

Choice Based Credit System (CBCS)

UNIVERSITY OF DELHI

DEPARTMENT OF HOME SCIENCE

**UNDERGRADUATE PROGRAMME
(Courses effective from Academic Year 2015-16)**



SYLLABUS OF COURSES TO BE OFFERED **Core Courses, Elective Courses & Ability Enhancement Courses**

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Undergraduate Programme Secretariat

Preamble

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching-learning process, examination and evaluation systems, besides governance and other matters.

The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching-learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated these guidelines.

CHOICE BASED CREDIT SYSTEM (CBCS):

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines to be followed.

Outline of Choice Based Credit System:

- 1. Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
- 2. Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.
 - 2.1 Discipline Specific Elective (DSE) Course:** Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).
 - 2.2 Dissertation/Project:** An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.
 - 2.3 Generic Elective (GE) Course:** An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.
- 3. Ability Enhancement Courses (AEC)/Competency Improvement Courses/Skill Development Courses/Foundation Course:** The Ability Enhancement (AE) Courses may be of two kinds: AE Compulsory Course (AECC) and AE Elective Course (AEEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement. They ((i) Environmental Science, (ii) English/MIL Communication) are mandatory for all disciplines. AEEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.
 - 3.1 AE Compulsory Course (AECC):** Environmental Science, English Communication/MIL Communication.
 - 3.2 AE Elective Course (AEEC):** These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based instruction.

Project work/Dissertation is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

Details of Courses Under Undergraduate Programme (B.A./ B.Com.)

Course	*Credits	
	Paper+ Practical	Paper + Tutorial
<u>I. Core Course</u> (12 Papers) Two papers – English Two papers – MIL Four papers – Discipline 1. Four papers – Discipline 2. Core Course Practical / Tutorial* (12 Practicals)	12X4= 48	12X5=60
<u>II. Elective Course</u> (6 Papers) Two papers- Discipline 1 specific Two papers- Discipline 2 specific Two papers- Inter disciplinary Two papers from each discipline of choice and two papers of interdisciplinary nature. Elective Course Practical / Tutorials* (6 Practical/ Tutorials*) Two papers- Discipline 1 specific Two papers- Discipline 2 specific Two papers- Generic (Inter disciplinary) Two papers from each discipline of choice including papers of interdisciplinary nature.	6x4=24	6X5=30
<ul style="list-style-type: none"> • Optional Dissertation or project work in place of one elective paper (6 credits) in 6th Semester 		
<u>III. Ability Enhancement Courses</u>		
1. Ability Enhancement Compulsory (2 Papers of 2 credits each) Environmental Science English Communication/MIL	2 X 2=4	2 X 2=4
2. Ability Enhancement Elective (Skill Based) (4 Papers of 2 credits each)	4 X 2=8	4 X 2=8
	<hr/> Total credit= 120	<hr/> Total = 120
Institute should evolve a system/policy about ECA/ General Interest/Hobby/Sports/NCC/NSS/related courses on its own.		

*wherever there is a practical there will be no tutorial and vice-versa.

B A (PROG) FOOD TECHNOLOGY

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits
Discipline Specific Course (DSC)	1. Fundamentals of Food Science & Technology Part I	4	2
	2. Fundamentals of Food Science & Technology Part II	4	2
	3. Basic Baking Technology	4	2
	4. Introduction to Food Safety & Preservation	4	2
Discipline Specific Elective (DSE)	1. Advanced Baking Technology	4	2
	2. Advanced Foods & Vegetables Preservation Technology	4	2
	3. Food Safety, Hygiene & Quality Testing	4	2
	4. Project / Dissertation		6
Skill Enhancement Course (SEC)	1. Food Product Development		2
	2. Entrepreneurship Development	2	
	3. Confectionary Technology		2
	4. Nutrition & Wellbeing		2
	5. Milk & Milk Product Technology		2
	6. Home Based Catering	2	
Generic Electives (GE)	1. Baking Technology	4	2
	2. Fruit & Vegetable Preservation Technology	4	2

**CHOICE BASED CREDIT SYSTEM IN
B.A. (PROG) FOOD TECHNOLOGY**

SEMESTER	CORE COURSE (12)	ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE DSE (4)	GENERIC ELECTIVE (GE) (4)
I	English/ MIL-1	English/MIL Communication / Environmental Science			
	DSC-FT -1A: Fundamentals of Food Science Technology Part -I (Theory + Practical)				
	DSC-2A				
II	MIL/English-1	Environmental Science/ English/MIL Communication			
	DSC-FT-1B: Fundamentals of Food Science Technology Part -II (Theory + Practical)				
	DSC-2B				
III	English/ MIL-2		SEC-1		
	DSC-FT-1C: Basic Baking Technology (Theory + Practical)				
	DSC-2C				
IV	MIL/English-2		SEC-2		
	DSC-FT-1D: Introduction to Food Safety and Preservation (Theory + Practical)				

	DSC-2D				
V			SEC-3	DSE-1 A	GE-1
				DSE-2 A	
VI			SEC-4	DSE-1 B	GE-2
				DSE-2 B	

ELECTIVE: DISCIPLINE SPECIFIC DSE (Any 2) (1 in Sem V and 1 in Sem VI):

CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

- DSE-FT 1: Advanced Baking Technology (Theory + Practical)
- DSE-FT 2: Advanced Fruit and Vegetable Preservation Technology (Theory + Practical)
- DSE-FT 3: Food Safety, Hygiene and Quality Testing (Theory + Practical)
- DSE-FT 4: Project/Dissertation (6th Semester)

SKILL ENHANCEMENT ELECTIVE COURSE

CREDITS – 2 (2 Period Theory or 4 Period Practical per Week)

- SEC-1: Food Product Development*
- SEC-2: Entrepreneurship Development*
- SEC-3: Confectionary Technology*
- SEC-4: Nutrition and Wellbeing
- SEC-5: Milk and Milk Product Technology
- SEC-6: Home Based Catering**
- *Picked from B.Sc. (Hons) Food Technology revised course under CBCS
- ** Picked from B.Sc. (Prog.) Home Science revised course under CBCS

ELECTIVE: GENERIC (GE)

CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

- GE-FT-1: Baking Technology
- GE-FT-2: Fruit and Vegetable Preservation Technology

DISCIPLINE SPECIFIC COURSES

DSC- FT- 1 A: FUNDAMENTALS OF FOOD SCIENCE AND TECHNOLOGY – PART I

(CREDITS: THEORY-4, PRACTICAL-2)

Objectives

1. To introduce students to the field of food science and technology.
2. To familiarize them with the science and processing of cereals, pulses, fruits and vegetables.

THEORY

LECTURES: 60

Unit 1	Introduction to Food Science and Technology	5
	<ul style="list-style-type: none">• Definition, scope and current trends in food science and technology	
Unit II	Food Groups, Nutrients and Balanced Diet	15
	<ul style="list-style-type: none">• Definition and meaning of food, nutrition, nutrient, health, concept and characteristics of a balanced diet.• Introduction to basic food groups and nutrients, food pyramid, macro and micronutrients.• Effect of processing on nutrients.	
Unit III	Browning reactions in foods	8
	<ul style="list-style-type: none">• Classification (enzymatic, non-enzymatic and metallic browning), causes and prevention of browning	
Unit IV	Cereals and Pulses	12
	<ul style="list-style-type: none">• Composition and nutritive value, types of cereals, processing of cereals and pulses (gelatinization of starch and the factors affecting it, germination and fermentation), toxic constituents in pulses, milling of pulses.	
Unit V	Fruits and vegetables	10
	<ul style="list-style-type: none">• Classification of fruits and vegetables, composition and nutritive value; effect of processing on pigments.	
Unit VI	Chocolate and cocoa products	10
	Cocoa bean processing, preparation of chocolate liquor, cocoa butter and chocolate	

PRACTICAL

Objectives

1. To incorporate concept of weighing and measurement.
2. To introduce the concept of effects of processing on cereals, pulses, fruits and vegetables.

- 1 Weights and measures, selection of raw material.
- 2
 - Gelatinization of starch and the factors affecting it.
 - Factors affecting gelatinization in preparation of custard/boiled rice/*halwa*.
- 3
 - Germination of pulses and its applications.
 - Preparation of products using sprouts – salads/fruit chat/poha/others.
- 4
 - Fermentation of cereals and pulses and its applications.
 - Preparation of cereal-pulse fermented products – idli/dosa/dhokla/others.
- 5 Effect of heat, acid and alkali on various plant pigments.
- 6
 - Enzymatic browning of fruits and vegetables.
 - Non-enzymatic browning reactions in food.
- 7 Chocolate preparation.

RECOMMENDED READINGS:

- Potter N, Hotchkiss JH. Food Science. 5th edn. Delhi: CBS Publishers, 2007.
- Sethi P and Lakra P. Ahaar Vigyan, Poshan evam Suraksha. Elite Publishing House 2015.
- Srilakshmi B. Food Science. Delhi: New Age International Private Limited, 2012.
- Suri S and Malhotra A. Food Science, Nutrition and Safety, Pearson India Ltd, 2014
- Vaclavik Vickie A and Christian Elizabeth W. Essentials of Food Science. 2nd Edition. New York: Academy Publishers, 2008.

Web Resources

Central Food Technology Research Institute: www.cftri.com

**DSC – FT- 1B : FUNDAMENTALS OF FOOD SCIENCE AND TECHNOLOGY –
PART II
(CREDITS: THEORY-4, PRACTICAL-2)**

Objective:

1. To familiarize students with the composition and processing of milk, egg, meat, sugars, fat and beverages.
2. To introduce them to the concept of food hygiene and adulteration

THEORY

LECTURES: 60

Unit I	Milk and milk products <ul style="list-style-type: none"> • Composition and nutritive value • Introduction to liquid milk technology (clarification, pasteurization, homogenization, fortification, sterilization) • Types of milk • Effect of processing on milk, • Introduction to milk products. 	10
Unit II	Eggs <ul style="list-style-type: none"> • Composition and nutritive value • Structure of an egg • Egg quality and deterioration • Green ring formation in boiled egg, preservation of eggs • Egg foams – stages of preparation and factors affecting them • Effect of heat on egg proteins; functions of eggs in cookery. 	10
Unit III	Meat, Fish and Poultry <ul style="list-style-type: none"> • Composition and nutritive value • Selection/purchasing criteria for meat, fish and poultry • Tenderization of meat. 	8
Unit IV	Sugar <ul style="list-style-type: none"> • Composition and nutritive value • Properties of sugars • Manufacturing/refining of sucrose • Sugar cookery – crystalline and non-crystalline candies, sugar based products. 	12

Unit V	Fats and oils	10
	<ul style="list-style-type: none"> • Composition and nutritive value • Types of fats/oils and their functions • Rancidity in fat and its prevention • Changes in fat during heating • Care of fat used for frying, emulsions. 	
VI	Introduction to food hygiene and food adulteration	10
	<ul style="list-style-type: none"> • Food hygiene, factors affecting food safety, personal hygiene. • Adulteration, adulterants and their effects on health. 	

PRACTICAL

Objective:

1. To introduce the concept of effects of processing on milk, egg, sugar, and fat.
 2. To familiarize the students with simple tests of food adulteration.
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- 1 - Effect of heat, acid and alkali on coagulation and precipitation of milk.
 - Preparation of milk products using prolonged heating/heat and acid technique.
 - 2 Determination of pH of different foods.
 - 3 - Egg white foam formation and factors affecting its stability
 - Egg foam products – omelets/meringues/soufflé
 - Green ring formation in boiled eggs and its prevention
 - 4 - Behaviour of sugar at various temperatures
 - Preparation of crystalline and non-crystalline candies
 - 5 - Determination of smoke point of various oils and factors affecting the smoke point.
 - Preparation of emulsions – mayonnaise
 - 6 Detection of adulterants in food

RECOMMENDED READINGS :

- Potter N, Hotchkiss JH. Food Science. 5th edn. Delhi: CBS Publishers, 2007.
- Srilakshmi B. Food Science. Delhi: New Age International Private Limited, 2012
- Suri S and Malhotra A. Food Science, Nutrition and Safety, Pearson India Ltd, 2014

- Vaclavik Vickie A and Christian Elizabeth W. Essentials of Food Science. 2nd Edition. New York: Academy Publishers, 2008.

Web Resources:

- Central Food Technology Research Institute: www.cftri.com

DSC – FT- 1C: BASIC BAKING TECHNOLOGY
(CREDITS: THEORY- 4, PRACTICAL- 2)

Objectives:

1. To impart students basic knowledge relating to the principles of baking
2. To introduce them to the techniques of cake and pastry making.

THEORY

LECTURES: 60

Unit 1	Baking Industry	12
	<ul style="list-style-type: none"> • Baking industry and its scope in the Indian economy. • History of Bakery - present trends, prospects • Nutrition facts of bakery products. 	
Unit II	Wheat Grain Technology	15
	<ul style="list-style-type: none"> • Wheat grain– its structure • Milling of wheat; types of refined wheat flour; composition of refined wheat flour (gluten, amylose/ amylopectin, enzyme activity, moisture) and its storage 	
Unit III	Cake Technology	18
	<ul style="list-style-type: none"> • Preparation of cakes - types of cakes; ingredients used; methods of batter preparation; steps in cake making; balancing of cake formula; evaluation of the baked cake; operational faults in cake processing and the remedial measures. Labeling and Packaging. Costing • Cake decoration- different methods of cake decoration 	
Unit IV	Pastry Technology	15
	<ul style="list-style-type: none"> • Preparation of pastry - types of pastries (short crust, puff/flaky and choux pastry); ingredients; processing and evaluation. faults and remedies 	

PRACTICAL

Objectives:

1. To introduce the proximate principal analysis of wheat flour.

2. To equip them with the necessary skills for cake and pastry processing.

- 1 Quality Testing of Flour
 - Determination of water absorption power (WAP) of refined wheat flour and whole wheat flour.
 - Determination of ash content in refined wheat flour.
 - Determination of moisture content of refined wheat flour.
- 2 Sensory evaluation (by Hedonic scale) for various processed food products
- 3 Preparation and sensory evaluation of cakes
 - fatless sponge (pineapple sponge, chocolate sponge and Swiss roll)
 - shortened cake (plain tea cake, Dundee cake, marble cake, fruit cake and innovative cakes)
 - eggless cake
 - cake Icing
- 4 Preparation and sensory evaluation of pastry
 - short crust (jam tarts)
 - puff/flaky (Bombay khari, vegetable patties)
 - choux pastry (chocolate éclairs)

RECOMMENDED READINGS:

- Cornell, Hugh J and Hoveling, Alber W, Wheat Chemistry and Utilization, CRC Press, 1998
- Dubey SC. Basic Baking-Science and Craft. Society of Indian Bakers, Delhi 2007.
- Edward, W P, The Science of Bakery Products, RSC Publishing, 2007.
- Encyclopedia of Food Science and Technology, Academic Press, 1993.
- Kent NL. Technology of Cereals. Pergamon Press, London 2004.
- Ketrappaul N, Grewal RB, Jood S. Bakery Science and Cereal Technology. Daya Publishing House, Delhi 2005.
- Khanna K, Gupta S, Seth R, Mahana R, Rekhi T. The Art and Science of Cooking. Phoenix Publishing House Private Limited, Delhi 2004.
- Matz A. Bakery Technology and Engineering. CBS Publishers, Delhi 1998.
- Matz A. The Chemistry and Technology of Cereals as Food and Feed. CBS Publishers, Delhi 2004.

- Potter, Norman N and Hotchkiss, Joseph H, Food Science, CBS Publishers, Delhi, 2007.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S. Basic Food Preparation – A Complete Manual. Orient Longman, 2005
- Sultan S. Practical Baking. The AVI Publishing Company, Connecticut 1996.

DSC- FT- 1D: INTRODUCTION TO FOOD SAFETY AND PRESERVATION

(CREDITS: THEORY- 4, PRACTICAL- 2)

Objectives:

1. To impart students with basic knowledge relating to food safety and principles of preservation.
2. To introduce them to the concept of processing and preservation of fruits and vegetables.

THEORY

LECTURES: 60

Unit I: Purpose and Scope of Preservation

- Objectives of preservation and processing 5
- Scope of preservation industry in India.

Unit II: Post-harvest Changes and Spoilage 10

- Physical, chemical and microbiological changes in fruits and vegetables
- Factors affecting growth of microorganisms and the control measures

Unit III: Food Safety

- Key terms, factors affecting food safety, recent concerns 20
- Food laws, standards and regulations
- Food additives and contaminants
- Hygiene and sanitation
- HACCP

Unit IV: Principles and Methods of Preservation 12

- Asepsis
- Use of low temperature,
- Use of high temperature
- Removal of moisture
- Removal of air,
- Use of chemical preservatives
- Fermentation
- Irradiation
- Gas preservation
- Newer methods

Unit V: Fruit and Vegetable Processing – Sauces and Beverages 13

- Chutney and sauces- definition, method of preservation, steps in preparation of chutney and sauces.
- Fruit beverages- definition and classification, method of preservation (with special emphasis on pasteurization, use of chemical preservatives, sugar), role of various ingredients.

PRACTICALS

Objectives:

1. To familiarize the students with preserved fruit and vegetable products available in the market.
 2. To equip them with skills required for preservation, packaging and evaluation of fruit beverages, ketchup, sauce and chutney.
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1. Sterilization of bottles.
 2. Market survey of preserved fruit and vegetable products.
 3. Preparation, packaging, sensory/objective (TSS, pH) evaluation and costing of:
 - Sauces (chilli sauce and tomato sauce)
 - Ketchup(tomato)
 - Chutney (tomato chutney and imli chutney)
 - Squash (lemon squash, orange squash, pineapple squash)
 - Syrup (rose syrup and almond syrup)
 4. Preparation of labels for preserved foods

RECOMMENDED READING S:

- Frazier WC and Westhoff DC. Food Microbiology. Tata McGraw-Hill Publishing Company Limited, 1995.
- Khurdia DS. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi 1995.
- Knechtges LI. Food Safety-Theory and Practice, USA: Jones and Barlette Learning 2012.
- Ramaswamy H and Marcott M. Food Processing Principles and Applications. CRC Press, 2005.
- Siddhapa GS, Lal G and Tandon. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi, 1998
- Srivastava SS. *Phal Parirakshan*. Kitab Mahal, Lucknow 2006
- Subbalakshmi G, Udipi SA. Food Processing and Preservation. New Age International Publishers, Delhi 2007
- Suri S and Malhotra A. Food Science, Nutrition and Safety, Pearson India Ltd, 2014
- The Food Safety and Standards Act along with Rules and Regulations. Delhi: Commercial Law Publishers (India) Pvt Ltd, 2011.

Web resources

- Food safety and Standards Authority of India. www.fssai.gov.in
- National Center for Home Food Preservation. <http://nchfp.uga.edu/>

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE- FT 1: ADVANCED BAKING TECHNOLOGY

(CREDITS: THEORY- 4, PRACTICAL- 2)

Objectives:

1. To equip students with knowledge related to baking technology.
2. To impart knowledge related to processing techniques of bread, biscuits and cookies.
3. To familiarize them with various food packaging materials

THEORY

LECTURES: 60

Unit I: Bread Technology

- Preparation of bread - ingredients used; methods of dough preparation; steps in bread processing; evaluation of the baked bread; staling of bread; diseases of bread. 14

Unit II: Biscuit and Cookies Technology

- Preparation of biscuits and cookies – types; ingredients; processing and evaluation. 12
- Crackers

Unit III: Food Packaging

- Packaging – it's importance, essential features of an ideal package; various food packaging materials and their characteristics 14
- recent trends in the field of packaging (active packaging, intelligent packaging, RFID)
- label regulations and designing for packaged foods , nutritional labelling

Unit IV: Marketing and Cost Control

- Marketing - definition, scope, understanding the 4Ps – (Product, Price, Place, Promotion), marketing techniques, marketing and distribution of processed products.
- Cost control – food cost, labour cost and other costs; costing of processed products.

12

PRACTICALS

Objectives:

1. To familiarize the students with quality tests of wheat flour and yeast with reference to bread processing.
2. To equip them with the necessary skills for bread, biscuits and cookies processing.
 1. Determination of gluten content in refined wheat flour.
 2. Qualitative assessment of bran content in various wheat flours.
 3. Determination of dough raising capacity (DRC) of yeast and factors affecting the yeast activity.
 4. Preparation and sensory evaluation of:
 - breads (white and brown bread)
 - buns and dinner rolls
 - pizza base
 5. Preparation and sensory evaluation of various biscuits and cookies
 - Dropped biscuits
 - Rolled biscuits
 - Moulded biscuits
 6. Preparing any of the baked product in bulk and organizing an exhibition-cum-sale

RECOMMENDED READING S:

- Athalye AS. Plastics in Food Packaging. Tata McGraw Hill Publishing Company, Delhi 1992.
- Booth GR. Snack Foods. CBS Publishers, Delhi 2003
- Faridi H. The Science of Cookie and Crackers Production. CBS Publishers, Delhi 2004.
- Griffin S. Principles of Food Packaging. The AVI Publishing Company, Connecticut 1997
- Ketrappaul N, Grewal RB, Jood S. Bakery Science and Cereal Technology. Daya Publishing House, Delhi 2005
- Khanna K, Gupta S, Seth R, Mahana R, Rekhi T. The Art and Science of Cooking. Phoenix Publishing House Private Limited, Delhi 2004.
- Matz A. Bakery Technology and Engineering. CBS Publishers, Delhi 1998.
- Potter N, Hotchkiss JH. Food Science. CBS Publishers, Delhi 2006
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S. Basic Food Preparation – A Complete Manual. Orient Longman, 2005

DSE-FT 2: ADVANCED FRUIT AND VEGETABLE PRESERVATION TECHNOLOGY

(CREDITS: THEORY- 4, PRACTICAL- 2)

Objective:

To equip students with advanced knowledge of processing and preservation of fruits and vegetables.

THEORY

LECTURES: 60

Unit I: Dehydration and Concentration

16

- Dehydration- definition and objectives, method of preservation, normal drying curve, water activity, factors affecting rate of drying, sun drying, types of dehydrators (air convection, drum, freeze and vacuum driers) steps in dehydration of fruits and vegetable

- Concentration- definition and objectives, techniques

Unit II: Refrigeration and Freezing

- Definition and objectives, difference between freezing and refrigeration, systems of refrigeration, method of preservation, steps in freezing fruits and vegetables, cryogenic freezing of fruits and vegetable, evaluation. 8

Unit III: Canning

- Definition and objectives, selection of fruits and vegetables, method of preservation, steps of canning fruits and vegetables (with special emphasis on blanching, exhausting and heat processing), spoilage of canned foods 9

Unit IV: Introduction to New Food Product Development 6

- Need and importance for developing a new product, types of new products, challenges, failure of new product

Unit V: Fruit and Vegetable Processing –Pectin Products Preserves and Pickles

- Jam, Jelly and Marmalade- definition, role of pectin and theory of gel formation, method of preservation, steps of preparation, evaluation. 9
- Preserves- definition, method of preservation, steps of preparation, evaluation, candied, crystallized and glazed fruits. 6
- Pickles- definition, classification, method of preservation, steps of preparation of vinegar pickles, evaluation. 6

PRACTICALS

Objective:

1. To equip them with skills required for preservation, packaging and evaluation of jam, jelly, marmalade, pickles and preserves.
 2. To impart them the expertise for freezing and dehydration of fruits and vegetables
-
1. Preparation, packaging, labeling, sensory/objective (TSS, pH), evaluation and costing of:
 - Jam (apple jam and mixed fruit jam)

- Jelly(guava jelly)
 - Marmalade (orange marmalade)
 - Pickle (green chilli, lemon, mixed vegetable)
 - Preserve (carrot)
 - Dehydration of vegetables (green leafy vegetables, other vegetables and tubers)
 - Freezing of vegetables
2. Determination of head space, total soluble solid content and acidity of different preserved foods.
 3. Preparing any of the preserved product/new product in bulk and organizing an exhibition-cum-sale

RECOMMENDED READING S:

- Khurdia DS. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi 1995
- Potter N, Hotchkiss JH. Food Science. CBS Publishers, Delhi 2006
- Siddhapa GS, Lal G and Tandon. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi, 1986
- Srivastava RS, Kumar S. Fruit and Vegetable Preservation; Principles and Practices. International Book Distributing Company, Lucknow 2005
- Srivastava SS. *Phal Parirakshan*. Kitab Mahal, Lucknow 2006
- Subbalakshmi G, Udipi SA. Food Processing and Preservation. New Age International Publishers, Delhi 2007

Web resources

- National Center for Home Food Preservation. <http://nchfp.uga.edu/>
- Ministry of Food Processing Industries. <http://mofpi.nic.in/>

DSE-FT 3: FOOD SAFETY, HYGIENE AND QUALITY TESTING (CREDITS: THEORY-4, PRACTICAL-2)

Objectives

1. To introduce the concept of food hygiene, and importance of safe food storage.
2. To acquaint the students with important food laws.

