

Semester II

S.No.	Title of the Course/ Course No.	Hours/Week			Marks	Credits
		L	T	P		
1	Life Span Nutrition HSC22201CR	4	0	0	100	4+0+0=4
2	Clinical & Therapeutic Nutrition HSC22202CR	4	0	0	100	4+0+0=4
3	Planning & Preparation of Normal & Therapeutic Diets (Lab Course) HSC22203CR	0	0	8	100	0+0+4=4
4	Extension Programme Planning and Design HSC22204CR	4	0	0	100	4+0+0=4
5	Extension Education System HSC22205CR	4	0	0	100	4+0+0=4
6	Extension Programme Planning and Design / Field Experiences (Lab Course) HSC22206CR	0	0	8	100	0+0+4=4
7	Advanced Study in Human Development-I HSC22207CR	4	0	0	100	4+0+0=4
8	Management of Programmes for Children and the Family HSC22208CR	4	0	0	100	4+0+0=4
9	Advanced Study in Human Development & Management of Programmes for Children and the Family (Lab Course) HSC22209CR	0	0	8	100	0+0+4=4
10	Research Methods & Statistics HSC22210CR	4	0	0	100	4+0+0=4

11	Nutrition in Emergency & Disaster HSC22211DCE	4	0	0	100	4+0+0=4
12	Women's Studies: Characteristics, Issues and Problems HSC22212DCE	4	0	0	100	4+0+0=4
13	Child and Human Rights HSC22213DCE	4	0	0	100	4+0+0=4
14	Nutrition in Health and Disease HSC22002GE	2	0	0	50	2+0+0=2
15	Introduction to Human Development HSC22002OE	2	0	0	50	2+0+0=2

Note: Course code HSC22210CR is common for all the four specializations viz. Food Science & Nutrition, Dietetics & Clinical Nutrition, Extension & Communication and Human Development.

LIFE SPAN NUTRITION

Code: HSC22201CR

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

CORE

Learning Objectives:

1. To know about the recommended dietary allowances
2. To enable students to understand the role of nutrition in pregnancy, lactation and childhood
3. To understand the special needs of nutritional requirement for the adolescents and adults
4. To know about the ageing process
5. To understand the special needs for sports nutrition

Learning Outcomes:

1. Comprehend the principles of planning nutritionally adequate diets.
2. Acquire knowledge about the nutritional needs and concerns of an individual through the life cycle.
3. Exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

Unit I: Nutrition in Pregnancy and Lactation

Nutrition in pregnancy

- Nutrition before conception
- Physiology of pregnancy
- Critical periods

- Gestational weight gain and diabetes
- Birth weight & factors affecting it
- Nutrition & Nutritional supplementation during pregnancy
- Common nutrition related concerns of pregnancy, High risk pregnancies

Nutrition in lactation

- Physiology of lactation
 - Changes during adolescence, Pregnancy & After delivery.
 - Hormonal Controls
- Nutrition for breast feeding women
- Practices incompatible with lactation
- Contra Indications to breast feeding

Unit II: Infancy and childhood Nutrition

Nutrition in Infancy

- Physiological development & Nutrient Requirements
- Feeding the Infant, Initial feeding patterns, Development of feeding skills, Alternative feeding, Introduction of semi solid foods
- Feeding problems during infancy
- Low birth weight infants:
 - Physiologic development, Nutritional requirements, Parenteral & Enteral feeding. Feeding methods for LBW's.

Nutrition in Childhood

- General physiological development
- Influences on childhood food habits and intake
- Nutritional concerns & Common diseases of childhood
- Adverse reactions to foods:
 - Food intolerance and Allergies

Unit- III: Nutrition during Adolescence & Adulthood

Nutrition in Adolescence

- Physical growth and development and Nutritional requirements
- Food Habits: Irregular meals and snacking, eating away from home, Fast foods and media, potential nutritional inadequacies

Nutrition in Adulthood

- Nutrient needs of the mature adults
- Defensive nutritional paradigm
- Weight and body composition, Mobility, Immunity, Taste and Smell, Gastrointestinal changes
- Nutrition related concerns and Meal management of mature adults

Unit IV: Geriatric and Sports Nutrition

Geriatric Nutrition

- Introduction to Gerontology, Ageing process and theories of ageing
- Physiological changes associated with ageing
- Dietary manipulation and nutrient requirement
- Nutritional support for elderly
- Food choices and eating habits
- Drug and nutrient interaction

Sports Nutrition

- Nutrition and Physical Performance
- Muscles, Energy Systems and Physical performance
- Optimal nutrition for athletes

References:

