

Semester III

S.No.	Title of the Course/ Course No.	Hours/Week			Marks	Credits
		L	T	P		
1	Assessment of Nutritional Status HSC15301CR	4	0	0	100	4+0+0=4
2	Advanced Food Science HSC15302CR	4	0	0	100	4+0+0=4
3	Assessment of Nutritional Status / Analytical Techniques in Food Science (Lab Course) HSC15303CR	0	0	8	100	0+0+8=4
4	Institutional Management HSC15304CR	4	0	0	100	4+0+0=4
5	Assessment of Nutritional Status / Institutional Management (Lab Course) HSC15305CR	0	0	8	100	0+0+8=4
6	Management of Human Service Organization HSC15306CR	4	0	0	100	4+0+0=4
7	Extension Management HSC15307CR	4	0	0	100	4+0+0=4
8	Management of Human Service Organization/ Extension Management (Lab Course) HSC15308CR	0	0	8	100	0+0+8=4
9	Advanced Study in Human Development - II HSC15309CR	4	0	0	100	4+0+0=4
10	Study of Persons with Disabilities HSC15310CR	4	0	0	100	4+0+0=4

11	Advanced Study in Human Development - II/ Study of Persons with Disabilities (Lab Course) HSC15311CR	0	0	8	100	0+0+8=4
12	Community Nutrition HSC15312DCE	3	0	0	75	3+0+0=3
13	Women Nutrition and Health HSC15313DCE	3	0	0	75	3+0+0=3
14	Mental Health and Developmental Perspectives HSC15314DCE	3	0	0	75	3+0+0=3
15	Community Organization and Developmental Theory HSC15315DCE	3	0	0	75	3+0+0=3
16	Culture and Psychology HSC15316GE	3	0	0	75	3+0+0=3
17	Behaviour Change and Advocacy in Health HSC15317GE	3	0	0	75	3+0+0=3
18	Health Consequences of Nutritional Deficiencies HSC15318OE	3	0	0	75	3+0+0=3

Note:- Course Code HSC15301CR is common for both specializations of Food Science & Nutrition/Dietetics & Clinical Nutrition

ASSESSMENT OF NUTRITIONAL STATUS

Code : HSC15301CR

Credits: L4

CORE

Periods/ Week :4 Hrs

M. Marks: 100 (Ext. Exam: 80/ Int. Asst: 20)

Objectives:

1. Orient the students with all the important state-of the art methodologies applied in nutritional assessment and surveillance of human groups.
2. Develop specific skills to apply the most widely used methods.

Contents:

Unit I:

Indicators of MCH Care

- Maternal mortality rate
 - Late Maternal death
 - Pregnancy - related death.
 - World Scenario
 - Causes
 - Preventive and social measures

Mortality in Infancy and childhood

- Perinatal, Neonatal , Post neonatal and infant mortality rate.
- Factors affecting infant mortality.
- Preventive and social measures.
- 1 - 4 year, under 5 mortality rate.
- Child survival rate.

Unit II:

Assessment of nutritional status by Anthropometry & Clinical Examination

- Nutritional Assessment Schedule
- Anthropometry – Infants, Children and Adults.
 - Weight (Techniques used)
 - Height , (Techniques used)
 - Mid arm circumference
 - Head circumference
 - Chest circumference
 - Skin fold thickness (Use of Calipers) .
 - Anthropometric Indices
 - Growth Charts, Standards, and Percentiles.
- Clinical Evaluation
 - PEM, (Protein Energy Malnutrition)
 - Vitamin A Deficiency
 - Iron Deficiency
 - Calcium Deficiency
 - Dental Caries and Fluorosis

Unit III:

Assessment of nutritional status by Biochemical and Dietary Assesment

- Laboratory and Bio-chemical Evaluation
 - Laboratory Test
 - ❖ Hemoglobin estimation
 - ❖ Test for Stools
 - ❖ Urine examination
 - Bio-Chemical Evaluation
 - ❖ Proteins
 - ❖ Vitamins – Riboflavin, Thiamin and Beta-carotene.
 - ❖ Minerals – Iron , Calcium

- Assessment of Dietary Intake (Food Frequency Method & 24 hr recall method)
- Vital Statistics
- Assessment of Ecological factors.

Unit IV : Nutritional Surveillance and Social Aspects of Nutrition.

- Nutritional Surveillance
 - Nutrition surveillance and growth monitoring
 - Nutritional status indicators
 - Problem and Ecology of Mal nutrition
 - Preventive and social measures.
 - Food surveillance
- Food hygiene
 - Milk, Egg, Fish, Meat ,Fruits and Vegetables.

References

1. Jelliffe, D, B, and jelliffee, E. F.P, (1989): Community Nutritional Assessment, Oxford University Press.
2. Beghin, I., Cap, M. and Dujardan, B. (1988): A Guide to nutritional status Assessment, WHO, Geneva.
3. Gopaldas, T. and Seshadri, S., (1987) Nutrition Monitoring and Assessment, Oxford University Press.
4. Mason, J. B, Habich, J.P. Tabataba, H. and Valverde, V., (1984) Nutritional Surveillance, WHO.
5. Lee, R.D., and Nieman, D. C., (1993): Nutritional Assessment, Brown and Benchmark Publishers.
6. Sauberlich, H. E., (1999) Laboratory Tests for the Assessment of Nutrition Status, CRC, Press.
7. Cameron, N. (1984): Measures of Human Growth, Sheridan House Inc. New York.
8. Scrimshaw, N. and Gleason, G. (Ed) (1991): Rapid Assessment Methodologies for planning and Evaluation of health related programs, Published by (INFDC) International Nutrition Foundation for Developing Countries.