3. To familiarize them with basic methods of quality testing of food.

THEORY

LECTURES: 60

Unit I Food Laws and Regulations 12

- Introduction to food acts laws and standards
- National food safety and standard act
- International standards, regulatory agencies
- Consumer protection act

Unit II Food Quality Management 12

- Characteristics of quality
- Quality Control,
- Quality Assurance
- Total Quality Management
- Quality Management System
- Good Manufacturing Practices
- Hazard Analysis Critical Control Point System (HACCP)

Unit III Introduction to Food Safety and Hygiene 10

- Food hygiene
- Factors affecting food safety
- Food spoilage
- Food handling
- Special requirements for high-risk foods,
- Safe food cooking temperature and storage techniques.

Unit IV Hygiene and Sanitation in Food Service Institutions 8

- Cleaning and disinfection
- Personal hygiene
- Pest control
- Waste disposal

Unit VI Sensory Methods of Food Quality Testing 8

- Sensation of taste, smell, appearance and flavor, sensory evaluation techniques

Unit VII Objective Methods of Food Quality Testing 10

- Physical test methods (moisture, acidity, water activity, texture, viscosity, colour)
- Simple methods of chemical analysis (protein, fat, water, ash)

- Microbiological sampling and testing.

PRACTICAL

Objectives

1. To familiarize students with basic food quality assessment tests using simple equipment.
 2. To develop basic computer skills for giving presentations.
-
1. Presentation on food hygiene and sanitation practices in any local food outlet.
 2. Sensory evaluation tests for processed foods
 3. Determination of the quality of an egg (whole and open egg).
 4. Determination of the moisture content of various flours
 5. Determination of viscosity of various food gruels (porridge, custards, batters etc) using viscometer.
 6. Assessing the texture of raw and cooked food using penetrometer.
 7. Measurement of the water activity (a_w) of raw and cooked food using AW – meter.
 8. Detection of pathogens in food using microbiological detection kits

RECOMMENDED READINGS:

- Fellows P et al. Making Safe Food: A Guide to Safe Food Handling and Packaging for Small-scale Producers Practical. Action Publishing, 1998.
- Frazier WC and Westhoff DC. Food Microbiology, TMH, New Delhi, 2004
- IFST. Food Hygiene Training: A Guide to its Responsible Management, UK: Institute of Food Science and Technology 1992.
- Lawley R, Curtis L and Davis J. The Food Safety Hazard Guidebook , RSC Publishing, 2004.
- Manay NS and Shadakshaswamy M. Food Facts and Principles, New Age International, 2004.
- Marriott NG and Gravani RB. Principles of Food Sanitation, New York: Springer, 2006.

- FAO Food and Nutrition Paper – 60. Food Fortification - Technology and Quality Control. 1996
- Suri S and Malhotra A. Food Science, Nutrition and Safety, Pearson India Ltd, 2014

Web Resources

- Institute of Food Science and Technology. www.ifst.org
- World Health Organization, WHO 5 keys to safer health poster.
<http://www.who.int/foodsafety/publications/consumer/5keys/en>

DSE-FT 4: PROJECT/ DISSERTATION

Objectives – To mentor the students to design and conduct original and ethical research. They should be able to write a dissertation in the APA format. The research done can either be empirical/data based (quantitative, qualitative, or mixed-methods) or it can be in the form of a critical review of research and theory.

RECOMMENDED READINGS:

- APA manual for dissertation

Evaluation: Viva jointly by one internal and one external examiner.

SKILL ENHANCEMENT ELECTIVE COURSES

SEC 1: FOOD PRODUCT DEVELOPMENT* (CREDITS: PRACTICAL-2)

**SEC course from B.Sc (Hons.) Food Technology*

Objectives

- To understand the concept of development of a new product and prepare new products based on special dietary requirements, functionality, convenience and improvisation of existing traditional Indian foods.

PROJECTS

Development of New Product (Chapter-3,4,5,6,14,15,19, Anil Kumar et al. and Chapter 13,14 Moskowitz and Saguy)

Definition, Importance, Objectives & Need of product development, Reasons of failure, Types and Steps of product development, Product development Tools and their use

Projects on:

1. Market and literature survey to identify the concepts of new products based on special dietary requirements, functionality, convenience and improvisation of existing traditional Indian foods.
2. Screening of product concept on the basis of techno-economic feasibility.
3. Development of prototype product and Standardization of formulation process.
4. Proximate Analysis of New Product
5. Packaging, labeling and shelf-life studies
6. Cost analysis and Final Project Report

Each team/group of students would develop a food product on the basis of above mentioned lines /steps and would submit a project report

RECOMMENDED READINGS:

- Fuller, Gordon W. New Product Development- From Concept to Marketplace, CRC Press. 2004.
- Anil Kumar, S., Poornima, S.C., Abraham, M.K.& Jayashree, K. Entrepreneurship Development. New Age International Publishers. 2004.
- Moskowitz, Howard and Saguy, R. I. Sam An Integrated Approach to New Food Product, CRC Press. 2009.

SEC 2: ENTREPRENEURSHIP DEVELOPMENT*

(CREDITS: THEORY-2)

**SEC course from B.Sc (Hons.) Food Technology*

THEORY

LECTURES: 30

UNIT I: ENTREPRENEURIAL DEVELOPMENT

10

- Case studies of successful entrepreneurs
- Exercises on ways of sensing opportunities – sources of idea, creating efforts, SWOT Analysis
- Entrepreneurial skill assessment test
- Techniques of development of entrepreneurial skills, positive self image and locus of control

UNIT II: FOOD BUSINESS MANAGEMENT

20

- Case studies of Food Processing Business and its aspects
- Business opportunity Identification and Assessment techniques
- Business Idea Generation and evaluation exercise
- Market Assessment study Analysis of competitive situation
- SWOT Analysis for business and for competitors
- Preparation of business plan
- Preparation of project report
- Methods of Arrangement of inputs – finance and material

RECOMMENDED READINGS:

- Acharya S S and Agarwal N L Agricultural Marketing in India, Oxford & ISH Publishing Co., New Delhi. 1987
- Chandra, Prasanna Projects, Planning, Analysis, Selection, Implementation and Review, Tata McGraw-Hill Publishing Company Limited, New Delhi. 1996
- D. David and S Erickson Principles of Agri Business Management, McGraw Hill Book Co., New Delhi. 1987
- David H. Holt Entrepreneurship – Anew Venture Creation, Prentice Hall of India, New Delhi. 2002
- Phillip Kotler Marketing Management, Prentice Hall of India Private Limited, New Delhi. 1994
- Vasant Desai The Dynamics of Entrepreneurial Development and Management, Himalya Publishing House Pvt. Ltd., Mumbai .2011
- Vasant Desai Fundamentals of Entrepreneurship and Small Business Management, Himalya Publishing House Pvt. Ltd., Mumbai. 2012

SEC 3: CONFECTIONARY TECHNOLOGY*
(CREDITS: PRACTICAL-2)

*SEC course from B.Sc (Hons.) Food Technology

Objectives

- Understanding status of confectionary industry in India
- To learn the technologies of confectionary products.
- To know about innovations in this sector.

Sugars- Types and sources, methods of preparation of sugars, jaggery, khandsari, raw and refined sugar. Principles of sugar cookery, crystalline and non-crystalline candies. Chapter 26– Manay.

Confectionary Products: Cake icings, hard-boiled candies, toffees, fruit drops, chocolates and other confections- ingredients, equipments & processes, product quality parameters, faults and corrective measures. (Chapter 5, 7 & 8 – Minifie.)

Practicals

1. Determine the effect of heat on sugar solution and perform the thread and cold water test.
2. To study the process of inversion, melting and caramelization in sucrose.
3. Preparation of fondant, fudge and brittles.
4. Preparation of *shakarpara* and *chenna murki*.
5. Preparation of candy and toffee and to perform quality assessment tests.
6. Preparation of icing and other cake decorations.

RECOMMENDED READINGS:

- Beckett S.T. Industrial Chocolate Manufacture, Blackwell Publishing Ltd. 2009.
- Manay, S. & Shadaksharaswami, M. Foods: Facts and Principles, New Age Publishers. 2004
- Minifie B.W. Chocolate, Cocoa and Confectionary, Aspen Publication. 1999.
- Sethi M, Eram Rao, Food Science- Experiments and applications, 2nd Ed. CBS publishers and Distributors Pvt. Ltd. 2011.
- Raina et.al. Basic Food Preparation-A complete Manual. 3rd Ed. Orient Longman Pvt. Ltd. 2003.

SEC 4: NUTRITION AND WELLBEING (CREDITS: PRACTICAL-2)

PRACTICAL

1. Identification of food sources for various nutrients using food composition tables.
2. Record diet of self using 24 hour dietary recall and its nutritional analysis.
3. Introduction to meal planning, concept of food exchange system.
4. Planning of meals for adults of different activity levels for various income groups.
5. Planning of nutritious snacks for different age and income groups.
6. Preparation of nutritious snacks using various methods of cooking.
7. Nutritional labeling of food products.
8. Estimation of BMI and other nutritional status parameters.

RECOMMENDED READINGS:

- Bamji MS, Krishnaswamy K, Brahmam GNV. Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. 2009.
- Srilakshmi .Food Science, 4th Edition. New Age International Ltd. 2007.
- Wardlaw MG, Paul M Insel . Perspectives in Nutrition, Fourth Edition. Mosby 2001.
- Introduction to Human Nutrition ed. Gibney et al, Blackwell Publishers, 2005
- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T .The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd. 2004.
- ICMR .Nutritive Value of Indian Foods. National Institute of Nutrition. 1990.
- Seth V, Singh K. Diet planning through the Life Cycle: Part 1. Normal Nutrition. A Practical Manual, Fourth edition, Elite Publishing House Pvt Ltd. 2005.
- ICMR. Nutrient Requirements and Recommended Dietary Allowances for Indians. 2010.
- Suri S and Malhotra A. Food Science, Nutrition and Safety, Pearson India Ltd. 2014.

SEC-5: MILK and MILK PRODUCT TECHNOLOGY
(CREDITS: PRACTICAL-2)

Objectives:

3. To equip students with skills required for purchase, storage, processing and Distribution of Milk and Milk Products
4. To help students in understanding the unit operations necessary for working or setting up a milk/milk product(s) related sale/distribution/processing/production unit

PRACTICAL

1. To study the sensory and other quality parameters (SNF and adulterants) of milk
2. To study the effect of different temperatures on the keeping quality of pasteurized milk
3. To study the factors influencing shelf life of milk products such as paneer, curd, lassi, ice-cream and fermented milk
4. To learn the preparation, packaging and storage of following milk products:
 - Curd/Yogurt and products
 - Cottage Cheese and products
 - Khoa, condensed milk and their products
 - Butter and Buttermilk
 - Ice-cream
 - Indian milk based desserts
5. To conduct a market survey on milk and milk products with special reference to their packaging, sale and information mentioned on their packs.

RECOMMENDED READINGS:

- Eram S. Rao. Food Science Experiments and Applications. CBS Publishers. 2nd Edition, 2011
- Frazier WC and Westhoff DC. Food Microbiology. Tata McGraw-Hill Publishing Company Limited, 1995.
- Knechtges LI. Food Safety-Theory and Practice, USA: Jones and Barlette Learning 2012.
- The Food Safety and Standards Act along with Rules and Regulations. Delhi: Commercial Law Publishers (India) Pvt Ltd, 2011.

SEC-6: HOME BASED CATERING
(CREDITS: THEORY:-2)

**SEC course from B.Sc (Pass) Home Science*

THEORY

LECTURES: 30

Unit 1 Introduction to Food Service

- Factors contributing to the growth of food service industry 4
- Kinds of food service establishments

Unit 2 Food Production

12

- Menu planning: Importance of menu, Factors affecting menu planning, Menu planning for different kinds of food service units
- Food Purchase and Storage
- Quantity Food production: Standardization of recipes, quantity food preparation techniques, recipe adjustments and portion control
- Hygiene and Sanitation

Unit 3 Resources

3

- Money
- Manpower
- Time
- Facilities and equipment
- Utilities

Unit 4 Planning of A Food Service Unit

- **Preliminary Planning**
Survey of types of units, identifying clientele, menu, operations and delivery
- **Planning the set up:**
 - a) Identifying resources
 - b) Developing Project plan
 - c) Determining investments
 - d) Project Proposal

RECOMMENDED READINGS:

- West B Bessie & Wood Levelle. Food Service in Institutions 6th Edition Revised By Hargar FV, Shuggart SG, & Palgne Palacio June, Macmillian Publishing Company New York. 1988.
- Sethi Mohini . Institution Food Management New Age International Publishers. 2005.
- Knight J B & Kotschevar LH. Quantity Food Production Planning & Management 3rd edition John Wiley & Sons. 2000.
- Philip E Thangam. Modern Cookery for teaching and Trade Part I & II Orient Longmam. 2008.
- Taneja S and Gupta SL. Entrepreneurship development, Galgotia Publishing. 2001.

GENERIC ELECTIVE

GE-FT-1: BAKING TECHNOLOGY

(CREDITS: THEORY-4, PRACTICAL-2)

Objectives:

3. To impart students with knowledge related to baking technology
4. To introduce them to the techniques of cakes, biscuits and pastry processing.

THEORY

LECTURES: 60

Unit I: Baking Industry

Baking industry and its scope in the Indian economy. Present Trends and Prospects. 8

Unit II: Cake Technology

Preparation of cakes - types of cakes; ingredients used; methods of batter preparation; steps in cake making; balancing of cake formula; evaluation of the baked cake; operational faults in cake processing and the remedial measures. 12

Unit III: Pastry Technology

Preparation of pastry - types of pastries (short crust, puff/flaky and choux pastry); ingredients; processing and evaluation. Faults and remedies. 10

Unit IV: Biscuit and Cookies Technology

- Preparation of biscuits and cookies – types; ingredients; processing and evaluation. 10

Unit V: Food Safety

- Key terms, factors affecting food safety
- Food additives used in baking 8

Unit VI: Marketing and Cost Control

- Marketing - definition, scope, marketing techniques, marketing and distribution of processed products. 12
- Cost control – food cost, labour cost and other costs.

PRACTICAL

Objectives:

To equip students with the necessary skills for cake, biscuit and pastry processing.

1. Weights and measures, selection of raw material.
2. Preparation, sensory evaluation and packaging of cakes
 - Fatless sponge cakes
 - Shortened cakes
 - Eggless cakes
 - Muffins and brownies
3. Preparation, sensory evaluation and packaging of pastries
 - short crust
 - puff/flaky
 - choux pastry
4. Preparation, sensory evaluation and packaging of biscuits

RECOMMENDED READING S:

- Dubey SC. Basic Baking-Science and Craft. Society of Indian Bakers, Delhi 2007.
- Encyclopedia of Food Science and Technology, Academic Press. 1993.
- Khanna K, Gupta S, Seth R, Mahana R, Rekhi T. The Art and Science of Cooking. Phoenix Publishing House Private Limited, Delhi .2004.
- Matz A. Bakery Technology and Engineering. CBS Publishers, Delhi. 1998.

- Matz A. The Chemistry and Technology of Cereals as Food and Feed. CBS Publishers, Delhi 2004.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S. Basic Food Preparation – A Complete Manual. Orient Longman, 2005.
- Sultan S. Practical Baking. The AVI Publishing Company, Connecticut 1996.

GE-FT-2: FRUIT AND VEGETABLE PRESERVATION TECHNOLOGY

(CREDITS: THEORY-4, PRACTICAL-2)

Objectives:

1. To impart students with basic knowledge related to fruit and vegetable preservation.
2. To impart knowledge of preservation of fruits and vegetables.

THEORY

LECTURES:60

Unit I: Purpose and Scope of Preservation

- Objectives of preservation and processing 4
- Scope of preservation industry in India.

Unit II: Post-harvest Changes and Spoilage

- Physical, chemical and microbiological changes in fruits and vegetables 10
- Factors affecting growth of microorganisms and the control measures

8

Unit III: Food Safety Regulations

- Key terms, factors affecting food safety, recent concerns
- National food law (FSSA), standards and regulations
- Food additives and contaminants
- Hygiene and sanitation
- HACCP

Unit IV: Principles and Methods of Preservation

- Asepsis 10
- Low temperature
- High temperature
- Removal of moisture
- Removal of air
- Use of chemical preservatives
- Fermentation
- Irradiation
- Newer methods

Unit V: Fruit and Vegetable Processing

- Chutney and sauces- Definition, method of preservation, steps in preparation of chutney and sauces. 28
- Fruit beverages- Definition and classification, method of preservation (with special emphasis on pasteurization, use of chemical preservatives, sugar), role of various ingredients.
- Jam, Jelly and Marmalade- definition, role of pectin and theory of gel formation, method of preservation, steps of preparation, evaluation.
- Preserves- definition, method of preservation, steps of preservation, evaluation, candied, crystallized and glazed fruits.
- Pickles- definition, classification, method of preservation, steps of preparation of vinegar pickles, evaluation.

PRACTICALS

Objectives:

To equip students with skills required for preservation, packaging and evaluation of fruit and vegetable products.

1. Preparation, packaging, labeling, sensory and objective (TSS, pH) evaluation of:
2. Sauces and chutnies
3. Ketchup (tomato)

4. Squashes (lemon squash, orange squash, pineapple squash)
5. Syrups (rose syrup and almond syrup)
6. Jams (apple jam and mixed fruit jam)
7. Pickles (green chilli, lemon, mixed vegetable)
8. Preserve (carrot)

RECOMMENDED READINGS:

- Khurdia DS. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi 1995.
- Siddhapa GS, Lal G and Tandon. Preservation of fruits and vegetables. Indian Council of Agriculture Research, New Delhi, 1998.
- Srivastava SS. Phal Parirakshan. Kitab Mahal, Lucknow 2006.
- Subbalakshmi G, Udipi SA. Food Processing and Preservation. New Age International Publishers, Delhi 2007.
- Ramaswamy H and Marcott M. Food Processing Principles and Applications. CRC Press, 2005.
- The Food Safety and Standards Act along with Rules and Regulations. Delhi: Commercial Law Publishers (India) Pvt Ltd, 2011.
- Frazier WC and Westhoff DC. Food Microbiology. Tata McGraw-Hill Publishing Company Limited, 1995.
- Knechtges LI. Food Safety-Theory and Practice, USA: Jones and Barlette Learning 2012.

Web resources

- Food safety and Standards Authority of India. www.fssai.gov.in
- National Center for Home Food Preservation. <http://nchfp.uga.edu/>

PROPOSED SYLLABUS

B.A. (Prog) Apparel Design & Construction

Choice Based Credit System

**From UGC
2015**

Preamble

As much as apparel is a basic necessity, the apparel sector is a vital constituent of the economy and a significant provider of employment and self-employment opportunities. The B.A Programme course with Apparel Design & Construction not only aims at preparing the students for a wide variety of jobs in the garment industry but also focuses on enabling the students to develop and apply their creative mind in the design of apparel and home linen. The theoretical and practical knowledge imparted through this course is also designed and structured to provide a strong foundation for their further studies or professional careers.

The core papers of this course introduce the students to both the art and science of apparel design and construction essential for understanding and applying the relevant theories, principles and techniques. These also aim at developing the requisite theoretical and practical knowledge required for selecting, sourcing and using the fabrics, trims, equipment, tools and instruments required in the apparel design and construction process. As part of the textile science focus, the students learn about the properties as well as the basic production and finishing processes of a variety of textile fibres, yarns, fabrics and garments. For enabling the students to develop and apply creativity, particularly in the apparel design process, the students are provided with an orientation on the elements and principle of design and taken through a complete design development process. Students are also apprised of basic concepts, terminologies and processes associated with fashion design and given a general introduction to the fashion industry. In addition, the students get to learn a variety of textile design concepts and techniques and particularly those which form part of the rich heritage of Indian textiles. There is also equal focus on imparting practical knowledge and understanding. Students are given the opportunity to gain first hand practical knowledge of stitches and seams and the ways to attach trims besides the techniques used drafting blocks and making basic patterns. The fashion illustration practicals familiarises the students with the techniques of developing designs making use of sketching. The dyeing and printing practicals acquaints them with the art and techniques using a variety of dyeing and printing methods including batik and dye.

The discipline specific elective papers build on the knowledge gained by the students from the core papers and familiarises them with the advanced techniques of garment construction including an introduction to draping and computer aided designing. They are also acquainted with the overall structure and functioning of the Indian garment industry including an overview of the different machineries and systems used in industrial scale garment manufacturing. These papers also create an appreciation of the quality and care labelling requirements and the techniques used for manipulating the patterns for achieving desired results. These papers also focus equally on the commercial aspects of the garment industry such as marketing and retailing and the rights of the consumers.

The skill based papers help expand the employability options for the students pursuing B.A Programme course with Apparel Design & Construction. The options available are 1) Fashion Event Management, 2) Effective Dressing Skills, 3) Apparel Retail 4) Apparel etail, and 5) Design Development Project.

B.A. (PROG) APPAREL DESIGN AND CONSTRUCTION

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits
Discipline Specific Course (DSC)	1. Fundamental Textile Science and Apparel Construction I	4	2
	2. Fundamental Textile Science and Apparel Construction II	4	2
	3. Textile Design Techniques	4	2
	4. Fashion Studies and Design Development	4	2
Discipline Specific Elective (DSE)	1. Apparel Industry and Quality Assessment	4	2
	2. Apparel Construction	4	2
Skill Enhancement Course (SEC)	1. Fashion Event Management	2	
	2. Effective Dressing Skills	2	
	3. Apparel Retail	2	
	4. Apparel etail	2	
	5. Design Development Project		2
Generic Electives (GE)	1. Fashion : Design and Development	4	2
	2. Fashion Accessories	4	2
	3. Textiles : Care and Conservation	4	2
	4. Appreciation of Textile Crafts	4	2

**CHOICE BASED CREDIT SYSTEM IN
B.A. (PROG) APPAREL DESIGN AND CONSTRUCTION**

SEMESTER	CORE COURSE (12)	ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE DSE (4)	GENERIC ELECTIVE (GE) (4)
I	English/ MIL-1	English/MIL Communication /Environmental Science			
	DSC -1A				
	DSC-ADC-2A Fundamental Textile Science and Apparel Construction –I (Theory + Practical)				
II	MIL/English-1	Environmental Science/ English/MIL Communication			
	DSC--1B				
	DSC-ADC-2B Fundamental Textile Science and Apparel Construction –I (Theory + Practical)				
III	English/ MIL-2		SEC-1		
	DSC -1C				
	DSC-ADC-2C Textile Design Techniques (Theory + Practical)				
IV	MIL/English-2		SEC-2		
	DSC-1D				
	DSC-ADC-2D : Fashion Studies and Design Development (Theory + Practical)				
V			SEC-3	DSE-1 A	GE-1
				DSE-2 A	
VI			SEC-4	DSE-1 B	GE-2
				DSE-2 B	

ELECTIVE: DISCIPLINE SPECIFIC DSE (Any 2) (1 in Sem V and 1 in Sem VI):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

DSE-ADC -2A: Apparel Industry and Quality Assessment (Theory + Practical)

DSE-ADC -2 B: Apparel Construction (Theory + Practical)

SKILL ENHANCEMENT ELECTIVE COURSE (Any 4. 1 each in Sem III, IV, V and VI):
CREDITS – 2 (2 Period Theory or 4 Period Practical per Week)

SEC-1: Fashion Event Management

SEC-2: Effective Dressing Skills

SEC-3: Apparel Retail

SEC-4: Apparel etail

SEC-5: Design Development Project

ELECTIVE: GENERIC (GE) (Any 2. 1 each in Sem 5 and 6):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

GE 1: Fashion: Design and Development

GE 2: Fashion Accessories

GE 3: Textiles: Care and Conservation

GE 4: Appreciation of Textile Crafts

DISCIPLINE SPECIFIC COURSES

DSC- ADC -2 A: FUNDAMENTAL TEXTILE SCIENCE & APPAREL CONSTRUCTION-I (CREDITS: THEORY-4, PRACTICAL-2)

Objectives:

- To familiarise the students with the terminologies related to apparel and its construction.
- To impart knowledge about textile fibres in terms of their origin and performance characteristics.
- To create awareness regarding selection criteria relating to apparel and home textiles.
- To acquaint the students with the tools and equipment used for sewing.