1. Barkar, D. J.P. (1998). Mothers, Bahks and Health in Later life. Edinburgh, Churchill Livingstone.

2. Ward, R.H.T. Smith, S.K. Donnai D. (eds) (1994) Early Fetal Growth and Development. London, RCOG, Press.
3. Tanner, J. M. (1998) Foetus into Man: Physical Growth from Conception to Maturity. Wheaton. And Co. Ltd. Great Britain.
4. WHO* (1999) Nutrition for Health and Development: Progress and Prospectus on the Eve of the 21st Century.
5. Kennedy Carroll (1998): Human development New York, Macmillan
6. Watson, R. R. (Ed) (2000) Handbook of Nutrition in the aged. 3rd Edition. CRC Press. Boca Raton.
7. Whitney, E., & Rady Rolfes, S. (2008). Understanding Nutrition (11th ed). Canda: Wadsworth, Cengage learning.
8. Insel, PEM., Turner, R.E., & Roos D. (2007). Nutrition (3rd ed) Sudnury: Jones & Bartlett Publishers.
9. Mahan, L.K., & Escoh- Sump, S. (2004). Krause's Food Nutrition & Diet Therapy (11th ed). Philadephia Sunders an imprint of Elsevier

CLINICAL AND THERAPEUTIC NUTRITION

Code: HSC22202CR

Credits: 4

CORE

Periods/week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To study the relationship between diet and disease.
2. To know about the changes of dietary requirements during pathological conditions.
3. To become proficient in planning and calculating diets for various diseases.
4. To learn the formulation of diets suited to the local conditions.
5. To understand the role of preventive, protective and curative diet in clinical practice.

Learning Outcomes:

1. Understand the role of nutrition maintaining good health and prevented diseases such as obesity, under nutrition, diabetes.
2. Students will learn to manage chronic diseases such as kidney disease and liver disease.
3. A proper diet plan can help patients manage their symptoms and prevent further complications.

Unit I:

Dietetics

- Dietetics – History, Scope, concept, importance, objectives of diet therapy.
- Role of dietitian in hospital and community.

Patients care and rehabilitation

- Team approach in patient care
- Interpersonal relationship with the patients
- Use of Food Exchange list

Modification of the normal diet

- Liquid diet, soft diet and bland diet
- Routine hospital diets, methods of feeding- oral, parenteral and tube feeding
- Dietary management in Injury, Burns and Surgery

Unit II:

Types of Fever and Dietary management

- Types of fevers - typhoid, tuberculosis, pneumonia and rheumatic fever, poliomyelitis
- Physiology of fevers, metabolic changes and dietary management

Types of gastro-intestinal tract and Dietary management

- Gastritis: Clinical features, type, causes and dietary treatment
- Peptic ulcer: type, etiology, prevalence, dietary management and counseling
- Disease of the small intestine and colon: Diarrhea, dysentery and constipation (causes, types, dietary management and counseling)
- Mal-absorption syndromes: Celiac diseases, Ulcerative Colitis and diverticulosis – (causes, symptoms, dietary management and counseling)

Unit III:

Types and Dietary Management in diseases of liver and Gall bladder

- Hepatic disorders: Fatty liver, jaundice, viral hepatitis, cirrhosis of liver – principle of diet, dietary management and modification of diet
- Gallstone formation and cholecystitis- principle of diet, dietary management and modification of diet

Types and Dietary Management of Renal diseases

- Nephrotic syndrome, dietary modification
- Renal failure, symptoms and clinical findings, dietary modifications.
- urinary calculi and dialysis
- Controlled protein, potassium and sodium diets

Unit IV:

Dietary Management in Acute and chronic diseases of heart

- Atherosclerosis, Hypertension-Clinical features, risk factors for coronary heart diseases
- Hyperlipidemia, Dietary modification and management of sodium restricted diet

Dietary Management in Obesity and Under-nutrition

- Definition, diagnostic test, etiology, types and complications
- Dietary management and other recommendations

Dietary Management in Metabolic disorders

- Diabetes mellitus: Types, causes, symptoms, complications, diagnosis, treatment, dietary management and counseling. Hypoglycemic agents, Glycemic Index
- Gout, Addison's disease, low purine diets (Dietary modification)

References:

1. Anderson Dibble., Nutrition in health Disease.
2. Robinson, C. H., Normal and Therapeutic Nutrition. (17th Edition) Macmillan Publishing Company.
3. Lea & Febiger USA Publishing.
4. Shills M.E., et.al., Modern Nutrition in Health and Disease.
5. B. Shri. Lakshmi., Dietetics, 4th Edition. New age, International (p) Ltd. Publishing.
6. Davis J., and Sherer, K. (1994): Applied Nutrition and Diet Therapy for nurses 2nd Ed. W.B.Saunders. Co.
7. William, S. R. (1993): Nutritional & Diet Therapy 7th Ed. Times Mirror/Mosby College Publishers.