9. FAO Nutritional Studies No. 4 (1953): Dietary Surveys: Their Technique and interpretation, FAO.
10. Bingham, S.A., (1987): The Dietary Assessment of Individuals, Methods Accuracy, New Techniques and recommendation, Nutrition Abstracts and Reviews, 57: 705-743.
11. Fidanza.
12. Collins, K.J., (ed) (1990) Handbook of methods for the measurements of work performance, physical fitness and energy expenditure in Tropical Population. International Union of Biological Sciences.
13. Ulijaszek, S. J., and Masice-Taylor, C.G.N., (ed) Anthropometry: the individual and the Population, Cambridge University Press, Cambridge.
14. Shetty, P.S., and James, W.P.T., (1994): Body Mass Index. A Measure of chronic Energy Deficiency in Adults FAO food and Agriculture Organization of the United Nations, Rome.
15. Davies, P.S.W and Cole, (ed): Body Composition Techniques in Health and Disease. Cambridge University, Cambridge.
16. Himes, J.H (1991): Anthropometric Assessment of Nutritional Status. Wiley- Liss New York.
17. Lohman, T.G., Roche, A.F., and Martorell, R. (ed) Anthropometric Standardization References Manual. Human Kinetics Books, Illinois.

ADVANCED FOOD SCIENCE

Code :HSC15302CR

Credits: L4

CORE

Periods/ Week :4 Hrs

M. Marks: 100 (Ext. Exam: 80/ Int. Asst: 20)

Objectives:-

1. To understand the factors effecting the sensory qualities various foods .
2. To understand the principles of chemistry of foods.
3. To apply the principles while preparing and cooking foods.
4. To learn the methodology of standardization of recipie evaluation.

Contents

Unit-I

- **Evaluation of food by sensory and objective methods:-** Factors effecting acceptability of food .Sampling of food , selection of taste panel. Difference, preference and descriptive tests. Objective methods - microscopic examination, Chemical methods (pH, Flavour, sugar concentration and saltiness) and Physical methods (texture, volume, tenderness, viscosity and surface tension, moisture, colour)
- **Colloidal Chemistry:-** General structure of food stuffs and relationship of cooking to colloidal chemistry. Denaturation,
- **Browning reactions** - Enzymatic and non enzymatic.
- **Sugar Cookery:-** Sources & uses of sugar in cookery, caramelization by heat and pH changes. Crystallization of sugar solution, factors that effect the size of crystals. Stages of sugar cookery. Crystalline and non crystalline candies,

Unit-II

- **Starch Cookery:-** Types of starch, gelatinization, reterogradation, Flour composition and baking qualities, dough, batter and bread making. Leavening agents. Gelatin composition and properties , preparation and its uses in food
- **Milk Cookery:-** Properties of milk protein. Uses of milk in food preparation. Cheese and Ice Cream preparation.
- **Egg Cookery:-** Uses, properties and coagulation of egg proteins. Egg as binding, foaming, emulsifying and thickening agent. Mayonnaise preparation.

Unit-III

- **Vegetables and Fruits:-** Structure of vegetable tissues. Starch, pectic substances & pigments (chlorophylls, anthocyanins). Enzymes. Browning, use of plant-enzymes for textural changes in food,
- **Fats and Oils:-** Processing and refining of fats, Uses in food preparation. Smoking point and melting point. Hydrogenation. Fat as shortening agent. Rancidity - types. Changes on storage & during cooking.
- **Pulse Cookery:-** Factors affecting cooking quality of legumes. Germination of pulses - and its effects.
- **Fortification, Enrichment of Foods:-** Objectives. Commonly fortified foods and methods of fortification.

Unit IV

- **Meat, Poultry and Fish:-** Types of meat, poultry and fish. Postmortem changes in muscle meat. Tenderness of meat. Processing and effect of processing. Methods of cooking, test for doneness.
- **Food Standards and Laws:** - Indian and International food standards and laws. Prevention of Food Adulteration Act (PFA). Effect of processing and Irradiation on Nutritive value of foods.
- **Food Adulteration:-** Definition of adulteration, Common adulterants in foods,

References

1. Charley H. (1982): Food Science 2nd Ed., John Wiley and Sons. New York.
2. Potter, N. and Hotchkiss, J. H. (1996): Food Science, 2nd Editions C.B.S. Publishers and Distributors, New Delhi.
3. Belitz, H. D. and Grosch, W. (1999): Food Chemistry 2nd Ed. Springer, New York.
4. Bowers, J. (1992): Food Theory and Application (2nd Ed), Macmillan Publishing Co., New York.
5. Peckhan, G. and Freeland - Graves, G. H. (1979): Foundation of Food Preparation.
6. Becker, P. (1965). Emulsions: Theory and Practice, Reinhold, New York.
7. B. Sri Lakshmi 2nd Ed. (2002): Food Science. New age International Pvt. Ltd.

Assessment of Nutritional Status & Analytical Techniques in Food Science (Lab Course)

Code :HSC15303CR

Credits: P4

CORE

Periods/ Week :8 Hrs

M. Marks: 100 (Ext. Exam: 80/ Int. Asst: 20)

LAB - A

1. Diet survey methods

- Diet history - Individual, Family.
- 24 hour recall method.
- Weightment method.
- Qualitative and quantitative methods

2. Anthropometric practices of studying various groups (Infants, children & adults).

- Height
- Weight
- Mid-arm circumference
- Head circumference
- Chest circumference
- Waist hip ratio
- BMI
- Comparison of standards. (Given by ICMR).

3. Biochemical tests

- Blood components tests for iron deficiency
- Protein estimation (Lowrys method)

4. Assessment of nutritional status of:

- Pregnant women, Lactating women and Pre school children.