THEORY

LECTURES 60

UNIT I Introduction to Apparel Construction

12

- Introduction to fabric
woven fabric structure : warp, weft, selvedge,
fabric grain – types, identification and importance in apparel construction
- Sewing:
Common terms: Seam allowance, Pattern, Grading, Notch, Stay stitching, Yoke, Gusset
Tools and equipment required for measuring, drafting, pinning, marking and cutting,
sewing, pressing
- Preparation of fabrics for clothing construction- shrinking, straightening, layout, marking
and cutting of patterns

UNIT II Introduction to Sewing Machine

5

- Sewing machine: its parts and functions, working defects and remedies, care and maintenance
- Use of different threads and needles for various fabrics

UNIT III Use and Selection of fabrics

18

- Application of textiles – Apparel, Home, Industry
- Fabric characteristics : Construction, Texture, Hand, weight, width
- Trims (types and their application)
- Linings and interlinings (types and their application)
- Market survey of trimmings, lining and interlinings available in market.
- Home furnishings: Standard size and selection of common household linen- towel, cushion cover, table linen, bed sheet and pillow covers
- Selection of fabric and clothing according for infants and children

- Introduction to fibers:
 - Primary and Secondary properties of Fibres
 - Fiber-classifications based on their origin (natural and man-made) and length (staple and filament)
 - Identification of fibers through visual inspection, burning test, microscopic test, chemical test.
- Demonstration of Burning, Microscopic and Chemical test.
- Properties related to performance and care of the following fibers: cotton, linen, wool, silk, rayon, nylon, acrylic, polyester
- Demonstration of tests - crease recovery, abrasion resistance and dimensional stability
- Project on market survey of fabrics : Collection of the swatches of different type of fabrics commonly available in market and presentation of the following information
- Statement of the unit price, characteristics, end use of the fabrics
- A list of the names and addresses of the sources of fabric swatches
- Preparation of a portfolio of the above.

Visits: Visit to a Textile-testing Lab

PRACTICAL

1	Temporary stitches - even, uneven, pin, machine and diagonal basting, thread mark	1
2	Permanent stitches –hemming, blind hemming, back stitch, fine stitch, running stitch, slip stitch	2
3	Decorative stitches - chain, herringbone, stem, running, lazy-daisy, satin, French knot, bullion stitch, buttonhole	2
	Introduction to a sewing machine with a demonstration and practice of learning the running of sewing machine on paper on straight lines, curved lines and corners	1
4	Plain seam and seam finishes – Pinking, Turned and Stitched, Edge stitched, overcast finish, overlapped, piped finish	2
5	French seam, run-n-fell seam, lapped seam, top stitching, piped seam	2
6	Fasteners: button, buttonholes, press buttons, hook-n-eye	1
7	Necklines and their finishing: bias binding, bias facing, shaped facing with fusing	2
8	Construction of a flanged pillow cover	2

RECOMMENDED READINGS

- Corbman,P.B., Textiles-Fibre to Fabric, Gregg Division/McGraw Hill Book Co.,US, 1985.
- Joseph M.L.,Essentials of Textiles (5th Edition), Holt, Rinehart and Winston Inc.,Florida, 1988.
- Tortora, G,Phyllis, Understanding Textiles (2nd Edition), McMillan Co., USA, 1987.
- Pizzuto, J.,Fabric Science (6th Edition), Fairchild Publications.
- Complete Guide to Sewing-Readers Digest, The reader's digest association, 1976
- Complete Book of Sewing, Alison Smith Dorling Kindersley, 1999
- Singer Sewing Book, Gladys Cunningham, The Singer Company

- Verma, Gayatri, Cutting and Stitching Pratical, Asian Publishers, Darya Gang, New Delhi, 2007. (Hindi Book)
- Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
- Verma, Promila., Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Academy, Bhopal, 2003. (Hindi Book)

**DSC- ADC -2 B: FUNDAMENTAL TEXTILE SCIENCE & APPAREL
CONSTRUCTION-II
(CREDITS: THEORY-4, PRACTICAL-2)**

Objectives

- To impart knowledge about yarn production and properties.
- To foster an understanding of the various fabric construction techniques.
- To develop an understanding of the various finishes used in the apparel industry.
- To acquaint the students with the importance of taking correct body measurements and size charts.
- To introduce the concept of drafting and paper patterns.

THEORY

LECTURES 60

UNIT I Yarns

12

- Basic steps in mechanical and chemical spinning
- Yarn Properties: Yarn twist, Yarn numbering systems; Demonstration of yarn count
- Spun and filament yarns
- Simple, Complex, Textured Yarns

UNIT II Fabric Construction Techniques

18

- Weaving: woven structure, General properties of woven fabrics
- Basic parts of a loom and their functions
- Basic weaves and variations – Plain, twill, satin
- Fancy Weaves – Leno, Dobby, Jacquard, Pile, Surface figure
- Knitting: wales, courses and identification, General properties of knitted fabrics, basic weft and warp knitted structures
- Blends: Reasons for Blending, properties, common blends available in Market
- Other methods of fabric construction: felting, non-woven, laces, braids, and nets- their properties
- Common fabric and yarn defects

UNIT III Finishes

12

- Introduction, significance and classification

- Regular finishes- scouring, bleaching, singeing, mercerization, tentering, calendaring
- Special finishes- Crease resistant, flame retardant, water-repellant, moth proofing, Soil release

UNIT IV Apparel Construction

18

- Correct procedure of taking body measurements, size charts.
- Clothing concepts : Ease type and amount in different garment, Dart – importance and types
- General principles of clothing construction:
Methods of pattern development: Drafting, Flat pattern making, Draping
Kinds of paper pattern- blocks, commercial pattern
Pattern information, marking symbols.

PRACTICAL

Basic Drafting:

1	Child's basic bodice block	1
2	Child's basic sleeve block	1
	Adaptation of drafts:	
3	Basic sleeve adaptation to flared, puff sleeve	2
4	Drafting of collars on basic neck line - Peter pan, Shirt collar	3
	Apparel Construction:	
5	Samples of pleats, tucks, gathers	2
6	A-Line Frock	3
7	Child's Pyjama	1
8	Petticoat	2

RECOMMENDED READINGS

- Marsh, J.T., An Introduction to Textile Finishing, B.I. Publishers, 1979
- Corbman,P.B., Textiles-Fibre to Fabric, Gregg Division/McGraw Hill Book Co.,US, 1985.
- Joseph M.L.,Essentials of Textiles (5th Edition), Holt, Rinehart and Winston Inc.,Florida, 1988.
- Tortora, G,Phyllis, Understanding Textiles (2nd Edition), McMillan Co.,USA, 1987.
- Bains, S. and Hutton, J., Singer Sewing Book, Hamlyn, London, 1972
- Patternmaking for Fashion Designers, Lori A. Knowles, 2006, Fairchild Publications Inc.
- Principles of Flat Pattern Design, 4th Edition, Nora M. MacDonald, Fairchild Publications Inc.,2009.
- Armstrong, Helen.,Pattern Making for Fashion Design,Harper Collins Publishers.,1997.
- Kindersley, Dorling.,The Complete Book of Sewing, Dorling Kindersley Limited, 1992.

- Shorie,G.P.,Vastra Vigyan Ke Mool Sidhant,Vinod Pustak Mandir, Hospital Road, Agra,2007.(Hindi Book)
- Verma, Promila.,Vastra Vigyan Avam Paridhan,Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003.(Hindi Book)

**DSC- ADC -2 C: TEXTILE DESIGN TECHNIQUES
(CREDITS: THEORY-4, PRACTICAL-2)**

Objectives

- To provide comprehensive knowledge about the concepts of dyeing and printing of textiles.
- To foster understanding of traditional Indian embroideries-motifs used, colour combinations used etc.

THEORY

LECTURES 60

UNIT I Introduction to Dyes

20

- Natural and Synthetic dyes
- Preparation of fabric for dyeing
- Dye classes : their suitability and fastness on different fabrics-direct, reactive, acid, vat and disperse dyes
- Dyeing procedure for Direct, reactive and acid dyes
- Stages of dye application and their effect on finished fabric
- Colorfastness: Factors affecting colorfastness, Testing Wash fastness, Light fastness

UNIT II Concept of Printing

14

- Dyeing vs. Printing
- Styles of printing – Direct, Resist, Discharge
- Methods of printing – Block, Roller, Screen, Rotary screen, Heat Transfer, Digital, Flock
- Common dyeing and printing defects

UNIT III Traditional Indian Textiles and Embroidery

26

- Indian Hand Embroideries: Kantha, Phulkari, Kashida, Mirrorwork (Gujarat), Chikankari with reference to Motifs, Color combination, Type of thread used, Stitches
- Traditional Indian Textiles : Brocades, Baluchari, Jamdani, Bandhni, Ikat with reference to: History, production centres, techniques, designs and colours

Visit: Visit to Crafts Museum and Crafts Fairs

PRACTICAL

1	Dyeing with direct dyes- cotton, rayon, silk	2
2	Dyeing with reactive dyes- cotton, wool, silk, nylon	2
3	Dyeing with acid dyes- wool, silk	1
4	Tie and dye technique	2
4	Block printing using single and double coloured blocks, various placements of blocks	2
5	Batik technique	2
6	Preparation of an article/garment with a combination of techniques learnt above	4

RECOMMENDED READINGS

- Chattopadhyaya, K., Handicrafts of India, All India Handicrafts Board, New Delhi, 1975.
- Ikat textiles of India Chelna Desai, Chronicle Books, San Francisco, 1988
- Silk Brocades Yashodhara Roli & Janssen BV, New 2003
- Hand-woven Fabrics of India, Jaslen Dhamija and Jyotindra Jain, Mapin Publishing Pvt. Ltd. Ahmedabad, 1989
- Tie-Dyed textiles of India, Veronica Murphy & Rosemary Crill, Victoria & Albert Museum, London, 1991
- Traditional Indian costumes and Textiles, Parul Bhatnagar, Abhishek Publication, Chandigarh, 2004
- Threads and voices Laila Tyabji Marg Publications, 2007
- Designs for a life time Usha Shrikant, Samata Enterprise, Mumbai, 2002
- Marsh, J.T., An Introduction to Textile Finishing, B.I. Publishers, 1979
- Corbman, P.B., Textiles-Fibre to Fabric, Gregg Division/McGraw Hill Book Co., US, 1985.
- Joseph M.L., Essentials of Textiles (5th Edition), Holt, Rinehart and Winston Inc., Florida, 1988.
- Tortora, G., Phyllis, Understanding Textiles (2nd Edition), McMillan Co., USA, 1987.
- Miles, L., Textile Printing, (2nd Edition), Society of Dyers and Colourists, England, 1994.
- Clarke, W., An introduction to Textile Printing, Newnes-Butterworths, Boston, 1977.
- Storey, J., Manual of Textile Printing, Thames and Hudson publication, London, 1992
- Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
- Verma, Promila., Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)
- Meller, S and Eiffer, J., Textile Design, Thames and Hudson, London, 1991.

**DSC- ADC -2 D: FASHION STUDIES AND DESIGN DEVELOPMENT
(CREDITS: THEORY-4, PRACTICAL-2)**

Objectives

- To understand the concept related to elements and principles of design.
- To understand terminology related to fashion.
- To acquaint the students with the basic factors influencing fashion.
- To foster an understanding of international designers and their work.
- To familiarize the students with the role of a designer.

THEORY

LECTURES 60

UNIT I Design Concepts

12

- Structural and applied design
- Garment Silhouettes
- Elements of design and their effects- Line, shape, Color and Texture.
- Principles of design and their effects- Proportion, Balance, Emphasis, Rhythm, Harmony

UNIT II Social aspects of clothing

8

- Clothing functions and theories of origin
- Individuality and conformity, conspicuous consumption and emulation

UNIT III Terms and Concepts Related To Fashion

24

- Fashion:
Fashion terms: Fashion, Fad, Classic, Trend, Haute-couture, Prêt-a-porter, Knockoff, accessories, toile, atelier, boutique, bespoke
Inspiration and sources of fashion- printed sources, historic/traditional costumes, media, travel, fabrics, awareness
Fashion cycle
Consumer identification with fashion life cycle – fashion leaders/ followers/ innovators/ motivators/ victims
Theories of Fashion adoption – trickle down, trickle up, trickle across
Factors favoring and retarding fashion
Fashion categories – women's : style, size, price
- Major fashion centers of the world and their leading designers- Paris, Milan, Tokyo, New York, London, India

UNIT III Design Development

16

- Role of a designer in the following:

Design development and sourcing of fabrics
Development of a sample garment and line
Specification sheet and cost sheet

- Fashion forecasting, sources of fashion forecasting information

PRACTICAL

1	Geometric Croqui	1
2	Muscle figure development of geometric croqui	2
3	Draping of garments on croqui	2
4	Different silhouettes: necklines, sleeves, tops and collars, skirts, trousers	2
5	Concepts of color: Color wheel, Value and Intensity	2
6	Matching according to different colors, prints, textures using various color mediums	2
7	Full rendering of dresses on croqui along with swatches	2
8	Preparation of a portfolio of any 3 themes with one sketch each	2

RECOMMENDED READINGS

- The Dynamics of Fashion, Elaine Stone, Fairchild Publication, 2008
- Frings Gini, Fashion-From Concept to Consumer, (5th Edition), Prentice Hall Publications,1996
- Marshall S G, Jackson H O, Stanley MS, Kefgen M &Specht T, (2009), Individuality in
 - Clothing & Personal Appearance, 6th Edition, Pearson Education, USA.
- Shorie,G.P.,Vastra Vigyan Ke Mool Sidhant,Vinod Pustak Mandir, Hospital Road, Agra,2007.(Hindi Book)
- Verma, Promila.,Vastra Vigyan Avam Paridhan,Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003 (Hindi Book)
- Jarnow, Jand Judelle, B.,Inside Fashion Business,Merill Prentice Hall, New Jersey, 1987

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE –ADC-2 A: APPAREL INDUSTRY AND QUALITY ASSESSMENT (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

Objectives

- To provide a comprehensive knowledge about judging the quality of ready made garments.
- To acquaint the students with the ready made garment industry and its problems and prospects.
- To understand the concept of marketing and its 4 P s.
- To work on various promotional campaigns like advertising brochures, etc.
- To understand the role of a merchandiser in the apparel industry.

UNIT I Quality Assessment

8

- Judging the quality of readymade garments: overall appearance, fabric, fit, workmanship, price
- Project work: Visit to readymade garment retail outlets belonging to three different levels (designer outlets, middle class outlets, ordinary outlets) and compare the workmanship, fabric, etc. of the garments. Presentation of the report by students

UNIT II Importance of Labels and Consumer Awareness

6

- Garment Labels: Types and importance of labels with special reference to care labels
- Consumer Problems and protection, Rights and Responsibilities

UNIT III Apparel Design

24

- Apparel classification and categories
- Study of garment components : necklines, collars, sleeves, plackets, pockets, hemlines
- Disposal of fullness- Darts, tucks, pleats and gathers
- Garment designing according to age, climate, occasion, occupation
- Garment designing for special needs, basic principles and requirements – Self-help, maternity wear

UNIT III Marketing In Apparel Industry

22

- Introduction to Apparel marketing and merchandising concepts
4Ps of Marketing- Product, Price, Place and Promotion
Market Segmentation-Target group and Demographics
Role of a merchandiser, Principles and techniques of merchandising

- Indian Readymade garment industry:
Importance in Export and Domestic sector
Recent Structural changes in garment industry
Problems and prospects
Apparel Retail: Various In store and non-store retail formats
Recent Structural changes in apparel retail

PRACTICAL

1	Adult's basic bodice and sleeve block	1
2	Drafting of collars on basic neck line- shirt collar- one piece, 2 piece, Chinese band	2
3	Basic skirt block. Adaptation to slim, flared, gored, wrap-around.	3
4	Garment construction: Adaptation of basic blocks to construct the following garments:	9
	• Saree blouse	
	• Simple kameez	
	• Salwar and Churidar	
	• Skirt	

RECOMMENDED READINGS

- Stamper, A.A., S. H. Sharp and L.B. Donnell (1986) Evaluating Apparel Quality, Fairchild Publications, America
- Kotler, P and Armstrong, G., Principles of Marketing, Prentice Hall of India, New Delhi, 1999.
- Fritz, A and Cant, J., Consumer Textiles, Oxford University Press, 1988
- Bharadwaj, S.K. and Mehta, P.V., Managing Quality in the Apparel Industry, New Age International, New Delhi, 1998.
- Constantino, M, Fashion Marketing, BT Batsford, London, 1998
- Stone, Elaine, Fashion Merchandising, Mc Graw Hill Inc, 1985
- Jackson, Tim, Mastering Fashion and Merchandising Management, Mc Millan Press, London, 2001
- Diamond, E., Fashion Retailing a Multichannel Approach, Prentice Hall, 2005
- Grace, E, Introduction to Fashion Merchandising, Prentice Hall, New Jersey, 1978

DSE –ADC-2 B APPAREL CONSTRUCTION (CREDITS: THEORY-4, PRACTICAL-2)

Objectives

- To familiarize the students with the concept of handling of different fabrics.
- To understand the common fitting problems and their correction.
- To understand the role of CAD in garment designing in the apparel industry.
- To equip the students with the knowledge about the problems faced by a textile consumer and his rights.

THEORY

LECTURES 60

UNIT I Layout planning and Handling Special fabrics

18

- Laying patterns on fabric: types of layouts, layout on different fabric widths and types
- Marker development, Calculations of material requirements
- Planning assembly of women's wear; Assessing quality at various stages of garment assembly.
- Precautions to be taken while working with different kind of fabrics: sheers and lace, silk & crepe, velvets, wool, plaids, stripes and figured prints. Handling of fabrics with reference to designing, marking, cutting, stitching, care and maintenance, shrinkage, needle sizes, stitch sizes, threads used, seams and other special considerations. Preparation of a sample file

UNIT II Fit related problems and introduction to draping

14

- Figure types-designing for various figure types
- Factors affecting fit
- Common fitting problems and remedies
- Introduction To Draping- Terminology, Muslin Preparation

UNIT III Industrial machines, tools and equipment

6

- Industrial machines: spreading, cutting, sewing, work aids, pressing and finishing

UNIT IV Introduction to Internet & Computer Aided Designing

22

- Basic computer terminology: hardware, software, network, internet, emailing,
- Use and importance of Internet and websites as a source for Design Ideas. Using search engines to source design ideas, designers, design trends. Hands on practice on the internet for using search engines, browsing internet for collecting information, sending emails
- Introduction to the role of Computer Aided Designing (CAD) in garment designing. Demonstration of various features and functionalities of various CAD Packages used for garment designing, pattern making and marking

PRACTICAL

1 Pattern-making:

6

- Dart manipulation: Single dart series, Two dart series, style lines, Yokes
- Hip length bodice
- Basic trouser block
- Design variations: Raglan Sleeve, Raised neckline, cowl neckline

- | | | |
|---|--|---|
| 2 | Garment Construction: Designing and Construction of one garment covering any age group involving dart manipulation and handling of different fabrics | 5 |
| 3 | Draping Demonstration:
Basic Bodice Block- Front And Back
Skirt-front & back , Flared skirt | 4 |

Special Lectures and workshops:

-By Academicians, Fashion Designers and professionals in the readymade garment industry

RECOMMENDED READINGS

- Doongaji, S and Deshpande, R., basic Processes and Clothing Construction, Raj Publications, New Delhi, 1988.
- Verma, Gayatri, Cutting and Stitching Pratical, Asian Publishers, Darya Gang, New Delhi, 2007. (Hindi Book)
- Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
- Verma, Promila., Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)
- Bains, S. and Hutton, J., Singer Sewing Book, Hamlyn, London, 1972
- Armstrong, Helen., Pattern Making for Fashion Design, Harper Collins Publishers., 1997.
- Kindersley, Dorling., The Complete Book of Sewing, Dorling Kindersley Limited, 1992

SKILL ENHANCEMENT COURSES

SEC 1: FASHION EVENT MANAGEMENT (CREDITS: THEORY:-2)

OBJECTIVES

1. To create an understanding of the different types of fashion events and the planning required for their successful organisation.
2. To familiarise the students with the various practical steps required for successful organisation of fashion events and impart knowledge about the ways in which all the relevant activities could be effectively coordinated.
3. To impart practical knowledge of the main administrative, design, marketing, operational and risk management steps required for the successful organisation of fashion events through project work.

THEORY

LECTURES 30

UNIT I Understanding Fashion Events & their Planning and Management Needs 8

- 1 Anatomy of Fashion Events
 - Introduction to event management – Types and category, Sports, Rallies, Wedding, Fashion and corporate events
 - Principles of Event Management
 - Key roles, types and purposes of fashion events – fashion show, fairs & trade show, product launch
 - Role of an event coordinator - Administration, Design, Marketing, Operations, Risk
 - Creating an event plan
- 2 Initial Planning Requirements
 - Creating themes for the event
 - Targeting the audience /vendors
 - Timing the event and Finding a venue
 - Guest lists and Invitations
 - Organising the required production team and preparing duty charts
 - Budget estimation
 - Seeking sponsorships – writing sponsorship letters

UNIT II Designing & Executing Fashion Show

12

- 1 Venue requirements
 - Stage/ booth design
 - Seating patterns and plan
 - Lighting and allied audio-visual effects
 - Preparation of Programme Booklet
 - Catering arrangements
 - Progress monitoring through checklists

- 2 Catwalk Presentation Requirements
 - Merchandise selection
 - Models selection
 - Music and choreography
 - Final show sequence and rehearsals
 - Fitting sessions
 - Dressing area arrangements
 - Commentary requirements
 - Closing and striking the show

UNIT III Marketing & Managing Fashion events

10

- 1 Pre-Show Marketing and post show follow up
 - Creating a pre and post-event promotion plan
 - Building media relations, preparing press release and media kit
 - Post Show Evaluation
- 2 Ensuring Legal Compliance, Safety & Security
 - Licenses and permissions to be obtained
 - Risk Management for prevention of hazards
 - Security for people and merchandise

RECOMMENDED READINGS

- Everett Judith C., Swanson Kristen K. (2012), Guide to Producing a Fashion Show (3rd Edition), Fairchild Publications, NY
- Silvers Julia Rutherford (2012), [Professional Event Coordination](#), Wiley; 2 edition
- Taylor Paula,(2012), How to Produce a Fashion Show, from A to Z , Pearson Prentice Hall

SEC 2: EFFECTIVE DRESSING SKILLS (CREDITS: THEORY:2)

Objectives

- To provide an understanding of the role of effective dressing in making one's presence felt.
- To create an awareness of the differences in body types and about the art of selecting styles that enhance the visual appeal.