PLANNING AND PREPARATION OF NORMAL AND THERAPEUTIC DIETS (Lab Course)

Code: HSC22203CR

CORE

Credits: 4

Periods/week: 8 Hours

Max. Marks: 100

Planning and preparation of Diet:

1. Pregnant women
2. Lactating women suffering from calcium and vitamin deficiencies.
3. Low and medium cost weaning food recipes (keeping in view its acceptability)
4. Pre-school children (keeping in view its acceptability)
5. School going children (Packed lunch)
6. Children suffering from PEM (3-6 years)
7. Adolescents
8. Adults (30-50 yrs. of age)
9. Athlete involved in a strenuous sport event.
10. Elderly person (60-80 years) having dental problems/dentures
11. In terms of consistency (Liquid, Soft, Full fluid)
12. Febrile illness
13. Diarrhea and Constipation
14. Liver diseases
15. Peptic ulcer patient
16. Atherosclerosis and Hypertension.
17. Renal diseases
18. Obesity and under nutrition
19. Mal absorption syndrome (Celiac Disease)
20. Obesity and diabetes

EXTENSION PROGRAMME PLANNING & DESIGN

Code: HSC22204CR

Credits: 4

CORE

Periods/Week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To understand the process of programme planning in extension.
2. To develop ability in planning extension programmes.
3. To learn the principles and procedures involved in programme planning, implementations and evaluation.

Learning Outcomes:

1. Identify the educational objectives, facilitates the selection of learning experiences to attain these objectives and evaluation of the results in relation to objectives decided.
2. Extension program to be effectively undertaken by an extension worker in the community or village.

Unit I: Programme Planning

- Definition, Meaning and importance of programme planning in extension
- Principles of programme planning, Criteria for good programme planning, Nature and scope of programme planning
- Abilities needed by planners
- Objectives of Extension programme planning

Unit II: Steps of Programme Planning

- Collection of facts
- Analysis of situation

- Identification of problems
- Deciding on programme objectives
- Developing plan of work

Unit III: Programme implementation

- Participation of organizations in programme planning
- Involvement of people in programme planning
- Role of specialist in Extension programme planning
- Surveys - Types of surveys
- Extension programme planning model

Unit IV: Extension Evaluation

- Evaluation- Definition, Nature, Types, Purpose
- Components to be evaluated
- Contribution of evaluation to programme planning
- Evaluation principles, Characteristics of evaluation information
- Extension evaluation process, validity of programme principles and procedures

References:

1. Albrecsht, H et.al. (1989) Rural Development Series. Agricultural Extension Vol. 1 & II. Basic concepts and methods. Wiley Eastern limited, New Delhi.
2. Chaubey, B.K (1979). A Handbook of Extension Education. Jyoti Prakshan; Allahabad.
3. Dhama, O.P. and Bhatnagar, O. P. (1987), Education and communication for Development Qxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
4. Extension Education in Community Development, (1961) Ministry of food and Agriculture Govt. of India., New Delhi.
5. Pankajain, G. (2000) Extension --- Third Dimension of Education, Gyan Publishing House; New Delhi.
6. Ray, G.L. (1999) Extension Communication and Management Naya Prakash;

Calcutta.

7. Reddy, A. (1999) Extension Education. Sree Lakshmi Press, Bapatla.
8. Sandhu, A.S. (1994) Extension Programme Planning, Oxford & 1D11 Publishing Company Private Limited, New Delhi.
9. Singh, R. (1987), Textbook of Extension Education, Sahitya Kala Prakshan Ludhina.
10. Supe, S.V, (1982) Introduction to Extension Education, Oxford Publishers,, New Delhi
11. A.S. Sandhu, (1994) Extension Programme Planning , Oxford & IBH Publishing Co- Pvt,. Ltd, New Delhi.

EXTENSION EDUCATION SYSTEM

Code: HSC22205CR

CORE

Credits: 4

Periods/Week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To understand the changing concept of extension.
2. To get acquainted with the trends in extension approaches and models.
3. To identify the support system development for extension education.

Learning Outcomes:

1. Understand the changing concept of extension; get acquainted with the trends in extension approaches and models; identify the support system development for extension education.
2. Generate knowledge by finding out their needs and problems.
3. Bring about planned changes in the behaviour of people, with a view to help them live better by learning the ways of improving their vocations, enterprises & institutions.

Unit I: Conceptual Analysis

- Extension: Meaning, changing concept of extension, philosophy, objectives, principles, functions, components of extension and dimension of extension.
- Extension Education: Meaning, Process and Principles of learning in extension.
- Extension education system in other countries; Sri Lanka, Indonesia, Philippines, China and Bangladesh.

Unit II: Extension Models and Approaches

- **Models:** Innovation transfer model, social education model, social action/ conscientization models & combination models.
- **Approach:** Agricultural extension, training and visit, participatory project, farming system development, cost sharing, educational institution, integrated area, cluster and target approach.

Unit III: National Extension System

- Early extension efforts, community development programme: genesis and growth, objectives, principles, critical appraisal of the community development programme. Functions of -ICAR-(Indian Council of Agricultural Research) Agriculture universities, KVK-(Krishi Vigyan Kendra's) TTCS-(Trainers Training Centres) Extension systems of ministry of rural development, Department of sciences and technology, Department of industries and Department of women and child development. Development work by NGO's, Government – NGOs collaboration.