5. Evaluation study of a nutrition project.

LAB - B

1. Standardization of recipes

2. Sugar Cookery:

- Experiments on crystallization of sugar,
- Stages of sugar cookery,
- Preparation of crystalline and non-crystalline candies.

3. Cereal & Starch Cookery:

- Microscopic examination of different starches.
- Gelatinization of starch
- Factors affecting gel formation, Gluten formation,
- Preparation of Cakes & Biscuits.

4. Pulse/legume cookery:

- Cooking of legumes by different methods, effect of addition of salt, acid, alkali, oil & spices on quality and time, effect of soaking, germination and pressure cooking on time and quality

5. Egg Cookery:

- Stages of fresh egg white foam,
- Effect of addition of various ingredients on foam formation,
- Coagulation of whole egg, egg yolk and egg white.
- Preparation of custard
- Preparation of Emulsions (Mayonnaise)

6. Milk Cookery:

- Preparation of cottage cheese, with different curdling agents,
- Cream of tomato soup,
- Ice cream preparation.

7. Vegetable and fruit cookery:

- Factors affecting colour, texture, flavour of vegetables by acid and alkali .
- Observation of browning reaction in raw fruits & vegetables

8. Fats & oils:

- Observing Smoking point of different oils.
- Factors affecting absorption of deep fat and shallow fried foods.

INSTITUTIONAL MANAGEMENT

Code :HSC15304CR

Credits: L4

CORE

Periods/Week :4 Hrs

M. Marks: 100 (Ext. Exam: 80/ Int. Asst: 20)

Objectives:

1. To know about different aspects of food service management.
2. To understand about sanitation safety and physical layout of food service organization.
3. to know about cost control, book keeping and accountancy.

Contents:

Unit I: Food – Service, Management, Selection, Storage and Production.

- Introduction to food service establishment
- Types of food services in India – hospitals, hotel , canteen, schools and cafeterias, Formal and informal food services.
- Meal Planning – Menu, types of menu, need for menu planning, principles involved in planning menus, mechanics of planning menu, Menu writing.
- Food selection and storage - The food buyer, the market, purchasing procedure. Selection of food and storage – types of storage, planning storage spaces, sanitation, safety and security of stores.
- Quantity food production- Food Production process, large quantity cooking techniques.

Unit II: Sanitation & Safety

- Sanitation and safety
 - Environmental Hygiene and Sanitation
 - Hygiene in Food Handling
 - Personnel Hygiene (with reference to sources of food infection and health rules.
 - Methods of sanitary dish washing and Cleaning supplies
 - Safety in food catering and use of equipment.

Unit III: Physical layout and equipment-

- Physical layout and equipment-
 - Developing Kitchen plans
 - Layout of Kitchens
 - Work Simplification
 - Equipments for Kitchen and Service rooms.
 - Décor of Service and Dining areas.

Unit IV: Functional Management

- Management : Concept, Processes and Principles.
- Organizing: Organization structure and design, types, formal and informal organization, delegation of authority.
- Financial Management - Concept, Financial planning, Role of Financial Manager, Working Capital Management – inventory, cash and receivables.
- Human Resource Management – concept and significance, Job analysis, Recruitment and selection, training and development.
- Cost control-Factors affecting cost control, techniques of cost control with special reference to foods

References:

1. Agarwal R. D., Organizational and Management, Tata McGraw Hill, publishing co, Ltd, New Delhi. 1982.
2. Beach Dales, S. Personnel, The management of people at work, 4th ed Macmillian Publishing Co. Inc, New York, 1986.
3. Finely, R. e., The personnel and his part, , D,B., Toreprovela, 1971
4. Hitchcock Amry, J. Food service systems administration, Macmillian publishing 1986.
5. Keiser James and Kallio Elmen controlling and analysing cost in food service operations, Jobarwiley and sen, Inc., New York, 1974.
6. Kinder Faye and Green Mancy R. Meal Management, 5th ed, Macmillian Publishing co, Inc, New York 1987.
7. Kotschevar, L. Terrell, M.E. Food service planning prevent and equipment, John wiley and sons Ltd, 1971.
8. Lawrence, a. A. Management in Action, Times of India Press.
9. West Bessie Brooke, wood Levelle, Hunger Virginia F, and Shugart Grace Severaance - Food service in institutions, 5th edition John Wiley and sons, New York 1977.

Assessment of Nutritional Status /Institutional Management (Lab Course)

Code :HSC15305CR

CORE

Credits: P4

Periods/ Week :8 Hrs

M. Marks: 100 (Ext. Exam: 80/ Int. Asst: 20)

LAB - A

1. Diet survey methods

- Diet history - Individual, Family.
- 24 hour recall method.
- Weightment method.
- Qualitative and quantitative methods

2. Anthropometric practices of studying various groups (Infants, children & adults).

- Height
- Weight
- Mid-arm circumference
- Head circumference
- Chest circumference
- Waist hip ratio
- BMI
- Comparison of standards. (Given by ICMR).

3. Biochemical tests

- Blood components tests for iron deficiency
- Protein estimation (Lowrys method)

4. Assessment of nutritional status of:

- Pregnant women, Lactating women and Pre school children.

LAB - B

1. Market survey and cost analysis of processed and finished food products (Traditional meat products, Fluid milk and milk products, Processed apple products and pickles)
2. Evaluation of food service units and equipments.
3. Layout analysis of kitchen – Hospital & Hostel based
4. Planning menus for quantity.
 - Banquet
 - Outdoor catering
 - Packed meals
 - Restaurant
5. Standardizing recipes for quantity.
6. Cost analysis of menus in
 - College canteen
 - Hostel mess
 - Hospital (private and government)
7. Analysis of food safety & hygiene.

