developing knowledge and competence for:

- related area of educational, commercial and research establishments
- selection and design of fabrics, apparel and accessories for commercial marketing
- entrepreneurial management in textiles and clothing enterprises/ industry
- enhance self employment through entrepreneurial skill training
- Intensive and extensive theoretical and experiential learning and training in fusion of traditional and modern

Programme Scheme:

M.Sc. (Home Science Human Development)

Semester: I

Existing					
Course Code	Course Name	L	T	P	C
CS 422	Introduction to computers	4	0	0	4
CS 422L	Introduction to computers laboratory	0	0	4	2
HSC 403	Advanced Study in Human Development: Conception to Childhood	4	0	0	4
HSC 403L	Advanced Study in Human Development: Conception to Childhood Lab	0	0	4	2
HSC 418	Research Methods in Human Development	4	0	0	4
HSC 424	Techniques of Studying Human Development and Scientific Writing	4	0	0	4
HSC 424L	Techniques of Studying Human Development and Scientific Writing Lab	0	0	4	2
HSC 427	Theories of Human Development	4	0	0	4
	Total	20	0	12	26

Proposed					
Course Code	Course Name	L	T	P	C
CS 422 / CS 422L	Introduction to Computers	4	0	4	6
HSC 403 / 403L	Advanced Study in Human Development: Conception to Childhood	4	0	4	6
HSC 418	Research Methods in Human Development	4	0	0	4
HSC 424/ 424L	Techniques of Studying Human Development and Scientific Writing	4	0	4	6
HSC 427	Theories of Human Development	4	0	0	4
	Total	20	0	12	26

Semester : II

Existing					
Course Code	Course Name	L	T	P	C
HSC 401	Adolescence & Youth	4	0	0	4
HSC 401L	Adolescence & Youth Lab	0	0	2	1
HSC 406	Contemporary Issues and Concerns in Human Development	4	0	0	4
HSC 406L	Contemporary Issues and Concerns in Human Development Lab	0	0	4	2
HSC 407	Early Childhood Care & Education	4	0	0	4
HSC 407L	Early Childhood Care & Education Lab	0	0	4	2
HSC 420	Social Psychology	4	0	0	4
HSC 420L	Social Psychology Lab	0	0	2	1
HSC 423	Statistical Methods in Human Development	4	0	0	4
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

Proposed					
Course Code	Course Name	L	T	P	C
HSC 401/ 401L	Adolescence & Youth	4	0	2	5
HSC 406 / 406L	Contemporary Issues and Concerns in Human Development	4	0	4	6
HSC 407/ 407L	Early Childhood Care & Education	4	0	4	6
HSC 420 / 420L	Social Psychology	4	0	2	5
HSC 423	Statistical Methods in Human Development	4	0	0	4
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

*Common practical examination for HSC 401L and HSC 420L.

*Common practical examination for HSC 401L and HSC 420L.

Semester : III

Existing					
Course Code	Course Name	L	T	P	C
HSC 502	Adulthood and Ageing	4	0	0	4
HSC 508	Child in the Family	4	0	0	4
HSC 511	Curriculum for Early Years	4	0	0	4
HSC 511L	Curriculum for Early Years Lab	0	0	4	2
HSC 520	Introduction to Guidance and Counseling	4	0	0	4
HSC 520L	Introduction to Guidance and Counseling Lab	0	0	4	2
HSC 526	Persons with Special Needs	4	0	0	4
HSC 526L	Persons with Special Needs Lab	0	0	4	2
	Total	20	0	12	26

Proposed					
Course Code	Course Name	L	T	P	C
HSC 502	Adulthood and Ageing	4	0	0	4
HSC 508	Child in the Family	4	0	0	4
HSC 520/ 520L	Introduction to Guidance and Counseling	4	0	4	6
	Discipline Elective - I	4	0	4	6
	Open Elective	4	0	4	6
	Reading Elective -I	0	0	0	2
	Total	20	0	12	28

List of Discipline Electives

Course Code	Course Name
HSC 526 / 526L	Persons with Special Needs
HSC 511/ 511L	Curriculum for Early Years
	Media Planning and Social Marketing (Newly Introduced)
	Planning for Innovative Project and Management(Newly Introduced)

Semester : IV

Existing					
Course Code	Course Name	L	T	P	C
HSC 501	Abnormal Psychology	4	0	0	4
HSC 525	Parent & Community Education	4	0	0	4
HSC 525L	Parent & Community Education Lab	0	0	4	2
	Specialization (I/II) Course 1	4	0	0	4
	Specialization (I/II) Course 2	4	0	0	4
	Specialization (I/II) Course 3	0	0	4	2
HSC 528P	Project	0	0	12	6
	Total	16	0	20	26