Unit IV: Support Structure and their Functions

- Panchayat, Panchayat union and DRDA. Central Social Welfare Board, State Social welfare Board, National level Voluntary Agencies like CAP ART, KVIC, local level.
- Voluntary agencies: People's Organization at grass roots – SHGs.

References:

1. Albreest; H. et. Al (1989). Rural Development Series, Agricultural Extension Vol I & II. Basic Concepts and Methods. Wiley Eastern Limited, New Delhi.
2. Chaubey, B. K. (1979) A Handbook of Education Extension Jyoti Prakashan. Allahabad.
3. Dhama, O. P. and Bhatnagar; O. P. (1987) Education and Communication for

Development Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.

4. Extension Education in Community Development (1961) Ministry of Food and Agriculture. Government of India. New Delhi.
 5. Pankajan; G. (2000)-Extension -- Third Dimension of Education, Gyan Publishing House, New Delhi.
 6. Ray. G. L. (1999) Extension Communication and Management. Naya Prakash, Calcutta.
 7. Reddy; A. (1999) Extension Education, Sree Lakshmi Press, Bapatta.
- Waghmare, S.K. (1989). Exploring of Extension excellence, Multi Tech. Pub Company.

EXTENSION PROGRAMME PLANNING & DESIGN /

FIELD EXPERIENCES (LAB COURSE)

Code: HSC22206CR

Credits: 4

CORE

Periods/Week: 8 hrs.

Max. Marks: 100

1. Assessment of needs and problems of identified group in a community any one:
Children / Adolescents / Women/ Aged
2. Selection of a problem for an identified group in a community requiring intervention and developing a plan of action
3. Implementation of a prepared plan of action
4. Preparation of a suitable teaching aid for a programme planned
5. Evaluation and feedback of the programme implemented.
6. Studying the on-going programmes of Social Welfare Department.
7. Visit to Panchayats to study their role in rural development.
8. Visit to training and development organization for Women.
9. Assessing social changes taking place in
 - Rural Areas
 - Urban Areas
10. Visit to community development agencies related to Health, Nutrition and Education
11. Studying the Role of Centre for Life-Long Learning and State Resource Centre University of Kashmir towards community development
12. Study of New Youth Employment Programme for J&K
 - HIMAYAT
 - UDAAN

ADVANCED STUDY IN HUMAN DEVELOPMENT-I

Code: HSC22207CR

CORE

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To study the advanced stages of Human Development from prenatal stage to adolescence.
2. To understand the principles and factors influencing various stages of Human Development.

Learning Outcomes:

1. Understand the developmental processes and principles from prenatal stage to adolescence
2. Focus on the critical areas of development from prenatal stage to adolescence
3. Comprehend the domains of development from prenatal stage to adolescence

Unit-I: Principles and Concept of Development

- Principles of growth and development
- Developmental tasks from prenatal stage to adolescence
- Basic concepts of development

Prenatal Development:

- Recapitulation of stages in prenatal development
- Genetic and environmental factors- maternal conditions and teratogens. Significance of the genome project for understanding Human development.
- Importance of Indian practices during pregnancy.

Unit II: Infancy (Birth to 2 years)

- The new born: Birth process and the neonate, physical description, sensory capacities and reflexes. Becoming coordinated-feeding, crying, sleeping.
- Imitation, object permanence and other cognitive accomplishments
- Early language development
- Social relationships during infancy
- The cultural experience of being an infant

Unit III: Childhood (2 to 11 years)

- Transition from infancy to childhood
- Physical and motor development (2-6 Years)
- Play and social relationships- The emerging self
- Language, Cognition, Socialization and Emotions in early years
- Physical and Motor development (6-12 Years)
- Sense of industry and personality
- Cognitive, moral and language development
- Social relationships-peers, siblings and parents
- The experience of schooling - academic achievement

UNIT IV: Adolescence (11-18 years)

- Transition from childhood to sexual maturity- puberty and its consequences, emotional changes.
- Development of formal operations: Adolescent thought Integration of the self-issues of identity.
- Role of family, peers, community and ethnic group
- Moral reasoning and Judgment

- Health, sexuality, mental health, delinquency, conformity

References:

1. Hurlock, Elizebeth B. 1978, Child Development 6th Edition McGraw Hill.
2. Rice F.P.(1995) Human Development New Jersey Prentice Hall.
3. Berk, L.E (1995) Child Development. London Allyn and Bacon.
4. Cole, M. S. (1993) The development of children(2nd ed) New York Scientific American Books. Freeman and Co.
5. Dutt. H. (1997) Moral values in child development. New Delhi Anmol.
6. Papalia, D.E., Old, & Feldman, R.D. (2010). Human Development (10th) New Delhi: Tata McGraw – Hill Publishing Company Limited.
7. Bee H. (1997) The developing child(VII Ed) New York Longman.
8. Mussen, P.H Conger JJ. Kagan, J, and Hustan, A. C (1996) child development and personality, New York Harper and Row.
9. Berger, K.S. (2006). The Developing person through childhood & adolescence (7th Ed.) New York: Worth Publishers.
10. Santrock, W (2007). Adolescence (11th ed) New Delhi: Tata McGraw Hill Publishing Company limited.
11. Laura E. Berk (2013) Child Development (9th Ed.) Pearson Education Inc. (PEI).