- To equip the students with basic knowledge and skills required for making the required minor alterations in readymade garments to get the correct look and fit
- To help develop the ability to recognise and evaluate quality workmanship and making wise buying decisions
- To help learn the ways to leverage various optical illusions of line, colour and texture to create the right impression with clothes and accessories.
- To help the students in acquiring skills for dressing up effectively for special occasions including interviews
- To enable students to learn the required dressing styles and skills for various professions

THEORY

LECTURES 30

UNIT I Psychological and sociological influences of clothing 6

- How dress affects behaviour
- First Impression
- Non verbal Communication: First impression
- Verbal Communication: Halo Effect Self Concept & Image

UNIT II A Evaluating the body- 8

- Figure analysis and standard figure
- Different body types
- Recognizing problem areas

B Recognizing Correct Fit

- Basic fitting standards
- Learning to fit a garment-
- Armhole and sleeve correction
- Bust correction
- Hip correction
- Neckline correction, etc

UNIT III A Suitability of clothing for- 7

- Season/Climate
- Different body types
- Occasion
- Age
- Occupation

B Selecting appropriate readymade garments in terms of-

- Fabric
- Workmanship
- Price

UNIT IV Learning to use elements and principles of designs- 5

- Elements of Design- Line, Shape (Silhouette), Colour, Texture
- Principles of Design- Balance, Proportion & Rhythm, Emphasis, Harmony
- Usage of Elements and Principles of Design for different body types for Clothing and Accessories

UNIT V Care and Maintenance of Wardrobe- 4

- Daily and Periodic care
- Storage
- Cleaning-Wet and Dry
- Stain Removal

RECOMMENDED READINGS

- Sturm M, 1973, Guide to Modern Clothing McGraw- Hill
- Chata Romano, 2002, Plan your Wardrobe , New Holland Publication
- Navneet Kaur, 2010, Comdex Fashion Design, Dreamtech Press
- Elizabeth Liechty, Steineckert D., Rasband J., 2009, Fitting and Pattern Alteration, Fairchild Publication

**SEC: 3 APPAREL RETAIL
(CREDITS: THEORY:-2)**

Objectives

1. To create an awareness and understanding of the evolution and current structure of the apparel retailing industry in India
2. To develop and understanding and appreciation of the four Ps of marketing, basic principles of visual merchandising and effective customer handling practices

THEORY

LECTURES 30

UNIT I Retailing – introduction 4

- Role of retail in marketing system
- Retail evolution in India: structural changes

UNIT II Overview of Fashion Retailing 8

- Uniqueness of apparel retailing

- Types of fashion retail outlets – Department stores, speciality stores, chain stores, discount retailers, Supermarket retailing, convenience stores, contractual retailers, ware house retailers, non-store retailers

UNIT III Role of marketing strategy - 4 p's of marketing 8

- Product – Merchandise Assortment
- Place- Store location and layout
- Price – Pricing strategy
- Promotion – In-store promotion and Advertising
- Roles and responsibilities of retail store personnel – consumer handling

UNIT IV Visual Merchandising – its importance 10

- Schedules – Seasons, Promotions, special sales. Themes
- Type of displays – Window display, Interior displays -
- Elements of display – merchandise, forms, props, signage, lighting
- Common problems in display

RECOMMENDED READINGS

- Leslie David Burns, Nancy O. Bryant , 2011The Business of Fashion Fairchild Publications
- Elaine Stone, 1987,Fashion Buying, McGraw- Hill
- Mary Frances Drake, Janice Harrison Spooone, Herbert Greenwald, 1992 ,Retail Fashion Promotion and advertising Macmillan
- Michele M. Granger, Tina M. Sterling , 2011 ,Fashion Entrepreneurship Retail Business Planning, Fairchild Publications

**SEC 4 : APPAREL eTAIL
(CREDITS: THEORY:-2)**

Objectives

1. To provide an overview and insights in to the evolving business of apparel etailing
2. To create an awareness of the broad categories of etailing business models and the important factors governing the design of online apparel stores.
3. To provide an understanding of the relative strengths and weaknesses of apparel retail and etail operations and an appreciation of the role of multichannel retailing

THEORY

LECTURES 30

UNIT I Overview of Fashion etailing 5

- Uniqueness of apparel in etailing
- Types of fashion etail outlets

- Strengths & weaknesses of apparel retail & etail from vendor and consumer points of view

UNIT II Overview of Multichannel retailing **7**

- Organisational structure
- Advantages

UNIT III Basics of etail business **10**

- Broad categories of E-business models – brokerage model, advertising model, ediary model, merchant, manufacturer, affiliate, community, subscription model
- Products and managing inventory
- Marketing an e-business
- E-business customer service
- Steps in Setting up an ecommerce site

UNIT IV Effective online store design **8**

- Traits for effective sites
- Framework for website design
- Essentials of web content

RECOMMENDED READINGS

- Leslie David Burns, Nancy O. Bryant , 2011The Business of Fashion Fairchild Publications
- Lynda Gamans Poloian, 2009, Multichannel retailing, Fairchild Publications
- Elaine Stone, 1987,Fashion Buying, McGraw- Hill
- Mary Frances Drake, Janice Harrison Spoone, Herbert Greenwald, 1992 ,Retail Fashion Promotion and advertising Macmillan
- Michele M. Granger, Tina M. Sterling , 2011 ,Fashion Entrepreneurship Retail Business Planning, Fairchild Publications

**SEC 5 : DESIGN DEVELOPMENT PROJECT
(CREDITS: PRACTICAL :-2)**

Objectives : To gain work experience in design development process through work experience within the industries

PRACTICAL

Design Development in form of Portfolio-

- Design brief
- Design inspiration – Mood board/ theme board

- Sourcing of Fabrics
- Development of Design
- Feedback and improvement
- Exam as portfolio and viva –voce

RECOMMENDED READINGS

- Aspelund Karl ,2010, Design Process, Fairchild Publication
- Seivewright Simon 2012, Basics Fashion Design -Research and Design, Bloomsbury Publication India

GENERIC ELECTIVE COURSES

GE 1 : FASHION: DESIGN AND DEVELOPMENT (CREDITS : THEORY 4 , PRACTICAL 2)

THEORY

LECTURES: 60

Unit I Fashion study

12

- Timeline of clothing of draped style of early civilization up to stitched style of 21st century
- Indian costume- Vedic and Mughal

Unit II Adoption of fashion

5

- Consumer groups- fashion leaders, followers
- Adoption process- Trickle-down theory, bottom up theory & trickle across theory

Unit III Development of fashion details

12

- Necklines- high and low
- Collars – classification, stand and fall, shawl- flat & raised, shirt collar, peter-pan collar on deep open necklines
- Sleeves and cuffs- cap, leg-o-mutton, shirt maker and bishop, pet al & saddler
- Skirts- high and low waist, gathered, gored, pleated, flared with & without yokes
- Pockets- applied, in-seam & slashed
- Plackets – centralized, asymmetric and double breasted

Unit IV Fashion forecasting

10

- Forecasting background
- Forecasting industry
- Process: Colour, inspiration, graphics and labelling, fabrication and silhouette, details, mood boards

Unit V Designing a successful garment

15

3. Role of a designer
4. Facets of successful design, aesthetics
5. Organization of a line
6. Fabricating a line
7. Cost of a garment

Unit VI Fashion centres and designers of the world

10

- France, Italy, UK, Japan, NY
- India

PRACTICAL

1. Technical drawing of fashion details: skirts, bodices, sleeves, necklines, collars, accessories. **4**
2. Applied and in- seam pockets **2**
3. Style reading and Development of paper patterns of various collars and sleeves **4**
4. Design variations in bodice through dart manipulation **2**
5. Design variations in skirt on half scale templates **2**

RECOMMENDED READINGS

- Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York.
- Fringes, G.S. (1999), Fashion from Concept to Consumer, 6th edition, NJ, Prentice Hall.
- Jarnow, J. Dickerson Kitty G (1987), Inside the Fashion Business, New Jersey, Merrill, Prentice Hall.
- Mc. Kelvey, K., Muslow, J., Fashion Forecasting (2008) Wiley Blackwell
- Tate, S.L. and Edwards, M.S.(1982) The Complete Book of Fashion Design, New York, Harper & Row Publication.

GE: 2 FASHION ACCESSORIES (CREDITS : THEORY 4 , PRACTICAL 2)

THEORY

LECTURES 60

Unit I Role and Significance of Fashion Accessories 15

- Importance of fashion accessories in apparel industry
- History and overview of accessory design
- Role of an accessory designer
- Leading contemporary accessory designers and brands

Unit II Understanding categories, styles and production methods of fashion

Accessories 25

- Brief history, common styles, components, materials used and production methods of select accessories
 - Handbags
 - Footwear
 - Hats
- Common styles and production methods of other accessories – Jewellery, Belts, Gloves, Scarves
- Coordinating accessories and outfits

Unit III From Concept to Creation: Key Steps in Accessories Design **20**

- Creative Design Development of accessories
 - Inspiration and Research
 - Trend forecasting of fashion accessories
 - Design development
 - Developing a range
- Presentation techniques

PRACTICAL

1. Using Illustration, colouring and rendering techniques for designing fashion accessories – handbags, footwear, jewellery **4**
2. Designing and construction of a Tote Bag **3**
3. Restyling project - Restyling of plain accessories using creative techniques **3**
4. Final Project – Based on an inspiration, the students are required to design a collection of accessories **3**
5. Project report and Presentation **2**

RECOMMENDED READINGS

- Stephens Frings Gini, 2007, Fashion: From Concept to Consumer (9th Edition), Prentice Hall
- Genova Aneta 2011, Accessory Design, Fairchild Pubns; 1 edition
- Schaffer Jane, Saunders Sue 2012, Fashion Design Course: Accessories: Design Practice and Processes for Creating Hats, Bags, Shoes, and Other Fashion Accessories, Barron's Educational Series
- Lau John 2012, Basics Fashion Design 09: Designing Accessories: Exploring the design and construction of bags, shoes, hats and jewellery, A Publishing; 1 edition

GE 3: TEXTILES : CARE AND CONSERVATION
(CREDITS : THEORY 4 , PRACTICAL 2)

THEORY

LECTURES 60

Unit I Water

7

- Role of water in cleaning
- Hardness of Water

Unit II Materials and Practices in care

18

- Composition and Functions of Detergents
- Stiffening Agents and bleaching agents
- Special Fibre and fabric structures

- Dry cleaning

Unit III Cleaning Equipment **15**

- Industrial cleaning and finishing machines
- Laundromats, drying and Ironing equipment

Unit IV Conservation of Textiles in Museums **20**

- Current practices, ethics and materials used in conservation
- Factors affecting textile stability
- Handling
- Cleaning
- Display and Storage

PRACTICAL

1. Stain Removal of fabrics
2. Colour fastness of dyed cotton fabrics
3. Impact of softening agents on cotton
4. Impact of washability on shrinkage
5. Felting shrinkage
6. Restoration and stabilization of textiles
7. Handling of silk and wool

RECOMMENDED READINGS

- Agarwal, O.P., 1977, Care and Presentation of Museum projects – II, NRL
- Finch K. and Putnam G, 1985, The Care and Preservation of Textiles
- Landi, S. 1991, Textile Conservator's Manual, Routledge

**GE 4: APPRECIATION OF TEXTILE CRAFTS
(CREDITS : THEORY 4 , PRACTICAL 2)**

THEORY

LECTURES: 60

UNIT I Traditional needle craft techniques **15**

- Kashida
- Kasuti
- Kantha
- Chikankari
- Cutch work
- Phulkari

UNIT II Dyed, Painted and Printed Textiles **15**

- Kalamkari
- Bandhani
- Ikats
- Pichwais
- Ajrakh
- Bagru

UNIT III Woven Saris of India **17**

- Brocades
- Jamdani
- Baluchar
- Paithani
- Chanderi
- Kanjeevarams

UNIT IV Shawls and Carpets of various centres **8**

PRACTICAL

1. Bandhej & Laharia **5**

- Demonstration of techniques
- Handouts and related videos
- Development of Home textile products

2. Embroidery **5**

- Demonstration of traditional hand stitches
- Interaction with artisan
- Development of bags/pouches yokes/borders for a desired product

3. Printing **5**

- Demonstration of a block printing/mud resist printing
- Visit to craft centre/museum
- Development of stole/dupatta

RECOMMENDED READINGS

- Chattopadhaya, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi
- Das, Shukla, 1992, Fabric Art- Heritage of India, Abhinav Publications, N Delhi

PROPOSED SYLLABUS

B.A. (Prog) Development Communication and Extension

Choice Based Credit System

**From UGC
2015**

Preamble

The courses in Development Communication and Extension orient students to various dimensions of development and communication for social change. The curriculum provides strong theoretical foundations and experiential learning to meet the existing market demands for trained professionals in participatory development communication processes and programme management.

The courses offer focus on contemporary development concerns, advocacy and communication for sustainable social change with gender sensitivity. The other important areas of study are behaviour change communication, training and capacity building, media monitoring, audience segmentation and responses, new media technologies and monitoring and evaluation of national flagship programmes. The course orients and enhances the capacity of the students in participatory methodologies and innovative communication techniques are at the core of the curriculum.

Field experiences are an essential part of the teaching-learning process and help students to acquire appropriate skill sets. The course prepares students to take up positions in development agencies, media houses, corporates engaged in social responsibility initiatives, market research organisations, teaching and administrative positions in educational institutions. The curriculum encourages students to work as independent consultants and social entrepreneurs in the development sector.

B A (PROG) DEVELOPMENT COMMUNICATION & EXTENSION

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits
Discipline Specific Course (DSC)	1. Human Communication	4	2
	2. Communication Systems	4	2
	3. Extension for Development	4	2
	4. Programme Design and Evaluation	4	2
Discipline Specific Elective (DSE)	1. Communication for Development	4	2
	2. Gender and Society	4	2
Skill Enhancement Course (SEC)	1. Participatory Training and Development		2
	2. Behaviour Change Communication and Advocacy		2
	3. Advertising and Social Marketing		2
	4. Social Entrepreneurship		2
Generic Electives (GE)	1. Human Communication	4	2
	2. Communication for Development	4	2

**CHOICE BASED CREDIT SYSTEM IN
B.A. (PROG) DEVELOPMENT COMMUNICATION & EXTENSION**

SEMESTER	Discipline Specific Course (12)	ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE DSE (4)	GENERIC ELECTIVE (GE) (4)
I	English/ MIL-1	English/MIL Communication /Environmental Science			
	DSC-DCE -1A: Human Communication (Theory + Practical)				
	DSC-2A				
II	MIL/English-1	Environmental Science/ English/MIL Communication			
	DSC-DCE-1B: Communication Systems (Theory + Practical)				
	DSC-2B				
III	English/ MIL-2		SEC-1		
	DSC-DCE-1C: Extension for Development (Theory + Practical)				
	DSC-2C				
IV	MIL/English-2		SEC-2		
	DSC-DCE -1D: Programme Design & Evaluation (Theory + Practical)				
	DSC-2D				
V			SEC-3	DSE-1 A	GE-1
				DSE-2 A	
VI			SEC-4	DSE-1 B	GE-2
				DSE-2 B	

ELECTIVE: DISCIPLINE SPECIFIC DSE (Any 2) (1 in Sem V and 1 in Sem VI):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

DSE-DCE-1A: Communication for Development (Theory + Practical)

DSE-DCE -1B: Gender & Society (Theory + Practical)

SKILL ENHANCEMENT ELECTIVE COURSE (Any 4, 1 each in Sem III, IV, V and VI):
CREDITS – 2 (2 Period Theory or 4 Period Practical per Week)

SEC-1: Participatory Training and Development

SEC-2: Behaviour Change Communication and Advocacy

SEC-3: Advertising and Social Marketing

SEC-4: Social Entrepreneurship

ELECTIVE: GENERIC (GE) (Any 2, 1 each in Sem 5 and 6):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

GE 1: Human Communication

GE 2: Communication for Development

BA PROGRAMME (DEVELOPMENT COMMUNICATION AND EXTENSION)

DISCIPLINE SPECIFIC COURSE (DSC)

**DSC- DCE- 1 A: HUMAN COMMUNICATION
(CREDITS: THEORY-4, PRACTICAL-2)**

THEORY

LECTURES 60

Unit I: Communication: Basic Concepts

12 lectures

- Historical background, concept, nature, scope and functions of Communication
- Communication for social change
- Postulates/Principles of Communication
- Culture and communication- Signs, symbols and codes in communication

Unit II: Types of Communication

12 lectures

- Types of communication transactions
- Formal and informal communication
- Verbal and Non-verbal Communication

Unit III: Understanding Human Communication

12 lectures

- Elements of Communication and their characteristics
- Models of Communication
- Barriers to Communication

Unit IV: Effective Communication

24 lectures

Concept, nature and relevance to communication process:

- Empathy
- Persuasion
- Perception
- Listening
- Learning and Audio-Visual Aids- concept and classification

PRACTICAL

- Developing skills in planning and conducting small group communication.
- Review of media on selected issues
- Design and use of graphic media

RECOMMENDED READINGS

- Barker, L. (1990). "Communication", New Jersey: Prentice Hall, Inc; 171.
- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Patri and Patri (2002); Essentials of Communication. Greenspan Publications

DSC- DCE-2- A: COMMUNICATION SYSTEMS (CREDITS: THEORY-5, TUTORIAL-1)

THEORY

LECTURES 75

Unit I: Understanding self through communication

20 lectures

- Awareness of self in communication
- Intrapersonal Communication
- Self-concept and self esteem

Unit II: Interpersonal Communication

20 lectures

- Concept, types and functions of interpersonal communication
- Dyadic, small and large group communication
- Stages in human relationship development
- Small group communication: types and functions

Unit III: Organization, Public and Mass Communication

25 lectures

- Organizational communication: concept, types, functions and networks
- Public communication- concept and techniques
- Mass Communication- concept, significance, functions and elements
- Theories and models of mass communication
- Mass Media- characteristics and significance of print, electronic and web based media
- Intercultural communication- concept, stages and barriers

- Relationship between culture and communication

Unit IV: Media for Mass communication

10 lectures

- Print Media: types, nature, characteristics, reach access.
- Radio: types, nature, characteristics, reach, access.
- Television and cinema: types, nature, characteristics, reach, access.
- ICTs: types, characteristics, reach and access.

PRACTICAL

1. Know yourself exercises.
2. Studying group dynamics in organizations- formal and informal.
3. Audience analysis- readership, listenership and viewership studies
4. Content analysis of mass media

RECOMMENDED READINGS

- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Barker, Larry Lee. (1990) Communication. Eaglewood Cliffs, New Jersey: Prentice Hall.
- McQuail, D. (2000) Mass Communication Theories. London: Sage Publications
- Vivian, J. (1991) The Media of Mass Communication
- Stevenson, D. (2002) Understanding Media Studies: Social Theory & Mass Communication Sage Publications

DSC- DCE- 3 A: EXTENSION FOR DEVELOPMENT (CREDITS: THEORY-5, TUTORIAL- 1)

THEORY

LECTURES 75

Unit I: Extension: Basic concepts and principles

25 lectures

- Extension: concept, goals, philosophy and history
- Adult learning Components of Extension
- Principles of extension

- Relationship between communication and extension - role of extension in development

Unit II: Extension Approaches and Methods

25 lectures

- Stakeholders in development
- People's participation and social mobilization in development
- Leadership- concept, types, theories, styles, characteristics, functions; importance of local leadership
- Extension systems- types, advantages and disadvantages
- Diffusion of innovation and adoption
- Extension methods and approaches - classification, characteristics and selection

Unit III: Development Programmes

25 lectures

- Development issues and goals- national and international perspectives
- National Development Programmes – goals, strategies, structure and achievements
- Analysis of contemporary national development programmes- objectives, clients, salient features, outcomes and communication support.
- Behaviour Change Communication strategies in development programmes

PRACTICAL

1. Analysis of development programmes
2. Evaluate strategies used by development agencies for implementation of development programmes
3. Develop skills in planning and using individual and small group methods in extension

RECOMMENDED READINGS

- Mikkelsen, Britha, (2002), Methods for Development Work and Research. New Delhi: Sage Publications
- Dale R, (2004) Evaluating Development Programmes and Projects. New Delhi : Sage Publications

- Dahama, O.P. and Bhatnagar, O.P., (2003), Education and Communication for Development, New
- Delhi, Oxford and IBH Publishing Co. Pvt. Ltd. Kumar & Hansra, (1997) Extension Education for Human Resource Development. New Delhi: Concept Publishers.

**DSC - DCE-4 A: PROGRAMME DESIGN AND EVALUATION
(CREDITS: THEORY-4, PRACTICAL-2)**

THEORY

LECTURES 60

Unit I: Programme Planning and Management

15 lectures

- Concept, approaches and phases
- Factors influencing programme management
- Stakeholder participation in programme management
- Features of Management of Development programmes

Unit II: Programme Monitoring & Evaluation (M & E)

25 lectures

- Concept, approaches and components
- Programme goals, activities and indicators
- M&E frameworks and designs
- M&E tools and techniques
- Participatory monitoring and evaluation

Unit III: (M & E) of C4D programmes

20 lectures

- Trends in M & E of communication for development programmes
- Challenges, issues and strategies
- Approaches, methodologies and techniques
- Ethical issues in M&E

PRACTICAL

- Develop skills in developing M & E frameworks
- Learn the use of participatory techniques in monitoring and evaluation
- Design tools for monitoring and evaluation
- Case studies of monitoring and evaluation of development programmes

RECOMMENDED READINGS

- Mikkelsen, Britha, (2002), *Methods for Development Work and Research*. New Delhi: Sage Publications
- Dale R, (2004) *Evaluating Development Programmes and Projects*. New Delhi : Sage Publications
- Kumar & Hansra, (1997) *Extension Education for Human Resource Development*. New Delhi: Concept Publishers.

DISCIPLINE SPECIFIC ELECTIVE

DSE- DCE- 1 A: COMMUNICATION FOR DEVELOPMENT

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

Unit I Development Communication-concept and genesis

20 lectures

- Concept of development, characteristics of developing countries
- Measuring development- Indices of measuring development and classification of countries based on development indices
- Models of Development- Dominant Paradigm, Basic Needs Model, New Paradigm of development
- Development Communication- concept and genesis, characteristics, differences between communication and Development Communication
- Philosophy & Approaches to Development Communication

Unit II Paradigms of Development

20 lectures

- Press theories: Normative: Authoritarian, Libertarian, Social Responsibility, Democratic Participant theory; Sociological: Uses & Gratification, Agenda setting; Two-Step Flow; Psychological; Bullet Theory
- Success stories in Development Communication
- Innovations and trends in Development Communication

Unit III: Media and Development Communication

20 lectures

- Traditional Media: types, characteristics, role in development communication
- Development reporting- roles and responsibilities of a development reporter, ethics in reporting, specialized skills required and issues in development reporting
News reporting: definition of news, ingredients and qualities of news, news value, types of news reports, structure of news reports
- Radio news, features and commentaries. Radio and development communication.
- Television and cinema: role in development communication.
- ICTs: scope in development communication.

PRACTICAL

- Analysis of development indicators - national and international perspectives
- Critical analysis of selected development initiatives
- Analysis of media for development communication
- Designing media for development communication

RECOMMENDED READINGS

- Narula, Uma (1994) Development Communication, New Delhi, Hariand Publication
- Servaes, Jan (2008). Communication for Development and Social Change, New Delhi, Sage Publication
- Mefalopulos. P (2008) Development Communication Sourcebook- Broadening the boundaries of communication, The World Bank.

DSE- DCE- 1 B: GENDER AND SOCIETY (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

Unit I: Gender: Social construction

15 lectures

- Concept of gender
- Patriarchal social order and status of women
- Socio-cultural practices influencing women's status
- Shifts in Status of women- historical and contemporary perspectives
- Feminist theories and perspectives

Unit II: Understanding Gender differentials

15 lectures

- Life cycle approach to women's studies
- Status issues and challenges in context to
 - violence against women
 - women and health
 - women and education
 - women's work and economic participation
 - women and leadership

Unit III: Gender and Development

15 lectures

- Concept of Gender Development- indicators of human and Gender development

- Approaches to Women's Development
- Empowerment of women- concept and types
- National and International policies and agencies for women's empowerment

Unit IV: Gender and Advocacy

15 lectures

- Human Rights and Right to Development
- Women and Human Rights
- Laws for protection of women's rights
- Media and gender mainstreaming

PRACTICAL

- Analysis of gender differentials using development indicator
- Gender based analysis of media with special reference to portrayal of women.
- Case studies for programmes and campaign for women's development.

RECOMMENDED READINGS

- Bhasin, Kamla (2000). Understanding Gender. New Delhi. Kaali for Women.
- Goel, A, Kaur, A and Sultana, A (2006). Violence against women: Issues and Perspectives. New Delhi, Deep& Deep Publishers.
- Sohoni, K Neeraja, (1994), Status of Girls in Development Strategies, New Delhi, Har-Anand Publications.