Proposed					
Course Code	Course Name	L	T	P	C
HSC 501	Abnormal Psychology	4	0	0	4
HSC 525 / 525L	Parent & Community Education	4	0	4	6
	Elective Specialization Course 1	4	0	0	4
	Elective Specialization Course 2	4	0	0	4
	Elective Specialization Course 3	0	0	4	2
	Reading Elective -II	0	0	0	2
HSC 528P	Project	0	0	12	6
	Total	16	0	20	28

Specialization I Guidance and counseling						Specialization I Guidance and counseling					
HSC 517	Guidance and Coping in Crisis	4	0	0	4	HSC 517	Guidance and Coping in Crisis				
HSC 527	Principles and Procedures in Guidance and Counseling	4	0	0	4	HSC 527	Principles and Procedures in Guidance and Counseling				
HSC 537L	Practicing Guidance and Counseling Lab	0	0	4	2	HSC 537L	Practicing Guidance and Counseling Lab				
Specialization II Early Childhood Education						Or					
Specialization II Early Childhood Education						Specialization II Early Childhood Education					
HSC 513	ECE Centers Organization, Administration and Management	4	0	0	4	HSC 513	ECE Centers Organization, Administration and Management				
HSC 518	Innovative Programmes and Curriculum Planning for ECE Centers	4	0	0	4	HSC 518	Innovative Programmes and Curriculum Planning for ECE Centers				
HSC536 L	Management and innovations in Early Childhood Education Lab	0	0	4	2	HSC536 L	Management and innovations in Early Childhood Education Lab				

M.Sc. (Home Science Clothing and Textile)

Semester I

Existing					
Course Code	Course Name	L	T	P	C
CS 422	Introduction to computers	4	0	0	4
CS 422L	Introduction to computers laboratory	0	0	4	2
HSC 404	Apparel Pattern Making	4	0	0	4
HSC 404L	Apparel Pattern Making Lab	0	0	4	2
HSC 411	Historic Costumes	4	0	0	4
HSC 416	Research Methods in Clothing & Textile	4	0	0	4
HSC 425	Textile Chemistry	4	0	0	4
HSC 425L	Textile Chemistry Lab	0	0	4	2
	Total	20	0	12	26

Proposed					
Course Code	Course Name	L	T	P	C
CS 422/ 422L	Introduction to computers	4	0	4	6
HSC 404 / 404L	Apparel Pattern Making	4	0	4	6
HSC 411	Historic Costumes	4	0	0	4
HSC 416	Research Methods in Clothing & Textile	4	0	0	4
HSC 425/ 425L	Textile Chemistry	4	0	4	6
	Total	20	0	12	26

Semester II

Existing					
Course Code	Course Name	L	T	P	C
HSC 408	Fashion Business and Communication	4	0	0	4
HSC 408L	Fashion Business and Communication Lab	0	0	4	2
HSC 410	Garment Production Technology	4	0	0	4
HSC 412	Historic Textiles	4	0	0	4
HSC 412L	Historic Textiles Lab	0	0	4	2
HSC 421	Statistical Methods in Clothing & Textile	4	0	0	4
HSC 426	Textile Testing	4	0	0	4
HSC 426L	Textile Testing Lab	0	0	4	2
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

Proposed					
Course Code	Course Name	L	T	P	C
HSC 408/ 408L	Fashion Business and Communication	4	0	2	6
HSC 410	Garment Production Technology	4	0	0	4
HSC 412/ 412L	Historic Textiles	4	0	4	6
HSC 421	Statistical Methods in Clothing & Textile	4	0	0	4
HSC 426/ 426L	Textile Testing	4	0	4	6
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

Semester III

Existing					
Course Code	Course Name	L	T	P	C
HSC 504	Advanced Apparel Designing and Construction	2	0	0	2
HSC 504L	Advanced Apparel Designing and Construction Lab	0	0	4	2
HSC 512	Dyeing and Printing	4	0	0	4
HSC 512L	Dyeing and Printing Lab	0	0	8	4
HSC 514	Fabric Manufacture	4	0	0	4
HSC 514L	Fabric Manufacture Lab	0	0	4	2
HSC 532	Textile Merchandising	4	0	0	4
HSC 529	Technical Textiles and Textile Ecology	4	0	0	4
	Total	18	0	16	26

Proposed					
Course Code	Course Name	L	T	P	C
HSC 504/504L	Advanced Apparel Designing and Construction	2	0	4	4
HSC 512/512L	Dyeing and Printing	4	0	8	8
HSC 529	Technical Textiles and Textile Ecology	4	0	0	4
HSC 532	Textile Merchandising	4	0	0	4
	Discipline Elective	4	0	4	6
	Reading Elective -I	0	0	0	2
	Total	18	0	16	28