MANAGEMENT OF PROGRAMMES FOR CHILDREN AND THE FAMILY

Code: HSC22208CR

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

CORE

Learning Objectives:

1. To understand the purpose, scope and challenges of management for programmes of children and families.
2. To know about the various approaches to programme management.
3. To give students opportunity to work with children and families in different settings.
4. To critically evaluate and review programme models.

Learning Outcomes:

The students will be able to:

1. Learn about the management process.
2. Gain insight about the programmes for children and families.
3. Develop skills in project planning, coordination and evaluation.

Unit I: Management

- Management – Meaning, characteristics, nature, importance, functions, principles & managerial skills

Management process

- Planning, Coordination
- Supervision, Monitoring and Evaluation

Staff development

- Man power, Planning
- Training
- Appraisal, SWOT Analysis

Unit II: Programmes and services for children and families

- Demographic profile of children in India
- Family and child welfare services working at national level (NIPCCD, ICCW, CSWB, NCERT, ICDS, Ministry of Women and Child Development)
- International Level: WHO, UNICEF, ILO, CARE, World Bank
- Development programmes related to Health, Nutrition and Education

Unit III: Welfare and its Historical Perspective

- Nature, characteristics and function of welfare and development organization.
- Concept of development programmes
- Family welfare – concept, scope, need and historical perspectives

Unit IV: Managing Programmes for Children and Family

- Obtaining funds from the Government and other source and formulating a budget
- Administration, Structure and Management of various Institutions-
 - Residential Institutions-Orphanages and home for destitutes
 - Recreational Institutions-Balbhawans
- Training of personnel in the field of family & Child welfare- need & types

References:

1. Chaudhary. D.P. (1985): Child welfare services New Delhi. Atmaram and sons.
2. Wanghtery, A. S. and Ricks, B.R. (1989) contemporary supermision: Managing people and technology . New York : MacGraw Hill.

3. Grewal J.S. (1984) Early childhood education foundations and practices, Agra: National Psychology corporation.
4. Hildbrand V.(1984) Management of child development centres, New York Collier Macmillian Publishing.
5. Leeper, S. H., Wither, S. R.L. & Way, B (1984) Good schools for young children (5th ed) New York: Macmillian Publishing Co.
6. Maluccio, A.N., Fein, E and Olmstead, K. A.(1986) Permanency planning for children concepts and methods: New York. Tavistock Publications.
7. W.B. ((1) Experiencing fieldwork New York: Sage.
8. Watkins, P.K. and Divant (1987) Preschools Directors Stall developments Handbook. New York: Centers for applied research in education. Pifelion publishing.
9. Kumar, R. 1998. Child development in India – Health welfare and Management, Ashish Publication house.
10. Singh D. 1995. Child development: Issues, Polices and Programmes. Kauiska Publication.
11. www.unicef.org
12. <https://www.who.int>
13. <Httpa:/ /www.ilo.org>

ADVANCED STUDY IN HUMAN DEVELOPMENT-I AND MANAGEMENT OF PROGRAMMES FOR CHILDREN AND FAMILY (Lab Course)

Code: HSC22209CR

Credits: 4

CORE

Periods/week: 8 Hours

Max. Marks: 100

1. Study of local practices during pregnancy
2. Studying reflexes of infants (0-1 years)
3. Recording physical & motor development during infancy & early childhood years
4. Studying school adjustments during late childhood years.
5. Studying the problems associated with adolescence in the local context
6. Evaluating the functioning of ICDS Centres
7. Preparing a case study of Red Cross Society in Srinagar
8. Prepare a plan - short term /long term for enhancing quality of any Program/project working for Women/Children.
9. Planning and execution of activities for children in various institutions
10. Creating awareness about family welfare programs in a nearby rural area (Target group women)
11. Planning and implementing income generating activities for Women. Evaluate its impact on the group.

RESEARCH METHODS AND STATISTICS

Code: HSC22210CR

Discipline Centric Elective

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To understand the significance of statistics and research methodology in Home Science research.
2. To understand the types, tools and methods of research and develop the ability to construct the data gathering instruments appropriate to the research design.
3. To be able to appreciate and understand importance of writing scientifically.