SKILL ENHANCEMENT COURSE

SEC 1: PARTICIPATORY TRAINING AND DEVELOPMENT

(CREDITS-2 PRACTICAL-2)

PRACTICAL

I: Training: Concepts and types

- Training and learning, role of training and capacity building in HRD
- Concept and level of participation
- Types of training

II: Essentials for effective Training: Methods and Techniques

- Tools and techniques for training; participatory training tools
- Designing and evaluation of Training Programs for different stakeholders (Grassroot functionaries, managers, policy makers)

III: Application of Training Methods and Techniques

- Develop training modules for specific target groups and learning goals.
- Agencies involved in training and development- NGOs, GOs and Corporate

RECOMMENDED READINGS

- Lyton R and Pareek U. (1990). Training for Development. New Delhi, Vistaar Publications.
- Subedi, N R, (2008). Advocacy Strategies and Approaches: A Training of Trainers Manual. International
- PRIA (2014), Training of Trainers Manual, Society for Participatory Research in Asia.
- Agochiya D, (2009) Every trainers handbook, Second Edition, Sage Publication

SEC 2: BEHAVIOUR CHANGE COMMUNICATION AND ADVOCACY

(CREDITS: PRACTICAL-2)

PRACTICAL

I: Behaviour Change Communication: Concept & Approaches

- Concept and types and approaches of BCC
- Processes of Behaviour Change Communication
- Strategic issues and BCC (Health/ Environment/ Consumption)
- Analysis BCC campaigns for social mobilization and policy change
- BCC campaigns in core areas for stakeholders

II: Advocacy

- Meaning, purpose and types of Advocacy
- Tools, techniques and approaches of advocacy
- Elements of an advocacy strategy
- Advocacy Planning Cycle - planning advocacy campaigns for different
- Stakeholders
- Relationship between advocacy, programme communication and social mobilization

RECOMMENDED READINGS

- Subedi, N R, (2008). Advocacy Strategies and Approaches: A Training of Trainers Manual. International

SEC 3: ADVERTISING AND SOCIAL MARKETING

(CREDITS: PRACTICAL-2)

PRACTICAL

I: Advertising

- Concept, types appeals and role of advertisements
- Analysis of advertisements in media- print, audio and video
- Designing advertisements for media- print, audio and video
- Audience segmentation and its importance in advertising

- Laws, Standards & Regulations and Ethics

II: Social Marketing

- Concept of social marketing
- Social marketing and advertising
- Innovative strategies in Social Marketing

RECOMMENDED READINGS

- Aggarwal, B.V., Gupta, V.S. (2002) *Handbook of Journalism and Mass Communication*. Concept Publishing Company, New Delhi
- Kotler Philip, Roberto Eduardo L .(1989). *Social marketing: Strategies for Changing Public Behaviour*. Free Press , New York, 1989
- Kotler, Philip, Andreasen Alan (1987). *R Strategic Marketing for non-profit Organizations*. Englewood cliffs, New Jersey, Prentice Hall Inc.
- Jena, B., Pati R.(1986) *Health and family Welfare Services in India*. Ashish, New Delhi
- Maitra, T., (1985). *Public Services in India*. Mittal , New Delhi

SEC 4: SOCIAL ENTREPRENEURSHIP

(CREDITS: PRACTICAL-2)

PRACTICAL

I: Entrepreneurship Development

- Entrepreneurship- concept, definition, need and significance of entrepreneurship development in India, entrepreneurship growth process, barriers, entrepreneurship education model.
- Entrepreneur-their characteristics, types, gender issues, role demands
- Entrepreneurial Motivation and challenges
- Types of enterprises classification based on capital, product, location, ownership pattern and process

II: Understanding Social Entrepreneurship

- Social Entrepreneurship- concepts and approaches
- Comparison between business and social entrepreneurship
- Personality traits of social entrepreneur
- Innovations and social entrepreneurship
- Financing Social Enterprises
- Case studies

- Development of business model for a social enterprise

RECOMMENDED READINGS

- Akhouri, M.M.P. (1990) *Entrepreneurship for Women in India*. New Delhi: NIESBUD.
- Bedi, G. ; Shiva, V. (2002) *Sustainable Agriculture and Food security*. New Delhi: Sage Publications.
- Chakravarty, S. (2000) *Development Planning*. New Delhi: Oxford Publishers.
- Kundu, A.; Sharma, A.N. (2001) *Informal Sector in India-Perspectives and Policies*. New Delhi: Institute for Human Development.

GENERIC ELECTIVES (GE)

GE 1:HUMAN COMMUNICATION (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

Unit I: Communication: Basic Concepts

12 lectures

- Historical background, concept, nature, scope and functions of Communication
- Communication for social change
- Postulates/Principles of Communication
- Culture and communication- Signs, symbols and codes in communication

Unit II: Types of Communication

12 lectures

- Types of communication transactions
- Formal and informal communication
- Verbal and Non-verbal Communication

Unit III: Understanding Human Communication

12 lectures

- Elements of Communication and their characteristics
- Models of Communication
- Barriers to Communication

Unit IV: Effective Communication

24 lectures

Concept, nature and relevance to communication process:

- Empathy
- Persuasion
- Perception
- Listening
- Learning and Audio-Visual Aids- concept and classification

PRACTICAL

- Developing skills in planning and conducting small group communication.
- Review of media on selected issues
- Design and use of graphic media

RECOMMENDED READINGS

- Barker, L. (1990). "Communication", New Jersey: Prentice Hall, Inc; 171.
- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Patri and Patri (2002); Essentials of Communication. Greenspan Publications

**GE 2: COMMUNICATION FOR DEVELOPMENT
(CREDITS: THEORY-4, PRACTICAL-2)**

THEORY

LECTURES 60

Unit I Development Communication-concept and genesis

20 lectures

- Concept of development, characteristics of developing countries
- Measuring development- Indices of measuring development and classification of countries based on development indices
- Models of Development- Dominant Paradigm, Basic Needs Model, New Paradigm of development
- Development Communication- concept and genesis, characteristics, differences between communication and Development Communication
- Philosophy & Approaches to Development Communication

Unit II Paradigms of Development

20 lectures

- Press theories: Normative: Authoritarian, Libertarian, Social Responsibility, Democratic Participant theory; Sociological: Uses & Gratification, Agenda setting; Two-Step Flow; Psychological; Bullet Theory
- Success stories in Development Communication
- Innovations and trends in Development Communication

Unit III: Media and Development Communication

20 lectures

- Traditional Media: types, characteristics, role in development communication
- Development reporting- roles and responsibilities of a development reporter, ethics in reporting, specialized skills required and issues in development reporting
News reporting: definition of news, ingredients and qualities of news, news value, types of news reports, structure of news reports
- Radio news, features and commentaries. Radio and development communication.
- Television and cinema: role in development communication.
- ICTs: scope in development communication.

PRACTICAL

- Analysis of development indicators - national and international perspectives
- Critical analysis of selected development initiatives
- Analysis of media for development communication
- Designing media for development communication

RECOMMENDED READINGS

- Narula, Uma (1994) Development Communication, New Delhi, Hariand Publication
- Servaes, Jan (2008). Communication for Development and Social Change, New Delhi, Sage Publication
- Mefalopulos, P.(2008) Development Communication Sourcebook- Broadening the boundaries of communication, The World Bank.

PROPOSED SYLLABUS

B.A. (Prog) Human Development and Family Empowerment

Choice Based Credit System

From UGC

2015

PREAMBLE

Home Science is an interdisciplinary field of studies comprising of Food and Nutrition Science, Clothing and Textile Science, Human Resource Management, Human Development and Extension and Communication.

Each of these areas is multi - disciplinary in nature dealing with the 'Art and Science of Living'. The individual, the family and the community are the foci of Home Science.

The undergraduate programme in B.A with Human Development and Family Empowerment (HDFE) has been contextualized and embedded in the broader perspective of life span development. The increasing thrust on development programmes and legislations for women and children generates empowering awareness and prepare the students on 'quality intervention programmes'.

The course also emphasizes the integration and application of knowledge on Early Childhood Care and Education (ECCE), to provide stimulating environment to young children, and also to provide practical experiences of working with children which will enable students to develop necessary skills to work effectively with infants and preschoolers in various settings.

The course offers an interesting assortment of skill based courses and generic courses for students of other disciplines to allow for effective transmission of relevant experiences of daily living.

B A (PROG) HUMAN DEVELOPMENT AND FAMILY EMPOWERMENT

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits
Discipline Specific Course (DSC)	1. Principles of Child Development	5	1
	2. Introduction to Human Development	4	2
	3. Empowerment of Women & Children	4	2
	4. Principles & Perspectives on Early Childhood Care & Education	4	2
Discipline Specific Elective (DSE)	1. Child Rights & Gender Empowerment	4	2
	2. Children with Special Needs	4	2
	3. Parenting	5	1
	4. Childhood in India	5	1
Skill Enhancement Course (SEC)	1. Life Skills Education	2	
	2. Introduction to Guidance & Counselling	2	
	3. Parent and Community Education	2	
	4. Adolescent Development & Challenges	2	
Generic Electives (GE)	1. Care & Well-being in Human Development	5	1
	2. Child Rights & Social Action	5	1

CHOICE BASED CREDIT SYSTEM IN

B.A (PROG) HUMAN DEVELOPMENT AND FAMILY EMPOWERMENT

SEME STER	DISCIPLINE SPECIFIC COURSE (12)	ABILITY ENHANCEMEN T COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMEN T COURSES (SEC) (4)	DISCIPLINE SPECIFIC ELECTIVE (DSE) (2)	GENERIC ELECTIVE (GE) (2)
I	English/ MIL - 1 DSE-HDFE- 1A Principles of Child Development (Theory + Tutorial) DSC - 2A	(English/MIL/C ommunication) / Environmental Science			
II	MIL / English - 1 DSE-HDFE- 1B Introduction to Human Development (Theory + Practical) DSC – 2 B	(English/MIL/C ommunication) / Environmental Science			
III	English / MIL – 2 DSE-HDFE- 1C Empowerment of Women and Children (Theory + Practical) DSC – 2C		SEC - 1		
IV	MIL/ English - 2 DSE-HDFE- 1D Principles and Perspectives on Early Childhood Care and Education (Theory + Practical) DSC – 2 D		SEC - 2		
V	-		SEC - 3	DSE – 1 (Any one out of four)	GE - 1
VI	-		SEC - 4	DSE – 2 (Any one out of four)	GE - 2

DISCIPLINE SPECIFIC ELECTIVE (DSE): (4) – (Any one out of four in sem V and one in sem VI):

1. DSE-HDFE-01- Child Rights and Gender Empowerment (Theory and Practical)
2. DSE-HDFE-02- Children with Special Needs (Theory and Practical)
3. DSE-HDFE-03- Parenting (Theory and Tutorial)
4. DSE-HDFE-04- Childhood in India (Theory and Tutorial)

SKILL ENHANCEMENT COURSES (SEC): (4), (One each in Sem III, IV, V, VI):

1. SEC- 01 - Life Skills Education (Theory)
2. SEC- 02 - Introduction to Guidance and Counseling (Theory)
3. SEC- 03 - Parent and Community Education (Theory)
4. SEC- 04 - Adolescent Development and Challenges (Theory)

GENERIC ELECTIVE (GE): (2) (One each in semester V and semester VI):

1. GE- 01- Care and Well-being in Human Development (Theory + Tutorial)
2. GE- 02- Child Rights and Social Action (Theory + Tutorial)

DISCIPLINE SPECIFIC COURSES

DSC – HDFE- 1A PRINCIPLES OF CHILD DEVELOPMENT

6 Credits (Theory – 5 credits + Tutorial – 1 credit)

Objectives:

- To familiarize students with the concept of child development as a field of study
- To create an understanding of the various stages of child development beginning with prenatal, neonate and infant development.

THEORY

Unit I : Introduction to Child Development

- Brief history
- Scope
- Theoretical foundations

Unit II: Methods of Child Study

- Observation
- Interview
- Questionnaire
- Case study

Unit III

- Principles of Development
- Developmental Norms

Unit IV: Pre-natal Development & infant development

- Factors affecting Pre natal development
- Stages of Pre natal development
- Newborn- Characteristics
- Reflexes
- Infant developmental milestones

RECOMMENDED READINGS:

Bannerjee, B.G. (1987). Child Development and Socialization. Delhi: Deep Publications.

Hetherington, E.M. and Parke, R. D. (1993). Child Psychology: A contemporary viewpoint. Toronto: McGraw Hill.

Kanhai, P.(2002). Encyclopedia of Child Development. New Delhi: Commonwealth Publishers.

Verma, P. & Shirivastava, B. N. (1996). Balmanovigyan Bal Vikas.

Santrock, J.W. (1996). Child Development. U.S.A: Brown and Benchmark Publishers.

Berk, L.E. (2001). Child Development (3rd Ed). New Delhi: Prentice Hall.

Sharma, R.N. and Sharma, R. (2002). Child Psychology, New Delhi: Atlantic Publishers.

Agarwal, J.C. (2003). Child Development and Process of Learning. New Delhi: Shipra Publication.

DSC-HDFE- 1B INTRODUCTION TO HUMAN DEVELOPMENT

6 Credits (Theory – 4 + Practical – 2)

OBJECTIVES:

To enable the students

- To understand the field of Human Development and significance of Human Development.
- To understand childhood years, adolescence and adulthood

Unit- I Importance of Human Development

- Meaning, Definition, scope of Human Development,
- Growth and development and Principles of development
- stages, Developmental tasks across life span

Unit II Childhood- Early & middle

- Developmental milestones, physical, social, emotional, cognitive and language development.

Unit- III Adolescence

- Definition, characteristics, developmental milestones, Physical changes; male and female body clock, sequence of change; social, emotional, cognitive and moral development.

Unit- IV Adulthood

- Meaning, characteristics , physical, social, cognitive and emotional development during early, middle and late adulthood.

PRACTICALS

- Methods and techniques of child study
Interviews – 2
Observations - 2
- Case profile of a senior citizen

RECOMMENDED READINGS:

Berk, L.E., (2007), Development through the Life Span, Pearson Education,

New

Delhi.

Devadas, R.P; Jaya, N(2002), A Textbook on Child Development,

Macmillan India

Limited, Madras.

Digumarti Bhaskara Rao (1997), Care of the Child, vol and II, Discovery

Publication

House, New Delhi.

Jegannath Mohanty and Bhagyadhar Mohanty (1994), Early Childhood Care

and

Education (ECCE), Deep and Deep pub,New Delhi.

Hurlock, E.B., (2004), Child Growth and Development, Tata Mc.Graw Hill

Company

Papalia, D.E., and Olds, S.W., (2005), Human Development, Tata Mc.Graw

Hill

Company,New York.

Rice Philip. K (2001) Human development, Prentice Hall, New Jersey

Santrock, J.W., (2006), Child Development, Tata Mc.Graw Hill Publishing Company,
New Delhi

Sapra, R. (2007). Integrated Approach to Human Development.
Vishwabharati. New Delhi.

Sapra, R. (2008). Manav Vikas: Ek Parichay. Vishwabharati. New Delhi.

Suriakanthi, A., (2005), Child Development, Kavitha Publications,
Gandhigram, Tamil Nadu.

DSC-HDFE-1C EMPOWERMENT OF WOMEN AND CHILDREN

6 Credits (Theory – 4 + Practical – 2)

OBJECTIVES: To enable students to:

- Develop an understanding of women related issues in India
- To create awareness among students about the Government programmes, policies and legal provisions as well as Non-governmental efforts made to improve the status of Indian women
- Provide significant information related to maternal health and education.

THEORY

UNIT I – Status of Women

- Demographic profile of women related statistics
- Women empowerment – concept, need
- Issues related to women – social issues, programs for girl child

UNIT II – Programs for women

- IWEP
- SEWA
- ICDS

UNIT III – Maternal Health Education and Child Development

- Importance of maternal health and impact on child's development
- Health and nutrition education
- Importance of maternal education
- MMR, School drop-out rate, causes, prevention and steps taken

UNIT IV – Women and work

- Women in organized and unorganized sectors
- Problems faced by working women

PRACTICALS

- Visit to any two organizations working for children
- Visit to any one organization working for women
- Case profile of a working women

RECOMMENDED READINGS:

Self Employed Women's Association (1991)
Siddiqi, F.E. & Ranganathan, S. (2001). Handbook on Women and Human Rights: A guide for Social Activists. (Part-I). New Delhi: Kanishka Publishers.
Goel, S.L. (2005). Population Policy and Family Welfare. New Delhi: Deep and Deep Publications.

DSC-HDFE-1D PRINCIPLES AND PERSPECTIVES ON EARLY CHILDHOOD CARE AND EDUCATION

6 Credits (Theory – 4 credits + Practical – 2 credit)

OBJECTIVES: The course will enable students to:

- Understand the need and significance of early childhood care and education
- Understand the policy perspectives on ECCE in India and world
- Develop knowledge and skills for research and evaluation in ECCE

THEORY

UNIT I – Objectives, significance and developmental contexts:

- Introduction, definition, objectives, need, coverage, significance of ECCE
- Philosophers in the field of ECCE (Indian and western thinkers)
- Developmental needs of children (0-8 years)-physical, cognitive, language, socio-emotional domains. Needs based on variations of socio-cultural contexts. Home to school transition issues and concerns.

Unit 2 - Policies and Changing Perspectives in early childhood care and education

- Policies, legislation and Programmes related to ECCE in Indian context would be covered such as National Policy on Education –(1986), Right to Education Act (2009), ECCE policy (2013) and so on.
- ECCE in Global Perspective: United Nations Convention on Rights of the Child (UNCRC, 1989) and other relevant policies or programmes.

Unit 3 –Approaches and Pedagogy of ECCE

- Understanding different approaches to learning (activity based, play-way, child-centered, theme-based etc)
- Different types of preschool curriculum (Example- Montessori, Kindergarten, Balwadi, Anganwadi etc.)
- Transaction methods-meaning, rationale, selection criteria
- Preparation & use of learning and play materials – principles and characteristics. Use of local specific community resources etc.

Unit 4–Organizational Management and Community Involvement

- Evaluation of ECCE programmes- infrastructure, safety, ECCE professionals- competence, skill and methodology. Maintenance of records.

- Working with parents and community for continuity of home school interactions.

PRACTICALS

1. Case study of a Government and private pre-school Centre and report writing
2. Designing low cost and environment friendly appropriate learning materials for:
 - Story telling
 - Readiness
 - Art and craft
 - Rhyme booklets
 - Language and Literacy
 - Numeracy Skills
3. Theme based weekly programme- plan a curriculum and execute for preschool school children.
4. Organize a workshop/exhibition for involving parents of pre-school children

RECOMMENDED READINGS:

Aggarwal, J.C. and Gupta, S. (2007). Early Childhood Care and Education (First Ed.). Shipra Publications, New Delhi.

Government of India (1986). National Policy on Education, Department of Education, New Delhi.

Mishra, R.C. (2005). Early Childhood Education Today, Prentice Hall Publisher

NCERT (2005). National Curriculum Framework, New Delhi.

National early childhood care and education (ECCE) policy (Draft), Ministry of Women and Child Development, Government of India.

NCTE (2005). Report on ECCE Teacher Education: Curriculum Framework And Syllabus Outline, New Delhi

NIPCCD (2002). Children in Difficult Circumstances: Summaries of Research, Resource Centre on Children, New Delhi.

Pugh, G. (1996). Contemporary Issues in Early Years: Working Collaboratively for Children (2nd Ed.) National Children's Bureau, London.

Seefeldt, Carol (1990). Continuing Issues in Early Childhood Education, Merrill Publishing Company, Columbus, Ohio.

Swaminathan, M. and Daniel, P. (2000). Activity-based Developmentally

Appropriate Curriculum for Young Children, Indian Association for Pre-school Education, Chennai.

Swaminathan, Mina (1998). The First Five Years: A Critical Perspective on

Early Childhood Care and Education in India.

UNESCO (2007). Strong Foundations: Early Childhood Care and Education, Paris, UNESCO.

UNICEF and MHRD (2001). Early Childhood Care for Survival, Growth and Development, New Delhi.

World Bank (2004). Reaching out to the Child: An Integrated Approach to

Child Development, New Delhi, Oxford University Press.

DISCIPLINE SPECIFIC ELECTIVE

DSE- HDFE-01 CHILD RIGHTS AND GENDER EMPOWERMENT (6 Credits: Theory-4, Practical-2)

THEORY

Unit 1 Understanding Child Rights

- Meaning of Child Rights and Convention on Child Rights

- Knowing disadvantage and exclusion in relation to children
- Demographic profile of the child in India
- The role of state, family and children in promotion and protection of child rights
-

Unit 2 Children in Difficult circumstances

- Street children, working children and homeless children
- Child Abuse
- Child Trafficking
- Children in conflict with law
- Laws and policies

Unit 3 Conceptualizing Gender

- Defining terms- sex, gender, masculinity, femininity
- Socialisation for gender- gender roles, gender stereotypes
- Patriarchy and social institutions
- Perspectives on feminism

Unit 4 Gender Empowerment

- Demographic profile
- Issues and concerns related to girls and women in India
- Media and gender
- Laws, policies and programmes for girls and women in India

PRACTICAL

1. Profile of a child in difficult circumstances
2. Poster making on gender issues
3. Exploring the concept of child rights and gender through audio-visual sources and workshops
4. Programme planning for child rights and gender

RECOMMENDED READINGS:

Agarwal, A. & Rao, B.V. (2007). Education of Disabled Children. New Delhi: Eastern Book Corporation.

Agnes, F. (1999). Law and Gender Inequality: The politics of Women's Rights in India. Oxford University Press.

Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press.

Kishwar, M. (1999). Off the Beaten Track: Rethinking Gender Justice for Indian Women. New Delhi: Oxford University Press.

Satyarthi, K. and Zutshi, B. (Ed) (2006). Globalization, Development and Child Rights. New Delhi: Shipra Publication.

Saikia, N. (2008). Indian women: A socio-legal perspective. New Delhi: Serials Publication.

DSE-HDFE- 02 CHILDREN WITH SPECIAL NEEDS (6 Credits: Theory-4, Practical-2)

OBJECTIVES

To enable the students to:

- Sensitize to the needs and challenges of children with special needs.
- Understand the importance of identification, screening and assessment
- Appreciate the diverse educational arrangements as special, integrated and inclusive education

THEORY

Unit 1

Introduction to Children with Special Needs – Meaning, definition, classification, attitudes and challenges

Unit II

Early identification, screening, assessment and intervention of disabilities (sensory, physical, intellectual, social and emotional). Importance of functional skills – daily living, self -help, and social skills.

Unit III

Addressing Educational Needs-Concept of special, integrated, inclusive and home based education

Unit IV

Provisions and services- Rights and Laws for children with special needs. Role of family, community support for children with special needs

PRACTICAL

- Case profile/ Visit of an NGO working for children with special needs
- Interview of a child with special needs
- Compilation of newspaper clippings of children with special needs
- Review of a movie on the related social issues.

RECOMMENDED READINGS:

Mangal, S.K. (2007). Educating exceptional children: An introduction to special education. Prentice-Hall of India.

Mukhopadhyay, S. and Mani, M.N.G. (2000) Education for All : Year 2000 Assessment and MHRD.

National Human Rights Commission (2005). Disability Manual. New Delhi: NHRC.
Reddy G.L.& Raman, R (2000) Education of children with Special needs. Discovery P
New Delhi.

Sharma, N. (2006) Children with Disability as a Source of Well Being, in the book
Child Development: Issues and Concerns for the Well being Of the Child, New Delhi

Singh,A.N. (2001) Enabling the differently abled, Shipra Publishers, New Delhi.

Smith D.D. (2003) Introduction to special Education : Teaching in an age of
opportunity, Allyn and Bacon.

Venkataiah S. (Ed.) (2001) Special Education, Anmol Publications Pvt.Ltd, New
Delhi.

Vijay Pratap(2004) Educating Mentally Handicapped Children, Swarup and sons, New

(6 Credits: Theory-5 + Tutorial - 1)

OBJECTIVES:

The Course aims to provide:

- A general understanding on parenting
- The behavioral aspects of parenting and adolescents
- The role of parenting

THEORY

UNIT I: Parenting: An Overview

- Family as a System
- Styles of Parenting: Diana Baumrind
- Gender, Parenting and Co – parenting in Indian context
- Communicating Love

UNIT II: Concept of family and role of parents

- Indian Society and the Family System
- Functions of the family
- Role of Parents and other Partners in Parenting
- Parenting and its influence on children: role of birth order, siblings, socio-economic status, cultural, regional background, type of family, lifestyle, values and education on parenting practices

UNIT III : Parenting from infancy through Adolescence: Features and challenges (with emphasis on Indian family set up)

- Parenting an Infant
- Parenting a toddler
- Parenting a preschooler
- Parenting in middle childhood years
- Parenting in adolescence

UNIT IV: Parents and within family interactions

- Parent-child interactions in Indian family context
- Parents and External influence : Peers, school and electronic media
- Sharing of responsibilities, social emotional support, household tasks
- Interaction with grandparents

RECOMMENDED READINGS:

- Gupta Sangeetha (2006). *The Joy of Parenting*, Unicorn Books, New Delhi
- Holden W George (2010). *Parenting - A Dynamic Perspective*, Sage Publications, New Delhi.
- Santrock W. John,(2007). *Adolescence*, Tata McGraw- Hill, New Delhi
- Anandalakshmy, S. (2010). *Through the lens of culture: Centuries of childhood and education in India*. Monographs of Bala Mandir Research Foundation. Chennai: Bala Mandir Research Foundation.
- Anandalakshmy, S. (1981). Socialisation for competence. Unpublished MS, ICSSR, New Delhi.
- Ariès, P. (1962). *Centuries of childhood: A social history of family life*. Trans. Robert Baldick. New York: Vintage.
- Babu, N., & Misra, S. (2000). Development of mental state verbs among Oriya speaking children: Pragmatics and semantics. *Psychological Studies*, 45(1&2), 24 - 29.
- Berry, J. W; Dasen, Pierre R., & Saraswathi, T. S. (Editors) (1997), [*Handbook of Cross-cultural Psychology*](#), Vol 2: Basic processes and human development (2nd ed.), Boston: Allyn and Bacon.
- Blanton Brad,(2005). *Radical Parenting*, Magna Publishing Co.Ltd,Mumbai
- Chapman Garry, (1995). *Five Love Languages*, Northfield Publishing, Chicago
- Chaudhary, N. (2012). Negotiating with autonomy and relatedness: Dialogical processes in everyday lives of Indians. In: H. J. M. Hermans, & T. Gieser. *Handbook of Dialogical Self Theory*. (pp. 169-184). Cambridge, UK: Cambridge University Press.
- Chaudhary, N. (2010). Book review, Handbook of Indian Psychology by K. R. Rao, A. C. Paranjpe & A. K. Dalal (Eds. 2008). *Journal of Cross-Cultural Psychology*, 41(2), 284 – 292.
- Chaudhary, N. (2008). Methods for a cultural science. In, S. Anandalakshmy, N. Chaudhary, & N. Sharma, (Eds.). *Researching families and children: Culturally appropriate methods*. (pp. 29 - 52). New Delhi: Sage.
- Chaudhary, N. (2004). *Listening to culture: Constructing reality from everyday talk*. New Delhi: Sage
- Chaudhary, N., & Bhargava, P. (2006). Mamta: The transformation of meaning in everyday life. *Contributions to Indian Sociology*, 40(3), 343 – 373.

