



# Department of Higher Education

## U.P. Government, Lucknow

National Education Policy-2020

Common Minimum Syllabus for all U.P. State Universities

**Co-curricular course: Semester-1**

**Course Title: Food, Nutrition and Hygiene**

| Name                                                             | Designation                    | Affiliation                                                 |
|------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------|
| <b>Steering Committee</b>                                        |                                |                                                             |
| Mrs. Monika S. Garg, (I.A.S.),<br>Chairperson Steering Committee | Additional Chief Secretary     | Dept. of Higher Education<br>U.P., Lucknow                  |
| Prof. Poonam Tandan                                              | Professor, Dept. of Physics    | Lucknow University, U.P.                                    |
| Prof. Hare Krishna                                               | Professor, Dept. of Statistics | CCS University Meerut, U.P.                                 |
| Dr. Dinesh C. Sharma                                             | Associate Professor            | K.M. Govt. Girls P.G. College<br>Badalpur, G.B. Nagar, U.P. |

### **Syllabus Developed by:**

| S. No. | Name                                | Designation         | Department   | College/ University                         |
|--------|-------------------------------------|---------------------|--------------|---------------------------------------------|
| 1      | Dr. Nitu Singh<br>Subject Expert    | Associate Professor | Home Science | H.N.B.G.P.G.College,<br>Naini, Prayagraj    |
| 2      | Dr. Shivani Verma<br>Subject Expert | Associate Professor | Home Science | K.M.G.G.P.G.College,<br>Badalpur, G.B.Nagar |

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| Programme /Class:<br>Certificate                                                                                                                                                                                                                                                                                                                                                                                               | Year: First                                                                                                                                                                                                                                                                                   | Semester: First             |
| Co-Curricular Course                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                               |                             |
| Course Code: Z010101T                                                                                                                                                                                                                                                                                                                                                                                                          | Course Title: Food, Nutrition and Hygiene                                                                                                                                                                                                                                                     |                             |
| Course outcomes: <ul style="list-style-type: none"><li>To learn the basic concept of the Food and Nutrition</li><li>To study the nutritive requirement during special conditions like pregnancy and lactation</li><li>To learn meal planning</li><li>To learn 100 days Nutrition Concept</li><li>To study common health issues in the society</li><li>To learn the special requirement of food during common illness</li></ul> |                                                                                                                                                                                                                                                                                               |                             |
| Credits: 2                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                               | Compulsory                  |
| Max. Marks: 25+75                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                               | Min. Passing Marks:         |
| Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 2-0-0                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                               |                             |
| Unit                                                                                                                                                                                                                                                                                                                                                                                                                           | Topics                                                                                                                                                                                                                                                                                        | No. of Lectures<br>Total=30 |
| I                                                                                                                                                                                                                                                                                                                                                                                                                              | Concept of Food and Nutrition<br>(a) Definition of Food, Nutrients, Nutrition, Health, balanced Diet<br>(b) Types of Nutrition- Optimum Nutrition, under Nutrition, Over Nutrition<br>(c) Meal planning- Concept and factors affecting Meal Planning<br>(d) Food groups and functions of food | 8                           |
| II                                                                                                                                                                                                                                                                                                                                                                                                                             | Nutrients: Macro and Micro<br>RDA, Sources, Functions, Deficiency and excess of<br>(a) Carbohydrate<br>(b) Fats                                                                                                                                                                               | 7                           |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | (c) Protein<br>(d) Minerals<br>Major: Calcium, Phosphorus, Sodium, Potassium<br>Trace: Iron, Iodine, Fluorine, Zinc<br>(e) Vitamins<br>Water soluble vitamins: Vitamin B, C<br>Fat soluble vitamins: Vitamin A, D, E, K<br>(f) Water<br>(g) Dietary Fibre                                                                                               |   |
| <b>III</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1000 days Nutrition<br>(a) Concept, Requirement, Factors affecting growth of child<br>(b) Prenatal Nutrition (0 - 280 days): Additional Nutrients' Requirement and risk factors during pregnancy<br>(c) Breast / Formula Feeding (Birth – 6 months of age)<br>Complementary and Early Diet (6 months – 2 years of age)                                  | 8 |
| <b>IV</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Community Health Concept<br>(a) Causes of common diseases prevalent in the society and Nutrition requirement in the following:<br>Diabetes<br>Hypertension (High Blood Pressure)<br>Obesity<br>Constipation<br>Diarrhea<br>Typhoid<br>(b) National and International Program and Policies for improving Dietary Nutrition<br>(c) Immunity Boosting Food | 7 |
| <b>Suggested Readings:</b><br>1. Singh, Anita, "Food and Nutrition", Star Publication, Agra, India, 2018.<br>2. 1000Days-Nutrition_Brief_Brain-Think_Babies_FINAL.pdf<br>3. <a href="https://pediatrics.aappublications.org/content/141/2/e20173716">https://pediatrics.aappublications.org/content/141/2/e20173716</a><br>4. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5750909/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5750909/</a><br>5. वृंदा सिंह "आहार और स्वास्थ्य" 2015, तेहरवां<br>6. Sheel Sharma, Nutrition and Diet Therapy, Peepee Publishers Delhi, 2014, First Edition. |                                                                                                                                                                                                                                                                                                                                                         |   |
| <b>Suggested Continuous Evaluation Methods:</b><br>MCQs, Practical Diet/ Meal Planning, assignments Presentations, group Discussion, Case study, Survey                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                         |   |
| <b>Suggested equivalent online courses:</b><br><a href="https://www.udemy.com/course/internationally-accredited-diploma-certificate-in-nutrition">https://www.udemy.com/course/internationally-accredited-diploma-certificate-in-nutrition</a><br>Diploma in Human Nutrition-Revised Offered by Alison                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                         |   |