Learning Outcomes:

1. Allow students to test hypotheses and draw valid conclusions about human behavior and mental processes.
2. Enable students in research design and overall plan for a study in their 4th semester, including the methods and procedures used to collect and analyze data.
3. Get acquainted with data visualization techniques such as graphs and charts which provide students a quick and efficient way to interpret data, which can lead to better decision making.
4. Help in creating a visual representation of data, making it easier for students to interpret the results of their study in 4th Semester under course no. HSC23411CR.

Unit I: Introduction to Research Methodology

- Meaning, Importance, Objectives, Types of Research, Identification of a research problem–criteria for selection and formulation

- Designing the research study – concept, importance and contents of a research plan. Hypotheses – Types, sources and process of setting up hypotheses
- Data collection Methods: observation, questionnaire, interview, case studies and scaling techniques. Google Forms

Unit II: Research Methods and Data Gathering Instruments

- Sampling – Characteristics and steps of sampling. Pilot studies and pre-testing.
- Sampling Techniques: Probability and Non-Probability. Determination of sample size.
- Data Processing – Rules and types of diagrams, Presentation of data through Bar diagram and its types, Pie diagram and histogram

Unit III: Processing and Analysis of Data

- Measures of Central Tendency: Mean, Median, Mode, quartile, deciles and percentiles
- Measures of Dispersion: Range, inter quartile range, quartile deviation, mean deviation and standard deviation
- Chi Square and t-Test (dependent and Independent)

Unit IV: Analysis and Interpretation of Data

- Correlation analysis – Karl Pearson's coefficient of correlation, Rank difference method (Spearman's method), concurrent deviations
- Analysis of variance and Regression Analysis – lines of regression and regression equation.
- Applications of SPSS & MINITAB, preparation of worksheets etc. Report writing – Types, and format. Plagiarism and Ethical issues

References:

1. Bandakar, P.L. and Wilkinson T.S. (2000): Methodology and Techniques of social Research Himalaya Publishing House Mumbai.
2. Bhanthnagar, G. L. (1990): Research methods and measurement in Behavioural and social science, degree, colo publishing academy, New Delhi.

3. Dooley, D. (1995): Strategies for Interpreting Qualitative data sage publication, California.
4. Gay, L.R. (1981, 2nd Ed) Educational Research, Charles, E. Merrill Columbus Ohio.
5. Long, J. S., (Ed) (1988): Common Problems Proper Solution: Avoiding Errors in Qualitative Research, Beverly Hills, Sage Publications, California.
6. Mukherjee, R. (1989): The Quality of Life: Valuation in Social Research, Sage Publication, New Delhi.
7. Stranss, A. and Corbin, J. (1990): Basis of qualitative Research: Grounded Theory Procedures and Techniques, Sage Publications, California.

NUTRITION IN EMERGENCY AND DISASTER

Code: HSC22211DCE

Discipline Centric Elective

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. To familiarize students with various natural and man-made emergencies and disasters having an impact on nutrition and health status of a community.
2. To understand the special nutritional concerns arising out of emergency situations.
3. To know the strategies of nutritional rehabilitation of emergency affected populations.

Learning Outcomes:

1. Understand food and nutrition threats pertaining to disasters in order to predict and lessen their impacts.
2. Recognize the food supply chain and appropriate food rations in emergency.
3. Conduct rapid nutritional assessment.
4. Design nutrition interventions in emergency.

Unit I: Disaster Management

- Disaster – Definition, management
- Disaster impact and response
- Short-term effect of major disasters – Earthquakes, high winds, tidal waves/ flash floods, slow – onset floods, lands slides, famine, drought and war
- Surveillance
- Disease Prevention and Control

- Illustration using case studies of major disasters in India.
- Role of National Disaster Management Authority of India and Disaster Management Cell of J&K.

Unit II: Nutritional problems, Assessment and Surveillance in emergency affected populations

- Causes and indicators of malnutrition in emergency situations.
- Major Nutritional deficiency diseases in emergencies:
 - Protein energy malnutrition, Vitamin deficiency diseases, Mineral deficiency diseases
- Methods of assessment of mal-nutrition in emergencies.

Unit III: Communicable diseases: Surveillance and treatment

- Common communicable diseases
- Chicken pox, Measles, Mumps, Whooping cough, Influenza., Acute respiratory infection, Cholera, typhoid fever, Acute diarrheal diseases, Food poisoning, Malaria, Plague and Pandemic
- Role of immunization and sanitation

Unit IV: Nutritional Relief and Rehabilitation

- Assessment of food needs in emergency situations
- Food distribution strategy - Identifying and reaching the vulnerable group.
- Targeting Food Aid
- Therapeutic feeding
- Transportation and food storage
- Sanitation and hygiene
- Evaluation of feeding programmes
- Public nutrition approach to tackle nutritional problems in emergencies.