MANAGEMENT OF HUMAN SERVICE ORGANIZATIONS

Code: HSC15306CR

CORE

Credits: L 4

Periods/Week: 4 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

Objectives:

1. To understand the concept and Management of Human Service Organization
2. To Know about the Organizations working for the service of women and children
3. To know about the Organizations Working for the Service of Youth and Groups with Special Needs

Contents:

Unit I: Concept and Management of Human Service Organizations.

Concept of Human Service Organizations.

- Need & Nature of human service organizations in India.
- Philosophy and significance in a developing nation.

Management of Human Service Organizations.

- Concept, importance, functions and approaches to management.
- Planning, implementation, personnel management, financial management, administration and monitoring of organizational activities. Managerial skills.

Unit II : Organizations working for the service of women and children.

Government & Non Government Organization Working for the Service of Women.

- National Commission for Women, SEWA, Central Social Welfare Board, State Social Welfare Board, Bhartiya Gramin Mahila Sangh, Women's Development Corporation specific reference to J&K State, Various NGO'S:
 - Help Foundation
 - SOS VILLAGES
 - Helpline
 - Chottay Tarrey

Government & Non Government Organization Working for the Service of Children

- Indian council of child welfare, Integrated Child Development Services, National Institute for Public Co-operation and Child Development, Planned Parenthood Federation, Helpline, Chottay Tarrey.

Unit III: Organizations Working for the Service of Youth and Groups with Special Needs.

- Government & Non Government Organizations Working for the Service of Youth.
- Nehru Yuvak Kendra, YMCA, YWCA, YUVA.

Government & Non Government Organization Working for the Service of Groups with special needs.

- Physically and mentally handicapped, aged, destitute, orphans, street children, National Association for Blind, Spastic Society of India, Help Age - India.

Unit IV: Assessment of Human Services Organizations & Concept of Volunteerism.

Assessment of Human Service Organizations:

- Concept of Volunteerism
- Profile of Volunteers
- Motivation of Volunteers
- Role of Volunteerism and Society
- Assessment of Personal Accountability

References

1. Blake, John, and Lawrence Peter (1992): *The ABC of Management: A Handbook of Management terms and concept*. All India Travellers book seller, New Delhi.
2. Chaudry D. Paul (1993): *Handbook of Social Welfare*, Atma Ram & Sons, New Delhi.
3. Devi, Rameshwari and Ravi Prakesh (1998): *Social Work and Social Welfare Administration*, Vol. I & II Mangal Deep Publication, Jaipur.
4. Krishna, Raj. Maithreyi, C. (1998): *Women and Development, The India Experience*.
5. Moshal, B. S. (1998): *Organizational and Management: Text and Cases*, Galgolia Publishers, New Delhi.
6. Pareek, Udai, (1994): *Beyond Management: Essay on Institution Building and Related Topics*, Oxford University Press, Bombay.

EXTENSION MANAGEMENT

Code: HSC15307CR

CORE

Credits: L 4

Periods/Week: 4 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

Objectives:

1. To understand the concept and process of Extension Management.
2. To enable students to realize the importance of management for achieving organizational goals.
3. To apply the principles of management for effective management of extension organization / services.

Contents:

Unit I: Extension & Personal Management.

Extension:

- Definition and meaning, objectives, need, process and principles of extension
- Teaching learning process, steps of extension teaching
- Motivation , extension approaches
- Requirements of extension workers.

Personal Management :

- Meaning, nature , functions and role of personal management
- Job analysis, job description and job specification

Unit II: Organizing and planning in Extension Management.

- **Organization:** Its meaning, culture, approaches, goals.
- **Planning:** Definition, requirements, elements, contingency.

- **Organizing:** Definition, requirements, line and staff functions, span of management, scalar principle, delegation of authority, use of committees, coordination, involvement of organizations at local level, inputs management, common mistakes in organizing.

Unit III: Staffing and Leading in Extension Management.

- **Staffing:** Definition, Requirements of effective staffing, Human resources development in organization, orienting the new entrant, training for development, training methods --- lecture, group discussion, Seminars, panel discussion, symposium, workshop, case study, role playing, brain storming, Buzz session, video conference, in-service training, performance appraisal,, stress in managing, organizational conflicts, Grievance handling.
- **Leading:** Definition, Requirements of effective leading, the nature of people, theory X, Y, Z. Motivating people to work, Information needs of extension agents.

Unit IV: Controlling and Efficiency of Personal in Extension Management.

- **Controlling:** Definition, Requirements of effective controlling, Monitoring and evaluation, Supervision, Budgeting and Auditing, Reporting, Self- Discipline, Change agent problems, **Efficiency of Personal:** Orientation to new workers, Training of the workers, Stimulus and incentives, Code of ethics,
- Qualities of a good extension manager.

References:

1. Banerjee, S. (1981). Principles and Practice of Management. Oxford and IBH Publishing Company, New Delhi.
2. Basu, C.R., (1989). Organization and Management, S. Chand & Co. Ltd., New Delhi.
3. Burton, Gene and Hanab Thaker (1997). Management Today. Tata McGraw Hill Publishing Company, New Delhi.
4. Chandan, J. S., (1997) Management—Concepts and Strategies, Vikas Publishing House, New Delhi.
5. G. L. Ray., (1996)., Extension Communication & Management.
6. Hersey, Paul and Kenneth, H. Blanchar. (1996). Management of Organizational Behaviour. Utilising Human Resources, Prentice Hall of India, Private Limited; New Delhi.
7. Koontz and Heinz Weihrich., (1990) Essentials of Management. McGraw-Hill; New Delhi.
8. Prasad., M. L., (1999) Principles and Practice of Management. Sultan Chand & Sons, New Delhi.
9. Rao, V. S. P. and Narayana, P. S. (1987) Principles and Practice of Management. Konark Publishers, Private Limited, New Delhi.
10. Tripathi, P. C. and Reddy, P. N. (1993). Principles of Management: Tata McGraw Hill, New Delhi.