Chaudhary, S., & Mehta. B. (2004). Adolescents and gender equality: A pedagogic concern. *Perspectives in Education*, 20(1): 28 – 49.

Datar, C. (1995). Democratising the family. *Indian Journal of Social Work*. LV(1): 211 – 224.

Chowdhury, P. (1994). *The veiled women: Shifting gender equations in rural Haryana*. New Delhi: Oxford University Press.

Cole, M. (2005a). Cross-cultural and historical perspectives on the developmental consequences of education. *Human Development*, 48(2), 195 – 216.

Deb Sibnath and Chatterjee Pooja, (2008). *Styles of Parenting Adolescents – The Indian Scenario*, Akansha Publishing House, New Delhi

Degangi A Georgia and Kendall Anne,(2008),*Effective Parenting for the Hard to Manage Child*, Taylor and Francis Group, New York

Gottlieb, A. (2009). Who Minds the Baby? Beng Perspectives on Mothers, Neighbors, and Strangers as Caretakers. In, G. Bentley and R. Mace (Eds.), *Substitute Parents: Alloparenting in Human Societies*. (Pp 115 – 138). Oxford: Bergahn (Biosocial Society Symposium Series).

Gupte Suraj,(2007). *Speaking of Child Care*, Sterling Paper Backs, New Delhi
Pickering Lucienne,(2000),*Parents Listen, Better Yourself Books*, Mumbai

Hurlock B. Elizabeth, (2007). *Developmental Psychology: A Life Span Approach*, (5th Edn.), Tata Mc-Graw Hill Publishing Company Ltd., New Delhi.

Nair V. R. and Yamuna. S, (2011). *Parenting of Adolescents: Facilitators Manual for Capacity Building of Parents*, Rajiv Gandhi National Institute of Youth Development, TamilNadu.

Sapra, R. (Ed.), (2010) *Child Development: Issues and Concerns for the well-being of the child*. Vishwabharati, New Delhi

Websites:

1. [www.http://.parentingbytrialanderror.com](http://.parentingbytrialanderror.com)
2. [www.http://.goodparenting.com](http://.goodparenting.com)
3. [www.http://.parentingwebsites.org](http://.parentingwebsites.org)

DSE-HDFE- 04 CHILDHOOD IN INDIA

(6 Credits: Theory-5 +Tutorial- 1)

THEORY

Unit I : Introduction to childhood in India

- Children in India: An overview
- Social construction of childhood and family
- Folk theories about childhood and family
- Childhood in mythology, stories and films

Unit II : Multiple contexts of childhood in India

- Childhood in families
- Growing up without the family
- Childhood in schools
- Children in extra- familial settings
- Belonging to a minority community

Unit III : Psycho- social dimensions of childhood

- Growing up in tribal family
- Childhood in selected family occupations: artists, farmers, weavers
- Growing up in rural setting
- Childhood in urban India
- Being a girl in India

Unit IV : Contemporary issues of childhood in India

- Language, religion and culture
- Poverty and disadvantage
- Caste and childhood
- Children on streets

RECOMMENDED READINGS

Behera, D. K. (Ed.) (2007) *Childhood in South Asia* : New Delhi. Pearson- Longman

Krishnan, L. (1998). *Child rearing: An Indian perspective*. In, A. K. Srivastava (Ed.), *Child Development: An Indian perspective*. Pp. 25-55. New Delhi: National Council for Education Research and Training.

Sharma, D. (2003). Infancy and childhood in India. In, D. Sharma (Ed.), Childhood, family and sociocultural changes in India (13-47). New Delhi: Oxford.

Sapra, R. (Ed.), (2010) Child Development: Issues and Concerns for the well-being of the child. Vishwabharati, New Delhi

SKILL BASED COURSES

SEC- 01 LIFE SKILLS EDUCATION (Credits: 2 Theory)

OBJECTIVES: To enable students to:

- Understand and enhance life skills
- Develop knowledge, understanding and skills in the management of issues related to personal growth and development
- Gain knowledge and understanding in order to make informed health and lifestyle decisions
- Develop skills, and responsible values and attitudes, that enhance the quality of interpersonal relationships

THEORY

UNIT - I

- Life skills-meaning, definition, importance, WHO life skills
- Life skills education-meaning, definition importance and goals

UNIT - II

- **Three basic categories of life skills -**
 - Social or interpersonal skills (Communication Skills, Assertiveness Skills, Cooperation Skills, Empathy)
 - Cognitive or thinking skills (Problem Solving, Critical Thinking , Creative Thinking, Decision Making, Self Awareness)
 - Emotional skills (Managing Stress, Managing Emotions, Resistingpeer pressure)
- **Communication skills-**
 - Meaning and definition
 - Types and levels of communication
 - Barriers to communication
 - Ways to improve interpersonal communication and public speaking

UNIT - III

Conflict management-

Understanding conflict in relationships, causes of conflict and steps for managing and resolving conflict, the five styles of conflict resolution and healthy ways of avoiding conflict in relationships.

UNIT - IV

Career guidance:

Need and Importance of Career Guidance, Exploring career options, Deciding a career, Career Guidance Centre, Resume Writing, Job Search Method and Interview Facing

RECOMMENDED READINGS:

Berk, L.E., (2007), Development through the Life Span, Pearson Education, New Delhi.

Devadas, R.P; Jaya, N(2002), A Textbook on Child Development, Macmillan India Limited, Madras.

DigumartiBhaskara Rao (1997), Care of the Child, vol and II, Discovery Publication House, New Delhi.

JegannathMohanty and BhagyadharMohanty (1994), Early Childhood Care and Education (ECCE), Deep and Deep pub,New Delhi.

Hurlock, E.B., (2004), Child Growth and Development, Tata Mc.Graw Hill Company

Papalia, D.E., and Olds, S.W., (2005), Human Development, Tata Mc.Graw Hill Company,New York.

Rice Philip. K (2001) Human development, Prentice Hall, New Jersey

Santrock, J.W., (2006), Child Development, Tata Mc.Graw Hill Publishing Company, New Delhi

Suriakanthi, A., (2005), Child Development, Kavitha Publications, Gandhigram, Tamil Nadu.

http://www.cbseacademic.in/web_material/Lifeskills/1_Life%20Skills%20Class%20VI.pdf

Sapra, R. (Ed.), (2010) Child Development: Issues and Concerns for the well-being of the child. Vishwabharati, New Delhi

SEC- 02 INTRODUCTION TO GUIDANCE AND COUNSELLING

(CREDITS: 2 Theory)

OBJECTIVES: The paper will enable the student to:

- Develop an understanding of basic meaning and types of guidance
- Develop an understanding of basic meaning and types of counseling
- Get acquainted with process and techniques of counseling
- Analyze the relationship between guidance and counseling

THEORY

UNIT-I: Guidance

- Need for Guidance, basic principles of guidance,
- Purpose of guidance: self-understanding, self-discovery, self-reliance, self-direction and self-actualization
- Common do's and don'ts in dealing with children

UNIT-II : Counseling

- Meaning, Principles and need for counseling
- Counseling process

UNIT-III: Types of Counseling

- Individual and Group counseling,
- Parental counseling,
- Counseling for children.
- Role, qualities and skills of a counselor
- Professional ethics

UNIT-IV

- Relationship between counseling, guidance and therapy. Types of therapy– client centered therapy, rational emotive therapy, behavior therapy, Gestalt therapy and psychoanalytical therapy

RECOMMENDED READINGS:

Bhatnagar, Asha and Gupta, Nirmala (Eds) (1999). Guidance and Counseling,

Vol. I: A Theoretical Perspective, New Delhi: Vikas.

Burnard, P (1999), Counseling skills training, New Delhi., Viva books company, New Delhi

Gupta. S.K, Guidance and Counseling in Indian Education, Mittal Publication Pvt. Ltd. Delhi

Rao, S.N, Counseling and Guidance, Tata McGraw Hill, Delhi

Patterson, H.C (2000), Theories of counseling and psychotherapy. New York. Harper

Bhatnagar, Asha and Gupta, Nirmala (Eds) (1999). Guidance and Counseling, Vol. I: A Theoretical Perspective, New Delhi: Vikas.

Cormier, L. & Hackney, H. (1987). The Professional Counsellor. Englewood Cliffs, New Jersey: Prentice Hall.

Corey, G. (1986). Theory and Practice of Counseling and Psychotherapy, 3rd Ed. Belmont: Calif-Brooks Cole.

Dave Indu (1984). The Basic Essentials of Counselling. New Delhi: Sterling Pvt. Ltd.

Gazda George R.M.(1989). Group Counselling: A Development Approach. London: Allyn and Bacon.

Gibson, R.L. & Mitchell, M.H. (1986). Introduction to Guidance. New York: McMillan.

Gladding, Samuel, T. (1996). Counselling: A Comprehensive Profession. New Delhi: Prentice Hall Inc of India Pvt. Ltd.

Nugent, Frank A. (1990). An Introduction to the Profession of Counselling. Columbus: Merrill publishing Co.

Rao, S.N. (1981). Counselling Psychology. New Delhi: Tata McGraw Hill.

Saraswat, R.K. & Gaur, J.S.(1994). Manual for Guidance Counselors. New Delhill NCERT.

SEC- 03 PARENT AND COMMUNITY EDUCATION (CREDITS: 2 Theory)

OBJECTIVES: To enable the students to:

- Understand the need and importance of parent education
- Get acquainted to the concept of community education
- Understand the techniques of imparting parent education programme.

Unit-I

Parent education –Need, aspects, types of parent education.

Parents as stake holders, planners, advisers, volunteers, and resource persons.

Unit-II

Community education – Fundamental principles of community. Community education with reference to education , health, rights of children, child rearing and socialization in various socio-cultural settings.

Unit-III

Techniques of Parent and community Education- Informal meeting, group and individual meetings, Use of audio visual aids.

Organizing parent and community programmes – school, community centers, recreation centers, youth clubs and other NGO's.

Unit-IV

Role of professional - contribution of professionals in parent and community education.

Training programmes for young parents.

Evaluation of parent and community education programmes

RECOMMENDED READINGS:

Child Welfare Information Gateway (2013) Parent education to strengthen families and reduce the risk of maltreatment. Washington, DC: U.S. Department of Health and Human Services, Children Bureau

Elias, M., Clabby, J. & Friedlander, S. (2000). Emotionally intelligent parenting. Crown Publishing.

Hildebrand, V. (2000). Parenting: Rewards and responsibilities. New York, NY: Glencoe McGraw-Hill.

Reppucci, N.D., Britner, P.A., Woolard, J.L. (1997) Preventing child abuse and neglect through parent education. Baltimore: Paul Brooks Publishing Company.

Simpson, A. R. (1997). The role of the mass media in parenting education. Boston: Harvard, Center for Health Communication.

Sapra, R. (Ed.), (2010) Child Development: Issues and Concerns for the well-being of the child. Vishwabharati, New Delhi.

SEC- 04 ADOLESCENT DEVELOPMENT AND CHALLENGES (CREDITS: 2 Theory)

Objectives:

To acquaint the students regarding the inherent challenges and contemporary issues in adolescent development.

THEORY**UNIT I**

Adolescence – definition, importance of the stage, theoretical perspective on adolescence, interpersonal relationships and socio- cultural attitudes of adolescents, maturation and learning.

UNIT II

Consequences of puberty changes, sexual development, early and late maturation and psychological implications.

UNIT III

Intellectual development- formal operations, Moral development - integration of self and psycho-sexual resolution and resolving identity crisis- reorganization of social life relationship with peers and parents, heterosexual relationships.

UNIT IV

Vocational preferences, training and work, transition to adulthood- conflicts with special reference to contemporary socio – cultural changes.

RECOMMENDED READINGS:

Berk LE.1993 *Infants, Children and Adolescents*.Allyn& Bacon.

Sebald H. 1984. *Adolescence - A Social Psychological Analysis*.Prentice Hall.

Seifert KL &Hoffnung RJ. 1991. *Child and Adolescent Development*. Houghton Mifflin.

GENERIC ELECTIVE

GE – 01 CARE AND WELL-BEING IN HUMAN DEVELOPMENT

(6 Credits: Theory - 5 + Tutorial - 1)

THEORY

Unit I: Care and Human Development

- Definition, concepts & relevance of care
- Vulnerable periods in life that require care
- Principles & components of care

Unit II: Well-being and Human Development

- Concept of well-being-- physical, psychological, spiritual
- Life crises and well-being
- Factors & experiences that promote well-being

Unit III: Care & well-being at different stages of life

- Childhood years
- Adolescence
- Adulthood and old age
- Well-being of caregivers

Unit IV: Policies, Services & Programs

- School health programs
- Nutrition & health for all
- Counselling & yoga

RECOMMENDED READINGS

IGNOU. (2011). Positive psychology-2, MCFT-006 Applied social Psychology. New Delhi: IGNOU.

Santrock, J.W. (2007). Life Span Development (3rd ed.). New Delhi: Tata McGraw-Hill.

Sapra, R. (Ed.), (2010) Child Development: Issues and Concerns for the well-being of the child. Vishwabharati, New Delhi.

Seligman, M.E.P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press.

Sriram, R. (2004). Ensuring infant and maternal health in India. In J. Pattnaik (Ed.). Childhood in South Asia: A critical look at issues, policies and programs. Conn.USA: Information Age.

Singhi, P.(1999). Child health & well-being: Psychosocial care within & beyond hospital walls. In T.S. Saraswathi (Ed.).Culture, socialization and human development. New Delhi: Sage.

GE- 02 CHILD RIGHTS AND SOCIAL ACTION

(6 Credits: Theory - 5 , Tutorial - 1)

THEORY

Unit I: Introduction to Child Rights

- Definitions of child and child rights
- Key philosophical concepts in the discourse on child rights
- Factors of exclusion- socio-economic, disability, geo-political etc.
- Role of family, community & child herself in protecting rights

Unit II: Vulnerable Groups: Causes and Consequences

- Street and working, destitute, homeless, institutionalized children
- Living with: chronic illness, HIV/AIDS, disabilities
- Affected by war, conflict, riots, disasters
- Victims of child-trafficking, abuse, dysfunctional families
- Children in conflict with law

Unit III: Framework for Social Action

- Role of state in protection of child rights
- Laws for children- Indian & international
- Constitutional provisions in India
- National policies and programs
- Institutional & non-institutional services

RECOMMENDED READINGS

Bajpai, A.(2006). Child rights in India: Law, policy and practice. New Delhi: Oxford University Press.

Bhargava, V. (2005). Adoption in India: Policies and experiences. New Delhi: Sage.

Virani,). (2000). Bitter chocolate: Child Sexual abuse in India. New Delhi: Penguin

Weiner, M., Burra, N., Bajpai, A. (2007). Born unfree: Child labour, Education, and the state in India. New Delhi: Oxford University Press.

PROPOSED SYLLABUS

of

B.A. (Prog) Nutrition and Health Education Choice Based Credit System

**from UGC
2015**

PREAMBLE

Nutrition has been recognized and given a special role in national development. This course is following on the same lines laid out in National Policy of Nutrition. This curriculum aims at training students to take up leadership roles in extension and community outreach programs. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages, and sustainable use of resources for human development are the hall mark of this course. This course aims at enriching the minds of the students who have interest in learning finer points of nutrition. Nutrition generates lot of concerns, issues and is very close to individual heart. Nutrition is the key to facilitate the study and enhance the quality of human life. Its approach is therefore inherently interdisciplinary. Its curriculum that engages the student through teaching, research and extension.

This course aims to develop a holistic and multidimensional understanding of the various topics. Syllabus covers basic aspects of nutrients, food science, nutrition concerns in various stages of life cycle, food safety, food security as well as open a vast understanding of the current spectrum of malnutrition. This course equips the students for skill development, academic understanding, entrepreneurship, community role and employment in various fields of food industry, health clinics, NGOs, etc.

The ongoing B.A. (Prog) with Nutrition and Health Education course was introduced as restructured course of Home Science. Until 2014-15, this course was being offered in B.A.(Prog) as a discipline course in three colleges of University of Delhi in semester mode. In Choice Based Credit System the course would be of 3-year duration, divided into 3 parts- Part I, Part II and Part III. Each part would consist of 2 semesters. There would be 4 core papers (along with 4 language and 4 core papers from some other opted discipline of B.A. Programme), 2 Discipline Centric Electives (2 DSE from other opted discipline), 4 Skill Enhancement Elective courses (SEC), 2 Generic Elective courses (GE) and 2 Ability Enhancement Compulsory Courses. Students will be given a pool of papers in DSE, SEC and GE from which they can choose their preferred papers.

The objectives of the course are-

- To introduce the students to the fundamentals of Nutrition, food and health
- To familiarize them with importance of nutrition during various stages of life.
- To impart knowledge regarding etiology and management of nutritional disorders ranging from nutritional deficiencies to life style disorders.
- To emphasize on the importance of food safety, food quality, food laws and regulations, ongoing national programmes as well as imparting entrepreneurship skill for job enhancement.

The contents have been drawn-up to accommodate the widening horizons of the discipline of Food and Nutrition. They reflect the current changing needs of the students and the evolving

needs of the community. The option of project/dissertation has been offered to strengthen the knowledge, skills and research procedures to inculcate the scientific temperament of students.

For each paper,

- The detailed syllabus for each paper is appended with the list of suggested readings.
- Teaching time allotted for each paper shall be 4 periods for each theory paper and 4 periods for each practical class per week .Each practical batch should ideally be between 15-20 students so that each student receives individual attention.

B.A. (PROG) NUTRITION AND HEALTH EDUCATION

Category of Paper	Name of Papers	Theory Credits	Practical/ Tutorial Credits
Discipline Specific Course (DSC)	1. Fundamentals of Nutrition and Food Science	4	2
	2. Nutrition for the Family	4	2
	3. Introduction to Food Safety	4	2
	4. Public Health Nutrition	4	2
Discipline Specific Elective (DSE)	1. Public Nutrition	4	2
	2. Entrepreneurship for Small Catering Unit	4	2
	3. Therapeutic Nutrition	4	2
	4. Project/ Technical Report/ Dissertation	6	
Skill Enhancement Course (SEC)	1. Home Based Catering	2	
	2. Nutrition and Fitness	2	
	3. Bakery Science		2
	4. Maternal & Child Nutrition	2	
	5. Food & Nutrition		2
Generic Electives (GE)	1. Human Nutrition	4	2
	2. Nutrition: A Life Span Approach	4	2
	3. Current Concerns in Public Health Nutrition	5	1

**CHOICE BASED CREDIT SYSTEM IN
B.A. (PROG) NUTRITION AND HEALTH EDUCATION**

SEMESTER	DISCIPLINE SPECIFIC COURSE (12)	ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE DSE (4)	GENERIC ELECTIVE (GE) (4)
I	English/ MIL-1	English/MIL Communication / Environmental Science			
	DSC-NHE -1A: Fundamentals of Nutrition and Food Science (Theory + Practical)				
	DSC-2A				
II	MIL/English-1	Environmental Science/ English/MIL Communication			
	DSC-NHE-1B: Nutrition for the Family (Theory +Practical)				
	DSC-2B				
III	English/ MIL-2		SEC-1		
	DSC-NHE-1C Introduction to Food Safety (Theory + Practical)				
	DSC-2C				
IV	MIL/English-2		SEC-2		
	DSC-NHE-1D: Public Health Nutrition - (Theory + Practical)				

	DSC-2D				
V			SEC-3	DSE- 1A	GE-1
				DSE-1 B	
VI			SEC-4	DSE-2A	GE-2
				DSE-2 B	

ELECTIVE: DISCIPLINE SPECIFIC DSE (Any 2) (1 in Sem V and 1 in Sem VI):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

- DSE-NHE-1A: Public Nutrition.
- DSE-NHE-.1B: Entrepreneurship for small Catering Unit
- DSE-NHE-2A Therapeutic nutrition
- DSE-NHE-2B: Project/ Dissertation

SKILL ENHANCEMENT ELECTIVE COURSE (Any 4, 1 each in Sem III, IV, V and VI):
CREDITS – 2 (2 Period Theory or 4 Period Practical per Week)

- SEC-1: Home Based Catering
- SEC-2: Nutrition and Fitness
- SEC-3 Bakery Science
- SEC-4: Maternal and Child Nutrition
- SEC-5: Food and Nutrition

ELECTIVE: GENERIC (GE) (Any 2, 1 each in sem 5 and 6):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

- GE-NHE-1: Human Nutrition
- GE-NHE-2: Nutrition: A Life Span Approach
- GE-NHE-3: Current Concerns in Public Health Nutrition

DISCIPLINE SPECIFIC COURSES

DSC-NHE-1A: FUNDAMENTALS OF NUTRITION AND FOOD SCIENCE (CREDITS: THEORY-4, PRACTICAL-2)

OBJECTIVES

1. To familiarize students with fundamentals of food, nutrients and their relationship to Health
2. To create awareness with respect to deriving maximum benefit from available food resources

THEORY

UNIT 1 Basic concepts in food and nutrition

5 periods

Basic terms used in study of food and nutrition

- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social

UNIT II Nutrients

20 periods

- Functions, dietary sources and clinical manifestations of deficiency/ excess of the following nutrients:
- Carbohydrates, lipids and proteins
- Fat soluble vitamins-A, D, E and K
- Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C
- Minerals – calcium, iron and iodine

UNIT III Food Groups

25 periods

- Selection, nutritional contribution and changes during cooking of the following food groups:
- Cereals
- Pulses
- Fruits and vegetables
- Milk & milk products
- Eggs
- Meat, poultry and fish
- Fats and Oils

UNIT IV Methods of Cooking and Preventing Nutrient Losses

10 periods

- Dry, moist, frying and microwave cooking
- Advantages, disadvantages and the effect of various methods of cooking on nutrients
- Minimizing nutrient losses

PRACTICAL

1. Weights and measures; preparing market order and table setting
2. Food preparation, understanding the principles involved, nutritional quality and portion size
 - Beverages: Hot tea/coffee, Milk shake/ lassi, fruit based beverages
 - Cereals: Boiled rice, pulao, chapatti, parantha, puri, pastas
 - Pulses: Whole, dehusked
 - Vegetables: curries, dry preparations
 - Milk and milk products:Kheer, custard
 - Meat, Fish and poultry preparations
 - Egg preparations: Boiled, poached, fried, scrambled, omelettes, egg pudding
 - Soups: Broth, plain and cream soups
 - Baked products: Biscuits/cookies, cream cakes, sponge cake preparations, tarts and pies
 - Snacks:pakorras, cutlets, samosas, upma, poha, sandwiches
 - Salads: salads and salad dressings.

RECOMMENDED READINGS

- Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; Fifth Ed; 2012; New Age International Publishers
- Mudambi, SR, Rao SM and Rajagopal, MV. Food Science; Second Ed; 2006; New Age International Publishers
- Srilakshmi B. Nutrition Science; 2012; New Age International (P) Ltd.
- Srilakshmi B. Food Science; Fourth Ed; 2010; New Age International (P) Ltd.
- Swaminathan M. Handbook of Foods and Nutrition; Fifth Ed; 1986; BAPPCO.
- Bamji MS, Rao NP, and Reddy V. Text Book of Human Nutrition; 2009; Oxford & IBH Publishing Co. Pvt Ltd.
- Wardlaw GM, Hampl JS. Perspectives in Nutrition; Seventh Ed; 2007; McGraw Hill.
- Lakra P, Singh MD. Textbook of Nutrition and Health; First Ed; 2008; Academic Excellence.
- Manay MS, Shadaksharaswamy. Food-Facts and Principles; 2004; New Age International (P) Ltd.
- Potter NN, Hotchkiss JH. Food Science; Fifth Ed; 2006; CBS Publishers and Distributors.
- Sethi P and Lakra P Aahaar Vigyaan,Poshan Evam Suruksha, Elite Publishing House, 2015
- Jain P et al. *Poshan va swasthya ke mool siddhant (Hindi)*; First Ed; 2007; Academic Pratibha.
- Vrinda S. *Aahar Vigyan (Hindi)*; 2003; Shyam Prakashan
- Suri S. and Malhotra A. Food Science, Nutrition & Food Safety Pearson India Ltd. 2014.

- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S. Basic Food Preparation – A Complete Manual. Orient Longman, 2005.
- Khanna K, Gupta S, Seth R, Mahana R, Rekhi T. The Art and Science of Cooking. Phoenix Publishing House Private Limited, Delhi 1998.

DSC-NHE IB: NUTRITION FOR THE FAMILY
(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

UNIT I Unit 1 Basic concepts meal planning

16

- Food groups and concept of balanced diet
- Food exchange list
- Concept of Dietary Reference Intakes
- Factors effecting meal planning and food related behavior.
- Dietary guidelines for Indians and food pyramid

UNIT II Nutrition during the adult years

Physiological changes, RDA, nutritional guidelines, nutritional concerns and healthy food choices

24

- Adult
- Pregnant woman
- Lactating mother
- Elderly

UNIT III Nutrition during childhood

20

- Growth and development, growth reference/ standards, RDA, nutritional guidelines, nutritional concerns and healthy food choices
- Infants
- Preschool children
- School children
- Adolescents

PRACTICAL

Objective

1. To develop in students, the concept of portion sizes
2. To impart basic cooking skills and healthy cooking practices

Introduction to meal planning

3

- Use of food exchange list
- Planning and preparation of diets and dishes for Young adult

10

- Pregnant and Lactating woman
- Preschool child
- School age child and adolescents
- Elderly

RECOMMENDED READINGS

1. Edelstein S, Sharlin J (ed). Life Cycle Nutrition- An Evidence Based Approach; 2009; Jones and Barlett Publishers.
2. Khanna K et al. Textbook of nutrition and dietetics; 2013; Phoenix Publisher.
3. Sharma S, Wadhwa A. Nutrition in the community- A textbook; 2003; Elite Publishing House Pvt. Ltd.
4. Jain P et al. *Poshan va swasthya ke mool siddhant (Hindi)*; First Ed; 2007; Academic Pratibha.
5. Malhan, Gupta, Jain. *Aahar aayojan, khadya sangrakshan evam griha vyavastha (Hindi)*; 1993; Sultan Chand & Sons Publishing.
6. Vrinda S. *Aahar Vigyan (Hindi)*; 2003; Shyam Prakashan.
7. Ghosh S. Nutrition and child care- A practical guide; 1997; Jaypee Bros.
8. Savage King F, Burgess A. Nutrition for developing countries; Second Ed; 1993; Oxford University Press.
9. Dietary guidelines for Indians- A Manual; 2011; NIN, ICMR, Hyderabad.
10. Gopalan,C et al. Nutritive Value of Indian foods; 1994; NIN, ICMR, Hyderabad.
11. Raina U, Kashyap S et al. Basic Food Preparation-Complete Manual; 2005; Orient Longman
12. Seth V and Singh K (2006). Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual. Elite Publishing House Pvt. Ltd. New Delhi.
13. Chadha R and Mathur P eds. Nutrition: A Lifecycle Approach. Orient Blackswan, New Delhi. 2015

DSC-NHE 1C: INTRODUCTION TO FOOD SAFETY (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

UNIT 1 Introduction to PHN

10

- Definition of PHN
- Levels of health care services

UNIT III: Food Safety and Storage

- Concept of food safety ,Key terms, factors affecting food safety, recent concerns 25
- Food safety measures: basic concept of HACCP
- Safe food handling practices and storing food safely
- Food additives

25

UNIT III: Food Adulteration

- PFA definition of food adulteration
- Adulterants in commonly consumed food items
- Accidental contamination: botulism, staphylococcal and aflatoxin intoxication
- Importance of food labels in processed foods and nutritional labelling
- Food laws, regulations and standards
 - Codex Alimentarius
 - Prevention of Food Adulteration (PFA) Act
 - Agmark
 - Fruit Products Order (FPO)
 - Meat Products Order (MPO)
 - Bureau of Indian Standards (BIS)
 - MMPO
 - FSSAI

PRACTICAL

1. Market survey of preserved fruit and vegetable products 1
2. Visit to food testing lab /or any agency of food standards 1
3. Nutritional labeling Development and understanding- use of computer graphics as an aid 5
4. Simple test for food adulteration 2
5. Case Study on food safety issues-ICDS/MDM/Diarrheal outbreak/ any other 3

RECOMMENDED READINGS

- Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; Fifth Ed; 2007; New Age International Publishers
- Wardlaw GM, Hampl JS. Perspectives in Nutrition; Seventh Ed; 2007; McGraw Hill..
- Sethi P and Iakra P Aahaar vigyaan ,Poshan evam Suruksha, Elite Publishing house, 2015
- Khanna K et al. Textbook of Nutrition and Dietetics;2013; Phoenix Publisher.
- Sharma S, Wadhwa A. Nutrition in the Community- A textbook; 2003; Elite Publishing House Pvt. Ltd.
- Srilakshmi B. Dietetics; Fourth Ed; 2002; New Age International (P) Ltd.
- Bamji MS, Rao NP, and Reddy V. Text Book of Human Nutrition; 2009; Oxford & IBH Publishing Co. Pvt Ltd.
- The Food Safety and Standards Act along with Rules and Regulations. Delhi: Commercial Law Publishers (India) Pvt Ltd, 2011.

DSC-NHE I D: PUBLIC HEALTH NUTRITION

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES 60

Objectives

1. To enable students to identify and contribute to the prevention of public health/ social health problems in the country.
2. To equip students with workable knowledge to treat common illnesses at home.

UNIT I: Introduction to Nutritional deficiency diseases

22

Causes, symptoms, treatment, prevention of the following:

- Protein Energy Malnutrition (PEM)
- Vitamin A Deficiency (VAD)
- Iron Deficiency Anaemia (IDA)
- Iodine Deficiency Disorders (IDD)
- Zinc Deficiency
- Fluorosis

UNIT II Social health problems

10

- Smoking
- Alcoholism

- Drug addiction
- AIDS including AIDS Control Programme

UNIT III Nutrition for special conditions

17

- Introduction to Nutrition for physical fitness and sport
- Feeding problems in children with special needs
- Considerations during natural and man-made disasters e.g. floods, war.- basic guidelines in disaster management.

Unit IV: Food Security

- (a) Key terms, factors affecting food security, recent concern 11
- (b) Technologies for food and nutrition security

PRACTICALS

Objectives:

1. To enable the students to develop recipes for treating various nutritional deficiencies
2. To develop in them the skill to modify normal diets for disease conditions

- Planning and preparation of snacks for PEM, VAD and IDA (one full days diet for PEM and snacks for PEM VAD and IDA 10
- Visit to any national programme 2

RECOMMENDED READING

- Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; 2012; New Age International Publishers
- Wardlaw GM, Hampl JS. Perspectives in Nutrition; Seventh Ed; 2007; McGraw Hill..
- Gibney et al. Public Health Nutrition; 2004; Blackwell Publishing
- Khanna K et al. Textbook of Nutrition and Dietetics; 2013; Phoenix Publisher.
- Sharma S, Wadhwa A. Nutrition in the Community- A textbook; 2003; Elite Publishing House Pvt. Ltd.
- Srilakshmi B. Dietetics; 2012; New Age International (P) Ltd.
- Bamji MS, Rao NP, and Reddy V. Text Book of Human Nutrition; 2009; Oxford & IBH Publishing Co. Pvt Ltd.
- Lakra P, Singh MD. Textbook of Nutrition and Health; First Ed; 2008; Academic

Excellence

- Jain P et al. *Poshan va swasthya ke mool siddhant (Hindi)*; First Ed; 2007; Academic Pratibha.
- Malhan, Gupta, Jain. *Aahar aayojan, khadya sangrakshan evam griha vyavastha (Hindi)*; 1993; Sultan Chand & Sons Publishing.

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE- NHE- 1A: PUBLIC NUTRITION

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

UNIT I: Concept and scope of public nutrition 5

- Definition and multidisciplinary nature of public nutrition
- Concept and scope
- Role of public nutritionist

UNITII: Nutritional problems, their implications and related nutrition programmes 22

- Etiology, prevalence, clinical features and preventive strategies of-
 - Undernutrition –
 - Protein energy malnutrition, nutritional anaemias, vitamin A deficiency, iodine deficiency disorders
 - Overnutrition – obesity, coronary heart disease, diabetes
- National Nutrition Policy and Programmes - Integrated Child Development Services (ICDS) Scheme, Mid day Meal Programme (MDMP), National programmes for prevention of Anaemia, Vitamin A deficiency, Iodine Deficiency Disorders.

UNIT III: Assessment of nutritional status 18

- Objectives and importance
- Methods of assessment
 - a. Direct – clinical signs, nutritional anthropometry, biochemical tests, biophysical tests
 - b. Indirect – Diet surveys, vital statistics

UNIT IV: Nutrition Education 15

- Objectives, principles and scope of nutrition and health education and promotion

- Behaviour Change Communication

PRACTICAL

1. Planning of low cost nutritious recipes for infants, preschoolers, pregnant/nursing mothers for nutrition education.
2. Assessment of nutritional status:
 - Anthropometry – weight and height measurements
 - Plotting and interpretation of growth charts for children below 5 years
 - Identification of clinical signs of common nutritional disorders
 - Dietary assessment – FFQ and 24 hour diet recall
2. Planning and conducting a food demonstration.

RECOMMENDED READINGS

- Wadhwa A and Sharma S (2003). Nutrition in the Community-A Textbook. Elite Publishing House Pvt. Ltd. New Delhi.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s Banarasidas Bhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.
- ICMR (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- ICMR (2011) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Jelliffe DB, Jelliffe ERP, Zerfas A and Neumann CG (1989). Community Nutritional Assessment with special reference to less technically developed countries. Oxford University Press. Oxford.
- World Health Organization (2006). WHO Child Growth Standards: Methods and development: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age (d).

DSE- NHE- 1 B : ENTREPRENEURSHIP FOR SMALL CATERING UNITS
(CREDITS : THEORY 4 , PRACTICAL 2)

THEORY	LECTURES 60
Unit I. Introduction to Food Service Units	4
<ul style="list-style-type: none"> • Origin of Food Service units • Kinds of food service units 	
Unit II. Menu Planning	8
<ul style="list-style-type: none"> • Importance of menu, • Factors affecting menu planning, • Types of menu 	
Unit III. Organization & Management	6
<ul style="list-style-type: none"> • Principles of management • Functions of management/ manager 	
Unit IV. Food Production Process	18
<ul style="list-style-type: none"> • Food purchase and receiving • Storage • Quantity food production: Standardization of recipes, Recipe adjustments and portion control, Quantity food production techniques • Food service • Food hygiene and sanitation 	
Unit V: Space and Equipment	4
<ul style="list-style-type: none"> • Types of kitchen areas, Flow of work and work area relationship • Equipment 	
a) Factors affecting selection of equipment	
b) Equipment needs for different situations	
Unit V: Financial Management	5
<ul style="list-style-type: none"> • Importance of Financial Management • Budgets and Budgeting process • Cost concepts 	

Unit VI: Personnel Management 4

- Functions of a personnel manager,
- Factors to consider while planning the kind and number of personnel:
Menu, type of operations, Type of service, Job description and job specification

Unit VII: Planning of A Small Food Service Unit 12

- Preliminary Planning
Survey of types of units, identifying clientele, menu, operations and delivery
- Planning the set up:
 - a) Identifying resources
 - b) Developing Project plan
 - c) Determining investments
- Development of a business plan

PRACTICALS

1. Market survey for food items both raw and processed 1
2. Survey of food service units 1
3. Standardization of a recipe 2
4. Preparing Quick Foods for scaling up for quantity production 2
5. Planning menus for the following: 6
 - Packed meals for office employees
 - Nutritious tiffins for school children
 - School/college canteens
6. Demonstration of a specialized cuisine 1
7. Develop a checklist for good hygiene practices 1

RECOMMENDED READINGS

- West B Bessie & Wood Levelle (1988) Food Service in Institutions 6th Edition Revised
By Hargar FV, Shuggart SG, & Palgne Palacio June, Macmillian Publishing Company
New York.
- Sethi Mohini (2005) Institution Food Management New Age International Publishers
- Knight J B & Kotschevar LH (2000) Quantity Food Production Planning &

Management 3rd edition John Wiley & Sons

- Dessler Gary (1987) Personnel Management, Modern Concepts & Techniques Prentice Hall New Jersey
- Tripathi P C (2000) Personnel management 15th ed Sultan Chand, New Delhi
- Kazarian E A (1977) Food Service facilities Planning 3rd Edition Von Nostrand Reinhold New York
- Kotas Richard & Jayawardardene. C (1994) Profitable Food and Beverage Management Hodder & Stoughton Publications
- Longree K, Langree K, Longrie K (1996) Quantity Food sanitation,John Wiley & sons
- Roday .S (2003) Food Hygiene & Sanitation , Tata Mc Graw Hill publication Ltd
- Taneja S and Gupta SL (2001) Enterpreneurship development, Galgotia Publishing

**DSE- NHE- 2A: THERAPEUTIC NUTRITION
(CREDITS: THEORY-4, PRACTICAL-2)**

THEORY

LECTURES 60

Unit I :Principles of nutrition care

8

- Nutrition Care Process
- Therapeutic adaptations of the normal diet
- Progressive diets – clear fluid, full fluid, soft and regular

Unit II: Etiology, clinical features and nutritional management of Infections and Fevers

8

- Typhoid
- Tuberculosis
- HIV

Unit III: Etiology, clinical features and nutritional management of the following

18

- GI Tract Disorders:
 - Diarrhoea
 - Constipation
 - Lactose intolerance
 - Celiac disease.
- Liver: Infective Hepatitis

Unit IV: Etiology, clinical features and nutritional management of **10**

- Weight Imbalances-Overweight and obesity; Underweight
- Eating disorder- anorexia nervosa and bulimia

Unit V: Etiology, clinical features, basic diagnosis and nutritional management of the
Following **12**

- Type 1 and Type 2 Diabetes Mellitus
- Metabolic Syndrome
- Hypertension and Coronary Heart Disease

Unit VI: Food allergy and food intolerance **4**

- Etiology, clinical features, diagnosis and nutritional management

PRACTICAL

Planning, preparation and service of diets for the following:

Therapeutic Diets – Normal, Soft, Clear and full fluid

- Fevers: acute and chronic
- Obesity
- Type 2 Diabetes
- Hypertension and CHD
- Survey therapeutic foods in market

RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- Mahan L K and Escott Stump S (2013). Krause's Food & Nutrition Therapy, 13th ed. Saunders-Elsevier.
- Stacy Nix (2009). William's Basic Nutrition and Diet Therapy, 13th Edition. Elsevier Mosby.

- ICMR (1999). Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Seth V and Singh K (2007). Diet Planning through the Life Cycle Part II: Diet Therapy. A Practical Manual, 4th edition. Elite Publishing House Pvt. Ltd.

**DSE-NHE-2B: PROJECT/ DISSERTATION
(CREDITS: THEORY-6)**

Objectives

To mentor the students to design and conduct an original and ethical research. They should be able to write a dissertation in the APA format. The research done can either be empirical/data based (quantitative, qualitative, or mixed-methods) or it can be in the form of a critical review of research and theory.

Reference – Latest APA manual for dissertation.

Evaluation: Viva jointly by one internal and one external examiner.

SKILL ENHANCEMENT COURSES (SEC)

SEC 1: HOME BASED CATERING

(CREDITS: THEORY 2)

THEORY

LECTURES 30

Unit I. Introduction to Food Service

3

- Factors contributing to the growth of food service industry
- Kinds of food service establishments

Unit II. Food Production

12

- Menu planning: Importance of menu, factors affecting menu planning, menu planning for different kinds of food service units
- Food Purchase and Storage
- Quantity Food production: Standardization of recipes, quantity food preparation techniques, recipe adjustments and portion control
- Hygiene and Sanitation

Unit III. Resources

4

- Money
- Manpower
- Time
- Facilities and equipment
- Utilities

Unit IV. Planning of A Food Service Unit

11

- Preliminary Planning
Survey of types of units, identifying clientele, menu, operations and delivery
- Planning the set up:
 - a) Identifying resources
 - b) Developing Project plan
 - c) Determining investments
 - d) Project Proposal

RECOMMENDED READINGS

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

New York.

- Sethi Mohini (2005) Institution Food Management New Age International Publishers
- Knight J B & Kotschevar LH (2000) Quantity Food Production Planning & Management 3rd edition John Wiley & Sons
- Philip E Thangam (2008) Modern Cookery for teaching and Trade Part I & II Orient Longman
- Taneja S and Gupta SL (2001) Entrepreneurship development, Galgotia Publishing

SEC 2: NUTRITION AND FITNESS (CREDITS: THEORY-2)

THEORY

LECTURES 30

- | | |
|---|---|
| Unit 1 Understanding Fitness | 7 |
| <ul style="list-style-type: none">• Definition of fitness, health and related terms• Assessment of fitness• Approaches for keeping fit | |
| Unit 2 Importance of nutrition | 8 |
| <ul style="list-style-type: none">• Role of nutrition in fitness• Nutritional guidelines for health and fitness• Nutritional supplements | |
| Unit 3 Importance of Physical activity | 7 |
| <ul style="list-style-type: none">• Importance and benefits of physical activity• Physical Activity – frequency, intensity, time and type with examples• Physical Activity Guidelines and physical activity pyramid | |
| Unit 4 Weight Management | |
| <ul style="list-style-type: none">• Assessment, etiology, health complications of overweight and obesity• Diet and exercise for weight management• Fad diets• Principles of planning weight reducing diets | |

RECOMMENDED READINGS

- Wardlaw, Smith. Contemporary Nutrition: A Functional Approach. 2nd ed: 2012. Mc Graw Hill.
- Williams Melvin. Nutrition for health, fitness and sports. 2004. Mc Graw Hill
- Joshi AS. Nutrition and Dietetics 2010. Tata Mc Graw Hill.

SEC 3: BAKERY SCIENCE (CREDITS: PRACTICALS-2)

PRACTICAL

1. BASIC CONCEPTS OF BAKERY

- a) Ingredients & processes used for preparation of
 - Cream cakes and sponge cakes
 - Short crust pastry
 - Breads, buns and pizza base
 - Cookies and biscuits
- b) Product characteristics, common bakery faults and corrective measures
- c) Bakery equipment- Types, selection, operations and maintenance

2. PRACTICAL TRAINING IN BAKING OF

- Cream cake
- Sponge cake preparations
- Short crust pastry
- Breads, buns, dinner rolls and pizza base
- Biscuits and cookies

RECOMMENDED REDINGS

- Dubey, S.C. (2007). Basic Baking 5th Ed. Chanakya Mudrak Pvt. Ltd.
- Raina et.al. (2010). Basic Food Preparation-A Complete Manual. 4rd Ed. Orient Black

Swan Ltd.

- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.

SEC 4: MATERNAL AND CHILD NUTRITION

(CREDITS: THEORY 2)

THEORY

LECTURES:30

Unit I **8**

- Nutritional needs during pregnancy, common disorders of pregnancy (Anaemia, HIV infection, Pregnancy induced hypertension), relationship between maternal diet and birth outcome.
- Maternal health and nutritional status, maternal mortality and issues relating to maternal health.

Unit II **7**

- Nutritional needs of nursing mothers and infants, determinants of birth weight and consequences of low birth weight, Breastfeeding biology, Breastfeeding support and counselling

Unit III **8**

- Infant and young child feeding and care - Current feeding practices and nutritional concerns, guidelines for infant and young child feeding, Breast feeding, weaning and complementary feeding.
- Assessment and management of moderate and severe malnutrition among children, Micronutrient malnutrition among preschool children
- Child health and morbidity, neonatal, infant and child mortality, IMR and U5MR; link

between mortality and malnutrition;

Unit IV

5

Overview of maternal and child nutrition policies and programmes.

RECOMMENDED READINGS

- Wadhwa A and Sharma S (2003). Nutrition in the Community-A Textbook. Elite Publishing House Pvt. Ltd. New Delhi.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s Banarasidas Bhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.

SEC 5 : FOOD AND NUTRITION

(CREDITS: PRACTICAL-2)

1. Identification of food sources for various nutrients using food composition tables.
2. Record diet of self-using 24 hour dietary recall and its nutritional analysis.
3. Introduction to meal planning, concept of food exchange system.
4. Planning of meals for adults of different activity levels for various income groups.
5. Planning of nutritious snacks for different age and income groups.
6. Preparation of nutritious snacks using various methods of cooking.
7. Nutritional labeling of food products.
8. Estimation of BMI and other nutritional status parameters.

RECOMMENDED READINGS

1. Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
2. Srilakshmi (2010). Food Science, 4th Edition. New Age International Ltd.
3. Wardlaw MG, Paul M Insel Mosby 1996). Perspectives in Nutrition, Third Edition.
4. Introduction to Human Nutrition ed.Gibney et al, Blackwell Publishers, 2005
5. Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.
6. NIN, ICMR (1990). Nutritive Value of Indian Foods.
7. Seth V, Singh K (2005). Diet planning through the Life Cycle: Part 1. Normal Nutrition. A Practical Manual, Fourth edition, Elite Publishing House Pvt Ltd.
8. ICMR (2010). Nutrient Requirements and Recommended Dietary Allowances for Indians.

GENERIC ELECTIVE (GE)
GE 1: HUMAN NUTRITION
(CREDITS: THEORY 4, PRACTICAL 2)

THEORY

LECTURES: 60

Unit I: Basic Concepts in Nutrition

10

- Basic terms used in nutrition
- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social
- Basic food groups and concept of balanced diet

Unit II: Nutrients

25

Energy- Functions, sources and concept of energy balance.

Functions, Recommended Dietary Allowances, dietary sources, effects of deficiency and/ or excess consumption on health of the following nutrients:

- Carbohydrates and dietary fibre,
- Lipids
- Proteins
- Fat soluble vitamins-A, D,E and K
- Water soluble vitamins – Thiamin, Riboflavin, Niacin, Pyridoxine, Folate, Vitamin B12 and Vitamin C
- Minerals – Calcium, Iron, Zinc and Iodine

Unit III: Nutrition during Lifecycle

25

Physiological considerations and nutritional concerns for the following life stages:

- Adult man / woman
- Preschool children
- Adolescent children
- Pregnant woman
- Nursing woman and infant

RECOMMENDED READINGS

- Wardlaw and Insel MG, Insel PM (2004). Perspectives in Nutrition. Sixth Edition, McGraw Hill.
- Srilakshmi B (2012). Nutrition Science.4th Revised Edition, New Age International Publishers.
- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.

GE 2: NUTRITION: A LIFESPAN APPROACH
(CREDITS: THEORY 4, PRACTICAL 2)

THEORY	LECTURES: 60
Unit I: Principles of meal planning	10
<ul style="list-style-type: none">• Balanced diet• Food groups• Food exchange list• Factors effecting meal planning and food related behaviour.• Dietary guidelines for Indians and food pyramid	
Unit II: Nutrient requirements	8
<ul style="list-style-type: none">• Concept of Dietary Reference Intakes• Overview of methods for assessment of nutrient needs	
Unit III: Nutrition for adulthood and old age	12
<ul style="list-style-type: none">• Adult: Nutrient requirements for adult man and woman, RDA, nutritional guidelines, nutritional concerns, diet and lifestyle related diseases and their prevention• Elderly – Physiological changes in elderly, RDA, nutritional guidelines, nutritional and health concerns in old age and their management, factors contributing to longevity	
Unit IV: Nutrition during pregnancy and lactation	12
<ul style="list-style-type: none">• Pregnancy – Physiological changes in pregnancy, RDA, nutritional guidelines, nutritional needs, effect of nutritional status on pregnancy outcome, optimal weight gain and its components, nutrition related problems in pregnancy and ways to control them.• Lactation – Physiology of lactation, RDA and nutritional needs of a nursing mother, nutritional guidelines	
Unit V: Nutrition during childhood	18
<ul style="list-style-type: none">• Growth and development, growth reference/ standards, RDA, nutritional guidelines, nutritional concerns and healthy food choices- Infants- Preschool children- School children- Adolescents	
PRACTICAL	
Unit I: Introduction to meal planning	3
-Use of food exchange list	

Unit II: Planning and preparation of diets and dishes for	10
• Young adult	
• Pregnant and Lactating woman	
• Preschool child	
• School age child and adolescents	
• Elderly	

Unit III: Planning complementary foods for Infants	2
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RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- Wardlaw GM, Hampi JS, DiSilvestro RA (2004). Perspectives in Nutrition, 6th edition. McGraw Hill.
- ICMR (2011) Dietary Guidelines for Indians. Published by National Institute of Nutrition, Hyderabad.
- ICMR (2010) Recommended Dietary Allowances for Indians .Published by National Institute of Nutrition, Hyderabad.
- Chadha R and Mathur P eds.(2015) Nutrition: A Lifecycle Approach. Orient Blackswan. New Delhi.
- Seth V and Singh K (2006). Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual. Elite Publishing House Pvt. Ltd. New Delhi.
- Gopalan C, Rama Sastri BV, Balasubramanian SC (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, ICMR, Hyderabad.