References:

1. Goyet, Fish. V.; Seaman, J. and Geijer, U. (1978): The Management of Nutritional Emergencies in Large Populations, World Health Organization, Geneva.
2. Refugee Nutrition Information System (RNIS): Newsletters UN ACC/SCN Sub-committee on Nutrition.
3. Field Exchange, Newsletters by Emergency Nutrition Network, Dept. of Community Health and General Practice, Ireland.
4. SCN News, Newsletters by UN ACC/SCN Sub-committee on Nutrition.
5. Bradley, A., Woodruff and Arabella Duffield (July, 2000): Assessment of- Nutritional Status in Emergency Affected Populations - Adolescents, Special Supplement, UN ACC/SCN Sub-Committee on Nutrition.
6. Steve Collins, Arabella Duffield and Mark Myatt (July, 200): Assessment of Nutritional Status in Emergency Affected Populations - Adults, Special Supplement, UN ACC/SCN sub-committee on Nutrition.
7. World Disasters Report - Focus on Public Health, International Federation of Red Cross and Red Crescent Societies.
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23. WHO (1997): Applied Health Research Priorities in Complex Emergencies. Geneva. WHO.
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25. Sue Rodwell Williams 4th Edition Essentials of nutrition and Diet Therapy.
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WOMEN'S STUDIES: CHARACTERISTICS, ISSUES & PROBLEMS

Code: HSC22212DCE

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

Discipline Centric Elective

Learning Objectives:

1. To enable students to gain a perspective of the significance of women's studies, gender concepts and the major issues concerning women.
2. To help students develop understanding of the status of women in India and the role of women in social institutions.

Learning Outcomes:

1. Understand the differences that gender makes in peoples' economic, social, and political lives.
2. Identify and articulate changes that could improve peoples' lives, based on gender differences.
3. Recognise feminist and interdisciplinary methods to place women's lives and experiences at the centre of conscious, while examining social and cultural constructs of gender; systems of privilege and oppression; and the relationships between power and gender as they intersect with.

Unit I: Introduction to Women's Studies

- Women studies- concept, meaning, definition& genesis
- Growth and Scope of women's studies in India,
- Women's Studies- An International perspective
- National Committees and Commissions for Women -Department of Women and Child Development

Unit II: Factors and Indicators on the status of women

- Demographic Indicators: Sex ratio in India, Factors responsible for adverse sex ratio in India, Consequences of adverse sex ratio
- Fertility: Definition - Crude birth rate, fertility rate in India
- Mortality & Morbidity- Definition, infant and maternal mortality rates in India, Causes for high female maternal mortality rates
- Economic Indicators: Role of women in economic development, female labour force in India
- Political Indicators-Statistical data about the women's representation in Local bodies, State assemblies, & Parliament

Unit III: Women and Social Institutions

- Family, Meaning - Definition & Ethos of Joint Nuclear - patriarchal & matriarchal families
- Marriage - Definition - Monogamy, Polygamy Polyandry
- Multiple Roles of Women- Role conflict, Role change
- Socialization: Meaning, Definition, and Stages - Agencies of Socialization
- Gender discrimination, gender stereotyping, Gender Roles, and Gender needs

Unit IV: Issues Related to Female children & Women,

- Female foeticide, Female Infanticide and Child marriage
- Dowry, Divorce, Domestic violence and Widow hood
- Female commercial sex workers
- Problems of Elderly and Single women, and Marginalized groups, (SC/ ST/ Women prisoners

References:

- 1) Yadav .C.P: Ency of Women's problems and their remedies

- 2) Sharma Kanta : Women's role in the family
- 3) M.K.Roy: Violence against Women
- 4) P.A Reddy: Problems of Widows in India
- 5) N.S.Nagar: Women and Politics
- 6) Kumar Raj: Women in Agriculture and Trade
- 7) Kumar Raj: Women and Marriage.
- 8) Sushma Srivastava: Women and Family Welfare

CHILD AND HUMAN RIGHTS

Code: HSC22213DCE

Discipline Centric Elective

Credits: 4

Periods/week: 4 Hours

Max. Marks: 100

Learning Objectives:

1. Develop awareness about evolution of Human Rights.
2. To become aware of human rights with specific reference to women & children rights.
3. To work with women & children to create awareness in them about their legal rights & to guide them to access their rights.

Learning Outcomes:

1. The students will be able to develop an understanding the rights of children and women in India.
2. Gain insight about the status of children in different circumstances.
3. The students will be able to identify violation against the rights to equality and freedom in the society around them.