MANAGEMENT OF HUMAN SERVICE ORGANIZATION/ EXTENSION

MANAGEMENT (Lab Course)

CORE

Code: HSC15308CR

Credits: P4

Periods/Week: 8 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

1. Visit to Government agencies working for the services of women- health, nutrition, educational, economical and social.
2. Visit to Non- governmental agencies working for the services of women health, nutrition, educational and social.
3. Visit to Government agencies working for the services of children.
4. Visit to Non- governmental agencies working for the services of children
5. Organizing group discussion for planning extension activities for various target groups viz: farmers, farm women and youth.
6. Interaction and its reporting with following officials:
 - Financial Institutions
 - Cooperatives
7. Meeting various extension functionaries from departments of agriculture, horticulture, and animal husbandry
8. Organizing role plays and brain storming session for identified groups.

ADVANCED STUDY IN HUMAN DEVELOPMENT-II

Code: HSC15309CR

CORE

Credits: L 4

Periods/week: 4 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

Objectives:

1. To understand the advanced stages of Human Development with specific focus on youth, adulthood and old age.
2. To understand the principles and factors influencing Human Development in these stages.

Contents:

Unit I: Youth/Young Adulthood.

- Perspectives on youth and adulthood –Biological, cultural and developmental.
- Developmental needs
- Vocational choice, career development.
- Physical changes
- Changes in the structure of thought/culmination of identity formation.
- Life cycle approach- sexuality, Criteria for mate selection, marital adjustment, parenthood, friendships.

Unit II: Middle Adulthood.

- Physical continuity and changes
- Adult Intelligence
- Personality changes
- Relationships at midlife

- Development of self
- Menopause in women, health and disease, adult sexuality.

Unit III: Late Adulthood

- Physical changes-Health, fitness and disability
- Continuity and changes in the personality
- Changes in cognitive abilities
- Grand parenthood-Inter generational relations
- Retirement from formal work-effect on Identity.

Unit IV: Old Age

- Mental Health and Intervention: Depression, Anxiety disorders
Dementia: Alzhiemers disease.
- Family life cycle.
- Death, dying and bereavement.

References:

1. Schiamberg, L.B and Smith K.U (1982) Human Development, New York, Macmillian.
2. Rice, F.P.(1992) Human Development-A life span approach, New Jersey Prentice Hall.
3. Lefrancois, G.K (1996) The life span new York, ward worth publishing.
4. Santrock, J.W (1997) Life span development Brown and Bench Mack.
5. Deaths S.M and Lenker L.J.(eds)1999 Aging and Identity , London Praeger.
6. Berk, L.E.C (1998). Development through the life span. Massachusetts: Allyn & Bacon auicom Company.
7. Kail, .V., & Cauanaugh, J.C. (2004) Human Development (3rd ed.) New York: Wadsworth, A division of Thomson learning, Inc.
8. Papalia, D.E., Old, & Feldman, R.D. (2010). Human Development (10th) New Delhi: Tata McGraw - Hill Publishing Company Limited.

STUDY OF PERSONS WITH DISABILITIES

CORE

Code: HSC15310CR

Credits: L 4

Periods/Week: 4 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

Objectives:

1. To become aware of various impairments and the manner in which these effect the lives of individuals.
2. To identify the physical and social barriers which create difficulty for people with disabilities
3. Understand the variation between people with disabilities.
4. Realize that the experiences of individuals with disabilities are related to their age, gender and also shaped by the context.
5. To apply the understanding gained from the experiences of people with disabilities in planning services for them.

Contents:

Unit I : Understanding Disability.

- Normality, disability, impairment, handicap.
- Various approaches to defining and understanding disability- medical approach, administrative approach, legal approach, social approach.
- Attitudes of people towards disability.
- Techniques of identification and assessment.

Unit II: Skeletal disorders and Sensory Impairments.

- Skeletal and Muscular disorders-causes and effects on individuals-Arthritis, Amputations.
- Sensory disorders-causes and effects on individuals:-
 - Visual: Definition, causes, prevalence, educational considerations.
 - Hearing:Definition, classification, causes, characteristics, prevalence, educational considerations.
 - Speech:Definition classification, causes, prevalence.

Unit III: Intellectual and Emotional Impairments

- Intellectual-causes and effects on individuals-Mental retardation, learning disabilities.
- Emotional-causes and effects on individuals-Autism, Neurosis, Psychosis, Phobias, Obsessions and compulsion, schizophrenia, ADHD, Conduct disorders, Elimination disorders, Habit disorders.

Unit IV: Physical disorders and Overview of Persons with Disabilities.

- Physical disorders- causes and effects on individuals, CNS disorders (Cerebral palsy,Epilepsy,Spinabifida, Spinal cord injuries).
- Physical and social barriers in the development of persons with disabilities, modification of physical and social environment.
- The philosophy of inclusion
- Programs and policies for persons with disabilities.
- Issues in planning inclusive programs for persons with disabilities.

References:

1. Baquer, A. (1994) *Disabled, Disablement, Diabolism*, New Delhi: Voluntary Health Association of India.
2. Kanga F. (1990) *Heaven on wheels*, New Delhi Penguin Books
3. Narasimhan M.C & Mukherjee A.K. (1986) *Disability a continuing challenge*, New Delhi Wiley Eastern limited.
4. Oliver M.(1996) *Understanding Disability, from theory to practice*, London Macmillan press.
5. Pandey R.S & Advani L. (1996) *Perspectives in disability and rehabilitation*. New Delhi Vikas Publishing House Private Limited.
6. Kirk, S.A., Gallagher, J.J., Anastaslow, N.J., & Coleman, M.R. (2006). *Educating conceptual children* (11th ed.) New York: Houghton Mifflin Company.
7. Micheal L. Hardman, Clifford J. Drew, M. Winston Egan, Hardman (2004) *Human Exceptionality - Society, School & Family*, 8th Edition, Allyn & Bacon.