List of Discipline Electives

HSC 514 /514L	Fabric Manufacture
Code to be generated	Knitting Technology(Newly Introduced)
HSC 531/531L	Textile Finishes
Code to be generated	Textile Auxillaries and their application(Newly Introduced)
Code to be generated	Media planning and Social Marketing(Newly Introduced)

Semester IV

Existing					
Course Code	Course Name	L	T	P	C
HSC 507	CAD in Textile and Garment Designing	2	0	0	2
HSC 507L	CAD in Textile and Garment Designing Lab	0	0	8	4
HSC 510	Commercial Clothing	4	0	0	4
HSC 510L	Commercial Clothing Lab	0	0	8	4
HSC 531	Textile Finishes	4	0	0	4
HSC 531L	Textile Finishes Lab	0	0	4	2
HSC 528P	Project	0	0	12	6
	Total	10	0	32	26

Proposed					
Course Code	Course Name	L	T	P	C
HSC 507/507L	CAD in Textile and Garment Designing	2	0	8	6
HSC 510/510L	Commercial Clothing	4	0	8	8
HSC 528P	Project	0	0	12	6
	Open Elective	4	0	4	6
	Reading Elective -II	0	0	0	2
	Total	10	0	32	28

M.Sc. (Home Science Food Science and Nutrition)

Semester I

Existing					
Course Code	Course Name	L	T	P	C
CS 422	Introduction to computers	4	0	0	4
CS 422L	Introduction to computers lab	0	0	4	2
HSC 402	Advanced Food Science	4	0	0	4
HSC 402L	Advanced Food Science Lab	0	0	4	2
HSC 413	Human Physiology	4	0	0	4
HSC 413L	Human Physiology Lab	0	0	2	1
HSC 417	Research Methods in Food Science and Nutrition	4	0	0	4
HSC 419	Scientific writing and nutrition communication	4	0	0	4
HSC 419L	Scientific writing and nutrition communication Lab	0	0	2	1
	Total	20	0	12	26

Common practical examination for HSC 413L and HSC 419L.

Proposed					
Course Code	Course Name	L	T	P	C
CS 422/422L	Introduction to computers	4	0	4	6
HSC 402/402L	Advanced Food Science	4	0	4	6
HSC 413/413L	Human Physiology	4	0	2	5
HSC 417	Research Methods in Food Science and Nutrition	4	0	0	4
HSC 419/419L	Scientific writing and nutrition communication	4	0	2	5
	Total	20	0	12	26

Semester II

Existing					
Course Code	Course Name	L	T	P	C
HSC 405	Biochemistry-I: Biomolecules and Energetics	4	0	0	4
HSC 405L	Biochemistry-I: Biomolecules and Energetics Lab	0	0	4	2
HSC 409	Food Microbiology	4	0	0	4
HSC 409L	Food Microbiology Lab	0	0	2	1
HSC 414	Nutrition Epidemiology Paediatric and Geriatric Nutrition	4	0	0	4
*HSC 414L	Nutrition Epidemiology Paediatric and Geriatric Nutrition Lab	0	0	2	1
HSC 415	Problems in Human Nutrition	4	0	0	4
HSC 415L	Problems in Human Nutrition Lab	0	0	4	2
HSC 422	Statistical methods in Food Science and Nutrition	4	0	0	4
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

Common practical examination for HSC 414L and HSC 409L

Proposed					
Course Code	Course Name	L	T	P	C
HSC 405/405L	Biochemistry-I: Biomolecules and Energetics	4	0	4	6
HSC 409/409L	Food Microbiology	4	0	2	5
HSC 414/414 L	Nutrition Epidemiology Paediatric and Geriatric Nutrition	4	0	2	5
HSC 415 /415L	Problems in Human Nutrition	4	0	4	6
HSC 422	Statistical methods in Food Science and Nutrition	4	0	0	4
HSC 428P	Work experience/ Internship	0	0	4	2
	Total	20	0	16	28

Semester III

Existing					
Course Code	Course Name	L	T	P	C
HSC 505	Advanced Nutrition	4	0	0	4
HSC 505L	Advanced Nutrition Lab	0	0	2	1
HSC 506	Applied and Community Nutrition	4	0	0	4
HSC 506L	Applied and Community Nutrition Lab	0	0	2	1
HSC 519	Institutional Food Administration (IFA) and Country & Continental Cuisines	4	0	0	4
HSC 519L	Institutional Food Administration (IFA) and Country & Continental Cuisines Lab	0	0	2	1
HSC 521	Metabolism and diagnostic Biochemistry	4	0	0	4
HSC 521L	Metabolism and diagnostic Biochemistry Lab	0	0	4	2
HSC 524	Nutrition in Diseases and Disorders	4	0	0	4
HSC 524L	Nutrition in Diseases and Disorders Lab	0	0	2	1
	Total	20	0	12	26
Common practical examination for HSC 505L and HSC 506L					
Common practical examination for HSC524L and HSC519L					