Unit I: Concept & Evolution of Rights

- Concept of Fundamental Rights (Article 12-35 Constitution of India)
- Legal & Moral Rights
- Need and Importance of Rights in a Society
- Universal Declaration of Human Rights (1948)
- National policy for children
- International conventions on child Rights

Unit II: Status of children And Human Rights

- Juvenile justice (care and protection of children) Amendment Act 2006. Section 2 (d, k, l) ,4 & 6. Working of various juvenile homes in j& k.
- Maintenance of children- section 125 cr.p.c1973, corresponding with section 488 of J&K code of criminal procedure, Child labour- causes & control.
- Infanticide, foeticide
- Prostitution– Causes & Remedies, Child prostitutes, street children, refugee children
- Child marriages & Law, Impact of child marriage on child development

Unit III: Women and their Rights

- Laws related to domestic violence
- Sexual harassment at work places
- Dowry prohibition
- Rape
- Medical termination of pregnancy
- Prohibition against pre-natal diagnostic tests (Sex Determination)

Unit IV: Economic, Social and Environmental Rights

Economic Rights

- Outline of economic rights

Social Rights

- Art. (39A, 41-43,45,47) of Indian constitution

Environmental Rights

- Importance of safe guarding environment for human development
- Environmental protection given under Art. 21,48 A of the constitution

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2. Burner, T, (1986) Actual minds- possible words. London, Harvard University press.
3. Desai, N. & Krishna, M. (1988)- Women & Society in India, New Delhi, Ajanta publications.

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8. D'souza, C, & Menon, J. *Understanding Human Rights* (Series 1-4) Bombay. Research & Documentation Centre, St, Pius College.
9. Agarwal, H.O *Human Rights*, Central Law Agency, Allahabad.
10. Pandey, J.N *Constitutional law India*, Central law Agency ,Allahabad.
11. Siddique, Ahmed *Criminology*, Eastern Law Book Co. Lucknow
12. Misra,S.N *The Code of Criminal Procedure*, Central Law Publications Allahabad.

NUTRITION IN HEALTH AND DISEASES

Code: HSC22002GE

Generic Elective

Credits: 2

Periods/week: 2 Hours

Max. Marks: 50

Learning Objectives:

1. To make students aware about fundamentals of Nutritional Science.
2. To enable students to understand the role of nutrition during life span.
3. To orient students to understand the role of diet in prevention of diseases.

Learning outcomes:

1. Students will be able to understand how to use and apply information sources related to nutrition, food, lifestyle and health, identifying and classifying food and foodstuffs.
2. Students will be able to integrate knowledge and skills in food and nutrition with professional issues affecting the nutrition and /or dietetics field.
3. The students will be able to interpret and apply nutrition concepts to evaluate and improve the nutritional health of communities.

Unit I: Fundamentals of Nutrition Science

- Food, Nutrition and Health: An Introduction
- Dietary Guidelines and their uses: (Recommended Dietary Allowances) Introduction to Basic Nutrients
- Menu planning and factors affecting menu planning

Unit II: Nutrition in Normal and Therapeutic Conditions

- Nutrition during Pregnancy
- Nutrition during Lactation
- Nutrition during Adolescence
- Diet in relation to cardiovascular diseases

- Atherosclerosis
- Hypertension
- Diet to relation to obesity and undernutrition
- Diet in relation to Urinary Calculi

References:

1. Robinson, C. H., Normal and Therapeutic Nutrition. (17th Edition) Macmillan Publishing Company.
2. Lea & Febiger USA Publishing.
3. Shills M.E., et.al., Modern Nutrition in Health and Disease.
4. B. Shri. Lakshmi., Dietetics, 4th Edition. New age, International (p) Ltd. Publishing.
5. Davis J., and Sherer, K. (1994): Applied Nutrition and Diet Therapy for nurses 2nd Ed. W.B.Saunders. Co.
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INTRODUCTION TO HUMAN DEVELOPMENT

Code: HSC22002OE

Credits: 2

Periods/week: 2 Hours

Max. Marks: 50

GENERIC ELECTIVE

Learning Objectives:

1. To understand the concept of stages and aspects of Human Development.
2. To understand the application of methods of studying Human Development.

Learning Outcomes:

1. Understand the concept, scope and significance of Human Development
2. Seek information about various methods used to study human development

Unit-I: Overview of Human Development

- Concept, Need and Scope of Human Development
- Principles of Growth and Development
- Developmental tasks throughout the life span
- Stages of development: Concept & Significance
- Aspects of Development (Physical, Cognitive, Psychological, Socio-emotional)

Unit-II Methods of Studying Human Development

- Subjective, objective & projective techniques
- Observation- Definition, concept& types
- Interview- Definition, concept& Types
- Questionnaire -Definition, concept& Types
- Case Study-Definition, concept & Types

References:

1. Berk, L.E. (2007) Development Through the Life span 3rd Edition. Darling Kindersley. India.

2. Papalia, D.E., Old & Feldman, R.D. (2010) Human Development. 10th Edition. New Delhi. Tata Mohraw- Hill Publishing company limited.
3. Hurlock. B.E. (1981) Development Psychology: A Life Span Approach. 5th Edition. New Delhi. Tata MC.Graw-Hill publishing company limited.
4. Kothari, C.R. & Garg,G. (2014) Research Methodology: Methods & Techniques. 3rd Edition. New Delhi. New Age International Publishers.
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