Journals

1. Disability and society
2. Action and disability News
3. Impairment and disability
4. Asia Pacific disability rehabilitation journals.

**Advanced Study in Human Development-I & Study of Persons with
Disabilities (Lab Course)**

Code: HSC15311CR

CORE

Credits: P 4

Periods/week: 8 Hours

M.M: 100(Ext.Exam: 80/Int .Assessment: 20)

1. Plan and organize life skill education for adolescents and youth about responsible parenthood.
2. Study the change in life style after retirement (economic & health problems) and their coping strategies.
3. Study the attitude of people towards death in age group-65 years and above and prepare a report.
4. Individual case study of a child with disability
5. Review and critique of a person with disabilities as portrayed by media (Print and electronic).
6. Case study of two institutions (CRC & Shafaqat).
7. Planning and execution of activities for special children (visual and hearing impaired, mentally retarded in any particular setting).

COMMUNITY NUTRITION

Code: HSC15312DCE

DISCIPLINE CENTRIC ELECTIVE

Credits: L 3

Period / week: 3 hours

M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

Objectives:-

1. Identify Nutritional problems in the community.
2. Evolve/ develop solutions to overcome these problems in the community.
3. Realize the role of state, national and international agencies to combat malnutrition.
4. To know how to plan different programmes of nutrition education for the community.
5. Understand the different methods of assessment of nutritional status of the community.

Contents:

Unit I: Community

- Definition and concept of community and health , Nutrition and society.
- Role of the community/public health nutritionist in health care delivery system.
- Impact of the following on nutritional status of the community:
 - Environmental and agricultural factors.
 - Storage and distribution
 - Socio -cultural and economic factors.
 - Population size.
 - Science and technology.

Unit II: Nutrition and Behaviour

- Factors affecting food habits and behaviour, Means of modifying them to promote health.
- Methods of Assessing Nutritional Status of the Community
- Definition, Objectives and scope of Nutrition Education.
- Prevalence of malnutrition in India.
- Role of National Nutrition Policy in protecting health of the Nation.

Unit III : Common Nutritional Problems in India.

- Common nutrition problems in India and measures to combat them.
- Nutritional surveillance
- ICDS, ANP, SNP, Mid day meal programme and School lunch programme.

Role of National & International Agencies in Improving the Nutritional Status of the Community.

- WHO, FAO, UNICEF, CARE, NIN, CFTRI, ICMR, Social Welfare Board & MCH .

References:

1. Park K., Preventive and Social Medicine. Banarasidas Bhanot Publishers 4th Ed. 1995.
2. Dwyer, T. Mayer, Food and Nutrition Policy in a changing world. New York, Oxford University Press, 1979.
3. Singhai, C. G. Environment Nutrition and Health Hazards in India, Vohra Publishers and distributors, Allahabad (India).
4. Margen Sheldon. Progress in Human Nutrition. The AVI publishing company, Inc, 1971.
5. Swaminathan. M. Handbook of Food and Nutrition.
6. Rao, Bhaskara. Community and School Nutrition Education discovery Publishing House, New Delhi. 1998.
7. McLaren S. Donald. Nutrition in the community John, Wiley & Sons Chichester 1983,
8. McLaren S. Donald Nutrition and its Disorders 3rd Ed. Churchill Livingstone Edinburgh, 1981.

WOMEN, NUTRITION & HEALTH

Code: HSC15313DCE

Credits: L 3

DISCIPLINE CENTRIC ELECTIVE

Periods/Week: 3 hrs

M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

Objectives:

1. To acquaint students with status of women in family and society.
2. Understand how various factors influence the health and nutritional status of women.
3. Plan and undertake various activities to improve the status of women.
4. Understand how health of women influence family, community and national development.

Contents:

Unit I: Women in - Family, Community & Society

- Women's role, their resources and contribution to family.
- Demographic changes, menarche, marriage, fertility, life expectancy, aging and widowhood, female- headed families.

Women & Society

- Women's role their resources and contribution to society.
- Effect of Urbanization on women
- Impact of economic policies, industrialization and globalization on women.

Unit II: Women and Nutrition.

Women's Nutritional requirements and food needs.

- Pubescence and Adolescence, Food related habits of Adolescents, General nutritional problems during adolescence.
- Pregnancy and Lactation, General dietary problems of expectant mothers.
- Menopause and dietary consideration.
- Nutrition related problems of old age.
- Situation of women in global, national and local context.
- Improving the nutrition and health status - interventions throughout the life cycle

Unit III: Women and Health

- Gender and Health, Health seeking behaviour.
- Women and aging --- special concerns in developed and developing societies - menopause, osteoporosis, chronic degenerative disease, neurological problems
- Women - AIDS and Breast Cancer.
- Empowerment of Women
- CEDAW (Convention on Elimination of all forms of Discrimination against Women) and WRLH (Women's Right to life and Health).
- Role of Education and various national schemes.

References:

1. ACC/SCN Policy Discussion Papers.
2. Wallace, H. M. and Giri, K. (1990) Health care of Women and Children in Developing Countries, Third Party Publishing Co., Oakland, California.
3. UNICEF, (1994): The Urban and Household Food Security, UNICEF.
4. IDRC, (1993): Gender, health and Sustainable Development.
5. NGO, Committee on UNICEF (1997): Women and Children in Urban Poverty --- What Way Out?
6. Census Reports, Government of India.
7. NFHS Reports.
8. UNICEF--- State of the World's Children.
9. Weil, D.E.C.; Alicbusan, A. P.; Wilson, J.F; Reich, M.R., and Bradley, D. J. (1990). The Impact of Development Policies on Health. A review of the Literature World Health Organization. Geneva.
10. International Nutrition Foundation—Micro-nutrient Initiative (1999): Preventing Iron Deficiency in Women and Children; Technical Consensus on Key Issues.
11. Gopalan, C. and Kaur, S. (Eds.) (1989): Women and Nutrition in India, Nutrition Foundation of India.