GE 3: CURRENT CONCERNS IN PUBLIC HEALTH NUTRITION

(CREDITS: THEORY 5, TUTORIAL 1)

THEORY

LECTURES: 75

Unit I: Nutritional problems affecting the community	25
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Etiology, prevalence, clinical features and preventive strategies of-

- Undernutrition - Protein energy malnutrition: Severe Acute Malnutrition and Moderate Acute Malnutrition, Nutritional Anaemias, Vitamin A Deficiency, Iodine Deficiency Disorders
- Overnutrition – obesity, coronary heart disease, diabetes
- Fluorosis

Unit II: Strategies for improving nutrition and health status of the community 10

Appropriate interventions involving different sectors such as Food , Health and Education

Unit III: Nutrition Policy and Programmes 30

- National Nutrition Policy
- Integrated Child Development Services (ICDS) Scheme, Mid day Meal Programme (MDMP), National programmes for prevention of Anaemia, Vitamin A deficiency, Iodine Deficiency Disorders

Unit IV: Food and Nutrition Security 10

- Concept, components, determinants and approaches
- Overview of Public Sector programmes for improving food and nutrition security

TUTORIAL

1. Planning and evaluation of low cost nutritious recipes for preschoolers, school age children, adolescents, pregnant and nursing mothers. 9
2. Planning and evaluation of low calorie nutritious recipes for weight management. 2
3. Planning and conducting a food demonstration. 2
4. Visit to an ongoing nutrition programme. 1

RECOMMENDED READINGS

- Wadhwa A and Sharma S (2003). Nutrition in the Community-A Textbook. Elite Publishing House Pvt. Ltd. New Delhi.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s BanarasidasBhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.
- Gibney MJ (2005). Public Health Nutrition.
- Vir S. (2011) Public Health Nutrition in developing countries. Vol 1 and 2
- ICMR (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- ICMR (2011) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s BanarasidasBhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.

PROPOSED SYLLABUS

B.A. (Prog) Resource Management & Design Application

Choice Based Credit System

**From UGC
2015**

Preamble

We are living in a world of scarce and finite resources and hence, management of resources becomes imperative for the society as a whole. The stream of Resource Management & Design Application focuses on optimization of resource utilization at the design stage itself. A good design is one which is least costly and most simple. Through its subjects like Management of New and Small Enterprises, Resources and Sustainable Development, Interior Design and Decoration, Ergonomics in Design Development and Human Resource Management, the stream intends to expose students to design from micro to the macro-level starting from the home to organization and the world – all with the backdrop of management and precious resources. The theme is sustainability, conservation and recycling of resources and use of alternate sources of energy. The aim is betterment of the environment and the world at large.

B.A. (PROG) RESOURCE MANAGEMENT & DESIGN APPLICATION

Category of Paper	Name of Papers	Theory Credits	Practical/Tutorial Credits
Discipline Specific Course (DSC)	1. Resource Management 2. Family Finance & Consumer Studies 3. Basics of Interior Design 4. Entrepreneurship Development	4 4 4 4	2 2 2 2
Discipline Specific Elective (DSE)	1. Space Planning & Design 2. Human Resource Management	4 4	2 2
Skill Enhancement Course (SEC)	1. Resources & Sustainable Development 2. Retail Design 3. Computer Aided Design 4. Waste to Wealth		2 2 2 2
General Elective (GE)	1. Basics of Interior Design 2. Entrepreneurship Development	4 4	2 2

**CHOICE BASED CREDIT SYSTEM IN
B.A. (PROG) RESOURCE MANAGEMENT & DESIGN APPLICATION**

SEMESTER	DISCIPLINE SPECIFIC COURSE (DSC) (12)	ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE DSE (4)	GENERIC ELECTIVE (GE) (4)
I	English/ MIL-1	English/MIL Communication /Environmental Science			
	DSC-RMDA -1A: Resource Managment (Theory + Practical)				
	DSC-2A				
II	MIL/English-1	Environmental Science/ English/MIL Communication			
	DSC-RMDA 1B: Family Finance & Consumer Studies (Theory + Practical)				
	DSC-2B				
III	English/ MIL-2		SEC-1		
	DSC-RMDA-1C: Basics of Interior Design (Theory + Practical)				
	DSC-2C				
IV	MIL/English-2		SEC-2		
	DSC- RMDA-1D: Entrepreneurship Development (Theory + Practical)				
	DSC-2D				
V			SEC-3	DSE-1 A	GE-1
				DSE-2 A	
VI			SEC-4	DSE-1 B	GE-2
				DSE-2 B	

ELECTIVE: DISCIPLINE SPECIFIC DSE (Any 2) (1 in Sem V and 1 in Sem VI):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

DSE-RMDA-1A: Space Planning & Design (Theory + Practical)

DSE-RMDA-1B: Human Resource Management (Theory + Practical)

SKILL ENHANCEMENT ELECTIVE COURSE (Any 4, 1 each in Sem III, IV, V and VI):
CREDITS – 2 (2 Period Theory or 4 Period Practical per Week)

SEC-1: Resources & Sustainable Development

SEC-2: Retail Design

SEC-3: Computer Aided Design

SEC-4: Waste to Wealth

ELECTIVE: GENERIC (GE) (Any 2, 1 each in Sem 5 and 6):
CREDITS – 6 (4 Period Theory and 4 Period Practical per Week)

GE 1: Basics of Interior Design

GE 2: Entrepreneurship Development

DISCIPLINE SPECIFIC COURSE (DSC)
DSC-RMDA- 1 A: RESOURCE MANAGEMENT
(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Introduction to Resource Management **16**

- Concept, universality and scope of management
- Approaches to management
- Ethics in management
- Motivation Theory

Unit II: Resources **18**

- Understanding meaning, classification and characteristics of resources, factors affecting utilization of resources.
- Maximizing use of resources and resource conservation.
- Availability and management of specific resources by an individual/ family
 - Money
 - Time
 - Energy
 - Space
- Application of Management Process in:
 - Event Planning & Execution

Unit III: Functions of Management: An overview **22**

- Decision Making
- Planning
- Supervising
- Controlling
- Organizing
- Evaluation

PRACTICAL

1. Resource conservation and optimization/green technologies (natural resources): Portfolio **3**
2. Identification and development of self as a resource. **3**
 - SWOT analysis-who am I and Micro lab
 - Building Decision Making abilities through management games
3. Preparation of time plans for self and family **3**
4. Time and Motion Study **3**
5. Event planning ,management and evaluation-with reference to **2**
 - Managerial process
 - Resource optimization - time, money, products, space, human capital

RECOMMENDED READINGS

- Koontz.H. and O'Donnel C., 2005, Management – A systems and contingency analysis of managerial functions. New York: McGraw-Hill Book Company
- Kreitner. 2009, Management Theory and Applications, Cengage Learning: India
- Rao V.S. and Narayana P.S., Principles and Practices of Management, 2007, Konark Publishers Pvt. Ltd.

DSC -RMDA- 1 B : FAMILY FINANCE AND CONSUMER STUDIES (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES :60

Unit I: Income and Expenditure

17

- Household Income – Types, Sources, Supplementation of family income, use of family income, budgets, maintaining household accounts
- Factors influencing expenditure pattern
- Family savings and investments- need ,principles, channels of investment, tax implications
- Consumer credit- need, sources, credit cards, Housing finance
- Personal finance management – tax implications, calculation of personal income tax,
- Guidelines for wise buying practices

Unit II: Consumer in India: Consumer problems and education

19

- Definition of a consumer
- Role of consumers in the economy, National Income, Per Capita Income, Household wise distribution of income
- Changing nature of the business world –e-commerce, e-business
- Types of consumer problems – products and service related, investment and infrastructure related, Causes and solutions
- Consumer education and empowerment

Unit III: Consumer Protection

20

- Consumer protection
- Consumer rights and responsibilities
- Consumer organizations – origin, functioning, role and types.
- Consumer cooperatives – role, history and growth in India, PDS Kendriya Bhandars.

- Basic legislative framework for consumer protection in India, Consumer Protection Act 1986 COPRA, Alternative redressal mechanisms, Mediation centres
- Standardization and quality control measures: ISI, FPO, AGMARK, ISO, Eco mark, Wool mark, Silk mark, Cotton mark, Handloom mark, BEE star labelling and others

PRACTICAL

- | | |
|--|----------|
| 1. Evaluation and designing of advertisements in the print media including products, services and social ads. | 3 |
| 2. Evaluation and designing of informative and attractive labels of different type of food products. | 3 |
| 3. Case study of banks and post offices to understand their services and products, Learning to fill different bank forms | 3 |
| 4. Analysis of consumer redressal through case study approach under CPA. | 3 |
| 5. Food adulteration tests | 2 |

RECOMMENDED READINGS

- Khanna S.R., Hanspal S., Kapoor S. & Awasthi H.K., 2007 Consumer Affairs, Universities Press India Pvt. Ltd.
- Sawhney, H.K. & Mital, M., 2007, Family Finance & Consumer Studies, Elite Publishing House Pvt. Ltd.
- Seetharaman, P. and Sethi, M., 2001, Consumerism: Strength and Tactics, New Delhi: CBS Publishers.

DSC -RMDA- 1C : BASICS OF INTERIOR DESIGN (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Design Fundamentals

30

- Objectives of Art & Interior Design.
- Types of Design: Structural & Decorative.
- Elements of Content: Space, Point, Line, Shape, Form, Texture, Light & Color.
- Elements of Order: Scale, Similarity, Proximity, Sequence, Trends, Themes, Geometrical Organization.
- Principles of Composition – Rhythm, Balance, Proportion, Emphasis, Unity, (Variety, Simplicity/Economy, Suitability).

- Composition of a Drawing – Harmony, Clarity, Adequacy.
- Color & its Application.
 - Dimensions of color.
 - Importance of color & its role in creation of the design.
 - Color systems & Theories.
 - Color Harmonies.
 - Principles of Design as applied to color use.
 - Color Forecasting
- Design Drawing – Drawing as a language to explore & communicate Ideas.

Unit II: Furniture & Furnishings: Historical Perspectives & Contemporary Trends 26

- History of Interior Design – including periods like Mughal Architecture, Colonial style, Renaissance.
- Architectural Styles –based on themes and main periods, like post Renaissance and modern style.
- Contemporary Trends in Interior Design with respect to furniture, furnishings & accessories.
- Furniture – Types, Construction, Selection and purchase, Arrangement, Care and maintenance
- Furnishings – selection, care and maintenance of fabrics used for -
 - Soft furnishings: curtains and draperies, upholstered furniture, cushions and pillows, etc.
 - Floor coverings
- Accessories – Uses, Classification, Design, Selection & Arrangement.
- Traditional and Modern Surface Finishes – types and uses
 - Furniture
 - Wall
 - Floor
 - Ceilings
 - Roofing
- Lighting applications (Energy efficient lighting design – number and type of lamps and luminaires for efficiency in lighting).
- Accessories – Uses, Classification, Design, Selection & Arrangement.

PRACTICAL

- Drawing – Introduction to drawing instruments & tools (manual & computer tools) **2**
 - Drawing lines (freehand & with drawing instruments) - both 2-dimensional & 3-dimensional
 - Lettering
 - Sketching (figures, buildings, trees & plants, vehicles) - both 2-dimensional & 3-dimensional
 - Rendering for different surfaces such as trees, brick, grass, water, wood, stone, earth, concrete using Water Colours, Stubbing, Pencil Colours
- Preparation of catalogue comprising pictures denoting application of Art & Elements of Design; Colour - Colour Wheel, Dimension & Harmonies of Colour. **2**
- Floor plans with rendering (Theme based- Manual/Computer aided) **3**
- Elevation & perspective plans with rendering (Manual/Computer aided) **2**
- Furniture & furnishing plans of specific areas- Critical Analysis **2**
- Preparation of portfolio based on historical designs & market review of furniture and furnishing materials (upholstery, curtains and draperies, bed & table linen) **3**
 - Wall coverings & decorations (pictures, etc)
 - Floor coverings & decorations
 - Window & door treatments
 - Lighting systems
 - Artifacts (sculptures, ceramics/terracotta, handicrafts, flower arrangements, etc.)
 - Fittings and fixtures
 - Wood and its substitutes.

RECOMMENDED READINGS

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.

DSC-RMDA- 1 D: ENTREPRENEURSHIP DEVELOPMENT (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Entrepreneurship Development

17

- Entrepreneurship- concept, definition, need and significance of entrepreneurship development in India, entrepreneurship growth process, barriers, entrepreneurship education model.

- Entrepreneur-their characteristics, types, gender issues, role demands and challenges.
- Entrepreneurial Motivation.
- Challenges faced by Women Entrepreneurs

Unit II: Enterprise Planning and Launching **17**

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

Unit III: Enterprise Management and Networking **22**

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

PRACTICAL

1. SWOT analysis with respect to entrepreneurial competencies through case profiling of successful entrepreneurs and enterprises. **2**
2. Achievement Motivation lab-development of entrepreneurial competencies **3**
3. Survey of an institution facilitating entrepreneurship development in India. **3**
4. Preparation of business plan. **6**

RECOMMENDED READINGS

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

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE -RMDA- 1 A: SPACE PLANNING AND DESIGN (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Basic Concepts in Space Planning and Design 16

- Concept of house, housing, architecture;
- Functions and concept of adequacy of space
- Characteristics of space, principles of planning spaces; planning and designing
- Types of house plans: floor, elevation, structural drawings and perspective plans
- Types of houses: Row, Semi-detached, detached, independent houses or flats/apartments, multi-storeyed buildings
- Basic norms and space standards in operation – NBC and MPD
- Structuring spaces: indoor and outdoor; space articulation: zones in spatial planning.
- Analysis of furniture needs of different zones in a house/workstations
- Green rating systems – GRIHA and LEED.

Unit II: Building Construction Techniques And Technologies: Innovations For Sustainable Development 24

- Classification of building materials – Conventional/Non-Conventional
- Site selection – Factors
- Foundation – Purpose, types of foundations, reasons for failure of foundation
- Damp-proofing and water-proofing - defects, sources and treatment.
- Masonry- types
- Flooring - types
- Roofs- types
- Lintels and Arches- definitions and purpose
- Doors and Windows- types
- Staircase - types
- Partitions and Panelling - types
- Cost economy in construction
- Concept and scope of pre-fabrication and modular housing

Unit III: Interior Environment and Services: Climatic Considerations 16

- HVAC
- Lighting: types of lighting systems

- Water and Plumbing systems, water harvesting.
- Insulation: sound and thermal – materials used and types of insulation

PRACTICAL

1. Housing by-laws and symbols, Different types of plans 2
2. Critical Evaluation of independent houses and apartments. 2
3. Identification of building materials and evaluation concerning their characteristics (favourable and unfavourable features), uses and applications, cost and environment friendliness. 2
4. Evaluation of buildings on energy efficiency parameters using green rating systems like GRIHA and LEED. 2
5. Observe and prepare house plans for different income groups up to 100 sq.m area (Computer aided /manual). 6

RECOMMENDED READINGS

- Adler, David., 2004, Metric HandBook planning & Design, Architectural press.
- Kumar, Sushil, 2008, Building Construction, Standard publisher.

DSE -RMDA- 1 B: HUMAN RESOURCE MANAGEMENT

(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Human Resources Management

15

- Concept, Scope and Significance
- Organisation Theories
- Human Resource Development and its challenges

Unit II: Functions of HRD

26

- Manpower planning
- Job Analysis – job description and job specification
- Recruitment, selection and placement
- Performance appraisal and development
- Basics of Employee compensation
- Training and Development
- Motivation

Unit III: Human Resources Audit **15**

- Concept
- Significance
- Process

PRACTICAL

1. Case study analysis and secondary research. **3**
2. Simulations/Presentations
 - HR Planning – Job Analysis and Design (Levels). **3**
 - Selection and Recruitment Strategies **3**
 - Interview techniques and skills (mock interview) **3**
 - Performance Appraisals – Methods **2**

RECOMMENDED READINGS

- Aswathappa. K, 2008, Human Resource and Personnel Management - Text and cases, Tata McGraw-Hill Publishing Company Ltd, New Delhi.
- Gary Dessler, 2006, Human Resource Management, Prantice Hall of India Pvt. Ltd, New Delhi.
- Subbaroo, R., 2007, Personnel and HRM – Text and Cases, Himalaya Publishing House, New Delhi.

SKILL ENHANCEMENT COURSES (SEC)

SEC 1: RESOURCES AND SUSTAINABLE DEVELOPMENT

(CREDITS: PRACTICAL-2)

PRACTICAL

1. Introduction to concept and dimensions of sustainable development, major conferences and agreements on sustainable development - Power point presentation and group discussion **1**
2. MDG's and challenges to sustainable development (Climate and Global Change, Energy, Water Resources, Population, Economic Development, etc.); (Case study approach) **2**
3. Water/Air analysis - Lab testing and class presentation **2**
4. Experiential learning through field visit: Sewage treatment plant/ Vermicomposting unit/ Air Monitoring Laboratory/ Environment Pollution Detecting Laboratory/ Rain Water Harvesting System/ Biogas Plant/ Green Building/ Ecotel Hotel/ CPCB/ Greenhouse/ Solid Waste Management Plant/ hydro/thermal power plants/ Environmental Agencies or National Parks/ Sanctuaries/ Biosphere Reserves. **2**
5. Development of awareness programme on sustainable consumption practices for masses.
6. A Survey related to environmental issues amongst the citizens: Data to be collected and analyzed statistically with suggestions for environmental management Or Secondary data collection/Case profile of any one govt. or non-govt. organization that contributed to environmental protection in India. **1**

RECOMMENDED READINGS

- Koontz.H. and O'Donnel C., 2005, Management – A systems and contingency analysis of managerial functions. New York: McGraw-Hill Book Company
- Kreitner. 2009, Management Theory and Applications, Cengage Learning: India
- Rao V.S. and Narayana P.S., Principles and Practices of Management, 2007, Konark Publishers Pvt. Ltd.
- Ganesha Somayaji and Sakarama Somayaji ,2009, Environmental concerns and sustainable development: some perspectives from India, TERI Publication
- I. Sundar ,2006, Environment And Sustainable Development, Aph Publishing Corporation
- UN Millennium Project, 2005. Innovation: Applying Knowledge in Development. Science, Technology and Innovation Task Force Report.

- World Bank, 2006, Enhancing Agricultural Innovation: How to go beyond the strengthening of research systems, World Bank: Agriculture and Rural Development

SEC 2: RETAIL DESIGN
(CREDITS: PRACTICAL-2)

PRACTICAL

- **Introduction to Retail Design** - Importance of retail design 1
- Types of retail and commercial spaces – Field visits 2
- Consumer buying decisions and influencing factors – Survey 2
- Layout plan and store design – Survey 2
- Elements of store design in a retail such as lighting, colour, music, props, accessories, etc.-
Observation 3
- Project - Case study of store layout (Interactive) 5

RECOMMENDED READINGS

- Mitton Maureen. (2004) Interior Design Visual Presentation: A Guide to Graphics, Models and Presentation Techniques, 2nd ed. New Jersey: John Wiley and Sons.
- Balaji, Tuli S. (2005). Retail Management

SEC 3: COMPUTER AIDED DESIGN
(CREDITS: PRACTICAL-2)

PRACTICAL

- Introduction to AUTO-CAD 1
- Creating folders and opening and saving files 1
- Commands for creating lines, rectangles, circles etc. 1
- Commands for creating complex figures 1
- Using commands for creating furniture, lighting and plumbing symbols. 2
- Making simple house plans. 4
- Drawing simple 3D objects such as chair, tables etc. 1
- Generating printouts. 1
- Projects 2

RECOMMENDED READINGS

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley & Bayen., (2003), the Elements of Design, Mitchell Beazley.

SEC 4: WASTE TO WEALTH

(CREDITS: PRACTICAL-2)

PRACTICAL

1. Explore kind of waste available/generated by people. **3**
2. Explore ideas for reusing and recycling the waste generated by residents. **3**
3. Case profile of success stories of waste to wealth. **3**
4. Develop prototype/ project for reuse and recycling of waste. **5**

RECOMMENDED READINGS

- Lal, Banwari & Sarma, Priyangshu M. (2011) Wealth from Waste: Trends and Technologies, 3nd ed. New Delhi: The Energy and Resources Institute.
- McDonough, William and Braungart, Michael. (2002). Cradle to Cradle: Remaking the Way We Make Things, United States: North Point Press.

GENERAL ELECTIVES (GE)

GE 1 : BASICS OF INTERIOR DESIGN (CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Design Fundamentals

30

- Objectives of Art & Interior Design.
- Types of Design: Structural & Decorative.
- Elements of Content: Space, Point, Line, Shape, Form, Texture, Light & Color.
- Elements of Order: Scale, Similarity, Proximity, Sequence, Trends, Themes, Geometrical Organization.
- Principles of Composition – Rhythm, Balance, Proportion, Emphasis, Unity, (Variety, Simplicity/Economy, Suitability).
- Composition of a Drawing – Harmony, Clarity, Adequacy.
- Color & its Application.
 - Dimensions of color.
 - Importance of color & its role in creation of the design.
 - Color systems & Theories.
 - Color Harmonies.
 - Principles of Design as applied to color use.
 - Color Forecasting
- Design Drawing – Drawing as a language to explore & communicate Ideas.

Unit II: Furniture & Furnishings: Historical Perspectives & Contemporary Trends 26

- History of Interior Design – including periods like Mughal Architecture, Colonial style, Renaissance.
- Architectural Styles –based on themes and main periods, like post Renaissance and modern style.
- Contemporary Trends in Interior Design with respect to furniture, furnishings & accessories.
- Furniture – Types, Construction, Selection and purchase, Arrangement, Care and maintenance
- Furnishings – selection, care and maintenance of fabrics used for -
 - Soft furnishings: curtains and draperies, upholstered furniture, cushions and pillows, etc.
 - Floor coverings
- Accessories – Uses, Classification, Design, Selection & Arrangement.

- Traditional and Modern Surface Finishes – types and uses
 - Furniture
 - Wall
 - Floor
 - Ceilings
 - Roofing
- Lighting applications (Energy efficient lighting design – number and type of lamps and luminaires for efficiency in lighting).
- Accessories – Uses, Classification, Design, Selection & Arrangement.

PRACTICAL

- Drawing – Introduction to drawing instruments & tools (manual & computer tools) **2**
 - Drawing lines (freehand & with drawing instruments) - both 2-dimensional & 3-dimensional
 - Lettering
 - Sketching (figures, buildings, trees & plants, vehicles) - both 2-dimensional & 3-dimensional
 - Rendering for different surfaces such as trees, brick, grass, water, wood, stone, earth, concrete using Water Colours, Stubbing, Pencil Colours
- Preparation of catalogue comprising pictures denoting application of Art & Elements of Design; Colour - Colour Wheel, Dimension & Harmonies of Colour. **2**
- Floor plans with rendering (Theme based- Manual/Computer aided) **3**
- Elevation & perspective plans with rendering (Manual/Computer aided) **2**
- Furniture & furnishing plans of specific areas- Critical Analysis **2**
- Preparation of portfolio based on historical designs & market review of furniture and furnishing materials (upholstery, curtains and draperies, bed & table linen) **3**
 - Wall coverings & decorations (pictures, etc)
 - Floor coverings & decorations
 - Window & door treatments
 - Lighting systems
 - Artifacts (sculptures, ceramics/terracotta, handicrafts, flower arrangements, etc.)
 - Fittings and fixtures
 - Wood and its substitutes.

RECOMMENDED READINGS

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.

GE 2: ENTREPRENEURSHIP DEVELOPMENT
(CREDITS: THEORY-4, PRACTICAL-2)

THEORY

LECTURES: 60

Unit I: Entrepreneurship Development **17**

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

Unit II: Enterprise Planning and Launching **17**

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

Unit III: Enterprise Management and Networking **22**

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

PRACTICAL

5. SWOT analysis with respect to entrepreneurial competencies through case profiling of successful entrepreneurs and enterprises. **2**
6. Achievement Motivation lab-development of entrepreneurial competencies **3**

7. Survey of an institution facilitating entrepreneurship development in India. **3**
8. Preparation of business plan. **6**

RECOMMENDED READINGS

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