BSHND 310: DIETETICS-III

Course Learning Outcomes:

- To understand the role of nutrition and dietetics in managing disease and preventing complications
- To get hands-on training for the dietary modification of normal diets aligned with various health disorders
- To comprehend the role of nutrition education and policies towards nutrition security

Content-Theory:

1. **Diet based regimen to improve the public health;**
   - Diet supplementation for diseased patients;
   - Malabsorption and mineral deficiency;
2. **Health diets and lifestyles;**
   - Preventing diet related diseases;
   - Nutritional implications of various diets;
   - Managing disease and avoiding complications through diet diversification;
3. **Dietary management in various health disorders (objective, physiology, food choices, diet plans):**
   - Obesity,
   - Leanness and underweight;
   - Coronary heart disease:
   - Dyslipidemia,
   - Hypertension,
   - Ischemic heart disease,
   - Heart failure;
   - Fevers and infections;
   - Diabetes mellitus;
4. **Diseases of respiratory system:**
   - Cystic fibrosis,
   - Asthma;
5. **Rheumatic diseases:**
   - Rheumatoid arthritis,
   - Osteoarthritis & gout;

6. **Inborn errors of metabolism:**
    - Phenylketonuria,
    - Maple syrup urine disease,
    - Galactosemia,
    - glycogen storage disease
    - Renal diseases;
    - Burn
    - Surgical conditions;
    - Bacterial overgrowth;
7. **Infections;**
    - AIDS;
    - Food allergy
8. **Protein energy malnutrition;**
    - Micronutrient deficiencies;
9. **Policy principles for promotion of healthy diets;**
    - Incorporating nutrition objectives into development policies;
    - Strategic actions and for promoting healthy diets;
    - Drawing up of nutrition education programs;
    - Role of specialist in dietetics and diseases.

Content-Practical:

1. **Planning of modified diet:**
    - Consistent carbohydrate diet,
    - Moderate carbohydrate diet;
2. **Modified proteins diet:**
    - High protein diet,
    - Restricted protein diet;
3. **Modified fats diet:**
    - Restricted fats diet;
    - Modified micronutrients diet;
    - Controlled sodium, potassium and phosphorus diet;
    - Dietary management in various health disorders;
    - Hospital visits and nutrition camps.

Teaching-Learning Strategies:

Teaching will be a combination of class lectures, class discussions, and group work. Short videos/films will be shown on occasion.

Assignments:

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination:

Sessional Work: 25 marks
Midterm Exam: 35 marks
Final Exam: 40 marks

Recommended Readings:

1. Mahan, L.K., Escott-Stump, S. & Raymond, J.L. (2012). Krause's Food, Nutrition & Diet Therapy, (13th ed.) Elsevier Saunders, St. Louis, Missouri, USA.
2. Mudambi, S.R. & Rajagopal, M.V. (2007). Fundamentals of Foods, Nutrition & Diet Therapy, 5thed. New Age International Pvt. Ltd. Publishers, New Delhi.
3. Punekar, M. & D'Souza, J. (2010). Handbook of Applied Nutrition, Dietotherapy and Diet Management. SBS Publishers & Distributors Pvt. Ltd., New Delhi.
4. Rawat, S. (2015). Applied Nutrition. Random Publication, New Delhi.
5. Schlenker, E. & Gilbert, J.A.(2015). Williams' Essentials of Nutrition and Diet Therapy, (11th ed.) Elsevier/Mosby Inc., Louis, Missouri.
4. 6.Singh, J. (2008). Handbook of Nutrition and Dietetics. Lotus Press, India.