MENTAL HEALTH IN DEVELOPMENTAL PERSPECTIVE

Code: HSC15314DCE
Credits: L 3
Periods/week: 3 Hours
M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

DISCIPLINE CENTERIC ELECTIVE

Objectives

1. To understand the importance of mental health at different stages of life.
2. Develop skills for promoting mental health across the life span.
3. Identify mental health issues in the community & sensitizing its members.
4. Develop skills of organizing school mental health programs.

Contents:

Unit I: Mental Health

- Definition, Concept, Characteristics & importance of holistic health.
- Biological, Ecological, Psychological concepts of Mental health
- Concept of normality & abnormality.
- Mental health - needs & programmes.

Unit II: Infancy & Early Childhood years

- Implication of attachment & bonding for mental health, deprivation syndrome.
- Mental health needs (safety, security, autonomy, self concept, importance of nutrition in health)
- Behavior difficulties manifested at this stage - feeding problems, aggression & withdrawal problems related to early schooling & formal learning.

Unit III: Middle Childhood , Adolescence and Adulthood- Mental Health Needs

- Mental health needs - Recognition, appreciation, friendship & industry.
- School related problems - discipline, truancy, phobias, learning difficulties & disabilities.
- Maladjustment at home & school.
- Problems related to physical appearance (developments & relationships)
- Problems related to sexuality.
- Authority adolescent conflict- (parents, grandparents & school authority)

References:

1. Shawl, S.I -A Text Book of Mental Health-
2. Govt. of India Ministry of health & family welfare (1982) National mental health program for India.
3. Grahan, P. J, Jegeda, R. O, Kapur, M., Minde, G., Nikapota, A.P. & Sell II. L. (1983). A manual on child mental health & psycho social development part III for teachers New Delhi. WHO.
4. Carter, F & Cheesman, P. (1988) Anxiety in childhood & adolescence encouraging self-help through relaxation training. London: Croom Helm
5. Barry, P.D. (1990):Mental health & mental illness (4th ed) Philadelphia J.B, Lippincott.Co.
6. Bone, E, D. (1991) Handbook for the positive revolution, London: Pengium Publication.
7. Gopal, K. N. (1994) Mental health & you
8. Kapur M. (1995) Mental Health of Indian children. New Delhi: Sage publications.
9. Goleman, D (1996). Emotional intelligence. N.Y: Bantam Books.
10. Sharma, R. (2006) Abnormal Psychology. New Delhi: Atlantic Publishers.

COMMUNITY ORGANIZATIONAL AND DEVELOPMENT THEORIES

Code: HSC15315DCE

DISCIPLINE CENTRIC ELECTIVE

Credits: L3

Periods/Week: 3 Hours

M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

Objectives:

1. To understand the concept, structure and organization of different types of communities.
2. To understand the factors contributing to changes in community, community organization and their mobilization for development goals.

Contents:

Unit I: The Community, Social Groups and Organization

- Concept and characteristics of a community.
- Structures and organization of different types of communities - tribal, rural and urban. Different communities - norms, mores and prevalent customs.
- Social Groups -Concepts, types, characteristics and dynamics of different social group, interests, attitudes and motivations for affiliation.
-

Unit II: Dynamics of Change in Community

- **Social organizations** - Family, school, co-operatives and other organization and their role in community.
- Factors contributing to change and transition in the structure and organization of societal institutions
- **Religion, socio** - Political Ideologies, Imperialism, Mass media and Communication,

- **Planned changes** - Concept, solution and changes of planned social changes.

Unit III: Organization in Development

- Theories of development, people centered development, factors contributing to paradigm shift.
- Organizations involved in development of government, corporate and voluntary sector organizations.
- Analysis of their present role, future potential in facilitating development; inter sectoral synergy, importance and operation allegation. Role of leadership in community development.

References:

1. Burkey, Stan (1993) People First: A Guide to Self-Reliant, Participatory Development.
2. Dale, R (2000): Organizational and development strategies, structures and process, Sage publication; New Delhi.
3. Edwards, M and Hulma, D. (1992). Making a difference; NGO's and development in a changing world.
4. Handy, C. B. (1983); Understanding Organizations.
5. Harka Lombos ---- Sociology: Themes and Perspectives.
Korten, D.C. (1990): People Centered Development---Getting to the 21st century New Delhi: Kanishka Publishers.
6. Capuzzi D & Gross D.R. Counselling & Psycho therapy-Theories and Interventions (4th Ed) Pearsons Education India.

CULTURE AND PSYCHOLOGY

GENERIC ELECTIVE

Code: HSC15316GE

Credits: L 3

Periods/week: 3 Hours

M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

Objectives:

1. To understand basic concepts related to culture & psychology with specific reference to cross cultural psychology.
2. To understand concerns & issues related to the study of culture & psychology.
3. To perceive the need for indigenization & development of humanistic approach in the study of culture & psychology.

Contents:

Unit I: Understanding the concept & process related to culture & psychology.

- Basic concept of culture & psychology.
- Culture:-Characteristics, dimensions (materials, cognitive, normative)
- Culture & civilization, institutions, customs, folkways, mores and laws.
- Developmental psychology and culture (functions of psychology, development of culture)

Unit II: Culture & Personality development

- Importance of language.
- Characteristics of personality (elements, determinants & traits of personality)
- Social theories of human development (Mead, Cooley, Benedict, Freud, Erickson)

Unit III: Methodological issues & theoretical concerns in the study of culture & psychology.