Proposed					
Course Code	Course Name	L	T	P	C
HSC 506 / 506L	Applied and Community Nutrition	4	0	2	5
HSC 519/ 519L	Institutional Food Administration (IFA) and Country & Continental Cuisines	4	0	2	5
HSC 521/ 521L	Metabolism and diagnostic Biochemistry	4	0	4	6
	Discipline Elective	4	0	2	5
	Open Elective	4	0	2	5
	Reading Elective I	0	0	0	2
	Total	20	0	12	28

List of Discipline Electives	
HSC 505/505L	Advanced Nutrition
HSC 524/524L	Nutrition in Diseases and Disorders
	Food Standards, Safety and Regulations(Newly Introduced)
	Media Planning and Social Marketing(Newly Introduced)

Semester IV

Existing					
Course Code	Course Name	L	T	P	C
HSC 523	Nutrition for Physical Health and Fitness	4	0	0	4
HSC 523L	Nutrition for Physical Health and Fitness Lab	0	0	2	1
HSC 530	Techniques and Instrumentation in Nutrition Research	4	0	0	4
HSC 530L	Techniques and Instrumentation in Nutrition Research Lab	0	0	2	1
	Specialization (I/II) Course 1	4	0	0	4
	Specialization (I/II) Course 2	4	0	0	4
	Specialization (I/II) Course 3	0	0	4	2
HSC 528P	Project	0	0	12	6
	Total	16	0	20	26

Proposed					
Course Code	Course Name	L	T	P	C
HSC 523/ 523L	Nutrition for Physical Health and Fitness	4	0	2	5
HSC 530/ 530L	Techniques and Instrumentation in Nutrition Research	4	0	2	5
	Elective Specialization Course 1	4	0	0	4
	Elective Specialization Course 2	4	0	0	4
	Elective Specialization Course 3	0	0	4	2
	Reading Elective -II	0	0	0	2
HSC 528P	Project	0	0	12	6
	Total	16	0	20	28

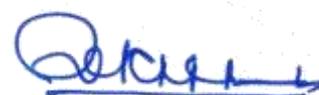
Common practical examination for HSC 530L and HSC 523L

Specialization I: Food Processing					
HSC 515	Food Processing and Technology	4	0	0	4
HSC 516	Food Product Development Safety and Quality Control	4	0	0	4
HSC535L	Food Processing and Quality Assurance Lab	0	0	4	2
Specialization II: Therapeutic Nutrition					
HSC 509	Clinical Nutrition and Dietetics	4	0	0	4
HSC 522	Nutrition and Critical Care	4	0	0	4
HSC538L	Therapeutic Nutrition Lab	0	0	4	2

Specialization I: Food Processing					
HSC 515	Food Processing and Technology				
HSC 516	Food Product Development Safety and Quality Control				
HSC535L	Food Processing and Quality Assurance Lab				
Or					
Specialization II: Therapeutic Nutrition					
HSC 509	Clinical Nutrition and Dietetics				
HSC 522	Nutrition and Critical Care				
HSC538L	Therapeutic Nutrition Lab				

List of Reading Electives for Home Science	
Course Code	Course Name
	Safe and Healthy Environments For Young Children (Newly Introduced)
	Nanotechnology in Textile(Newly Introduced)
	Introduction to Nutrigenomics / Online course in lieu - Nutrigenomics for Disease Prevention and Intervention https://www.nutrigenomics.arizona.edu/home.html
	Textile Conservation (Newly Introduced)
	Onconutrition (Newly Introduced)
	Colour Science and Instrumentation(Newly Introduced)
	Inclusive Education (Newly Introduced)
	Novel Technologies for Food Processing and Shelf Life Extension Online course in lieu - Novel Technologies For Food Processing And Shelf Life https://nptel IIT, Kharagpur Management
	Food Biotechnology (Newly Introduced)
	Science of Clothing Comfort Online course in lieu - Science of Clothing Comfort http://swayam.gov.in I I T, Delhi
	Ergonomic Applications in Interior Design (Newly Introduced)
	Functional Clothing(Newly Introduced)
	Content Development and Food Labelling(Newly Introduced)
	Emerging Technologies for Personalized Nutrition(Newly Introduced)
	Sports Nutrition(Newly Introduced)

Verified



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