- Exchange theory.
- Cultural approaches.
- Theoretical approaches.
- Methodological issues.

References:

1. Dawson, L. & Lonner, W. (1974) Readings in cross cultural psychology. Hong Kong: University of Hong Kong Press.
2. Berry, J. W, Poortinga, Y. H & Pandey, J. (1981) Handbook of cross cultural psychology: Theory & methods Boston Allyn & Bacon.
3. Eshleman J.R., Cashion B.G & Basirico L.A (1988) Sociology- An Introduction USA. Harper Collins, Publishers.
4. Hess B.B., Markson E.W & Stein P.J (1988) Sociology 3rd Edition, New York, Macmillian Publishing Company.
5. Light D; Keller, S & Calhoun C (1989) Sociology 5th Edition, New York Alfred A. Knoff.
6. Thio, A (1989) Sociology - An Introduction 2nd Edition New York, Harper & Row Publishers.
7. Berry, J. W. Dason, P. R. & Saraswathi, T. S. (Eds) (1997) Handbook of cross cultural psychology: Basic process & human development (2nd ed.) Boston Allyn & Bacon.
8. Danziger, K. (1997) Naming the mind. London Sage.
9. Dattan, N. & Resse, H. W. (1997) Life span developmental psychology, New York: Academic Press.
10. Saraswathi, T. S. (1999) culture, Human Development & Socialization. New Delhi; Sage.
11. Baker, C.(2000) Cultural Studies. London; Sage.
12. Coulding, N. (2000) Inside Culture. London: Sage.
13. Valand, J. (2000). Culture & Human development.
14. Macionis J.J (2001) Sociology 8th Ed. New Jersey, Prentice Hall

BEHAVIOUR CHANGE AND ADVOCACY IN HEALTH

Code: HSC15317GE

Generic Elective

Credits: L 3

Periods/Week: 3 Hours

M.M: 75(Ext.Exam: 60/Int .Assessment: 15)

Objectives:

1. To understand the multi-faceted nature of community health.
2. To develop a holistic understanding of sociology of health and people's perception towards health
3. To be able to critique policies, intervention programmes, and strategies adopted for addressing community health issues.

Contents:

Unit I: Health -Development Perspectives

- Health situation, concept of community health, epidemiology, demography, preventive and promotive health
- Socio cultural perceptions and motivations towards health.
- Health care systems-types-contemporary and traditional systems, socio-cultural context of health care and delivery systems.

Unit II: Community Health Issues

- Reproductive and child Health (RCH) – maternal and child mortality status. Traditional and contemporary RCH practices and issues.
- Social Health issues- Drugs Tobacco, alcohol – prevalence, prevention and rehabilitation.

- Environment and health- Pollution, toxicity, quality, contaminations, residues and adulteration issues- prevalence, health implications.
- Health issues during disaster and emergencies and special circumstances-assessment and surveillance of affected groups, relief and rehabilitation strategies.

Unit III: Health Communication and Advocacy

- Health communication and advocacy- Meaning, concept, various strategies,types.
- Strategizing health advocacy and BCC campaigns- elements, tools and techniques.
- Role of media in promoting health
- Synergizing inter-sectoral partnerships for health advocacy and action.

References:

1. Barur, V(1999) private Health Care in India.New Delhi: Sage Publications.
2. Easterling, D., Gallagher, K.; Lodwick, D. (2003) Promoting Health at the Community Level.Thousand Oaks, California: Sage Publications.
3. Park,K. (2000) Essential of Community Health.Jaipur: M/S Banarsidas Bhanot.
4. Gupta, J.A.(2000) New Reproductive Technologies- Women's Health and Autonomy.New Delhi: Sage Publications.

Health consequences of Nutritional Deficiencies

Code:HSC15318OE

Credits: L3

Periods/week: 3Hours

Marks: 75 (Ext. Exam: 60 / Int. Assessment: 15)

OPEN ELECTIVE

Contents:

Unit I: Common Nutritional Problems In India.

- Low Birth Weight (LBW)
 - Definition and Developmental problems of LBW
 - Nutritional Requirements.
 - Methods of feeding
- Protein Energy Malnutrition (PEM).
 - Types and etiology of PEM
 - Nutritional Requirement .

Unit II : Nutrition Deficiency Diseases

- Vitamin A deficiency Diseases
 - Etiology
 - Clinical forms and management.
- Nutritional Anemia
 - Types and clinical features
 - Dietary management

UNIT III: Nutrition Intervention Programmes For improving Nutrition And Health

- Vitamin A prophylaxis programme.
- Prophylaxis against Nutritional Anemia.
- Mid day Meal programme.
- ICDS programme.

References:

1. Park,k.(2013).Textbook of Preventive and Social Medicine(22nd ed.).Banarasidas Bhanot Publishers.
2. Srilakshmi,B.(2000).Dietetics(3rd ed.).New Age International Publishers.
3. Robinson,C.H.,Lawler,M.R.,Chenoweth,W.L.,Garwick,A.E.(2013).Normal and Therapeutic Nutrition(21th ed.).Macmillan Publishing Company New York.
4. Ghai,O.P.,Paul,V.K.,Bagga,A.(2009).Ghai Essential Pediatrics(17thed.)CBS Publishers.
5. Rice,F.P.(1992).Human Development-A Life Span approach(2nd ed.).Library of Congress Cataloging in publication data.
6. Mahan,L.K.,Escott-Stump,S.,Raymond,J.L.(2012).Krauses Food and the Nutrition Care Process(13th ed.).Elsevier publishers.