

## Course Outline

| Programme                                                                                                                                                                                                                                                                                                                                                  | ADP Home Economics                                                                                              | Course Code | HEFN-103L                                                          | Credit Hours | 1(0+1) |
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| Course Title                                                                                                                                                                                                                                                                                                                                               | FUNDAMENTALS OF FOOD AND NUTRITION (LAB)                                                                        |             |                                                                    |              |        |
| Course Introduction                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |             |                                                                    |              |        |
| This subject will equip students with basic nutrition concepts, including the role of nutrients in the body and the foods sources of those nutrients. They will learn to identify factors which influence food choice, and how they influence nutritional status. Students will also learn to apply the concepts to the planning and preparation of meals. |                                                                                                                 |             |                                                                    |              |        |
| Learning Outcomes                                                                                                                                                                                                                                                                                                                                          |                                                                                                                 |             |                                                                    |              |        |
| On the completion of the course, the students will:<br>1. Understand the basic principles of human nutrition and dietary needs.<br>2. Assimilate the functions and sources of basic nutrients.<br>3. Explain the impact of nutrition on health and well-being                                                                                              |                                                                                                                 |             |                                                                    |              |        |
| Course Content                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |             | Assignments/Readings                                               |              |        |
| Week 1                                                                                                                                                                                                                                                                                                                                                     | Introduction to practical side of Food and Nutrition<br>Orientation to File Work                                |             | Understanding Food: Principles and Preparation<br>Ch#5, pg.92-95   |              |        |
| Week 2                                                                                                                                                                                                                                                                                                                                                     | Basic practical terms and their definitions                                                                     |             | Understanding Food: Principles and Preparation<br>Ch#5, pg.92-95   |              |        |
| Week 3                                                                                                                                                                                                                                                                                                                                                     | Learning of laboratory skills, abbreviations and symbols of terms used in measuring and weighing various foods. |             | Understanding Food: Principles and Preparation<br>Ch#5, pg.101-102 |              |        |
| Week 4                                                                                                                                                                                                                                                                                                                                                     | Cutting Methods                                                                                                 |             | Understanding Food: Principles and Preparation<br>Ch#5, pg.98-100  |              |        |
| Week 5                                                                                                                                                                                                                                                                                                                                                     | Cooking Methods                                                                                                 |             | Understanding Food: Principles and Preparation<br>Ch#5, pg.92-95   |              |        |
| Week 6                                                                                                                                                                                                                                                                                                                                                     | Introduction to Dietary Composition of Various Foods                                                            |             | Normal and Therapeutic Nutrition<br>Ch#4, pg.34                    |              |        |
| Week 7                                                                                                                                                                                                                                                                                                                                                     | Food Composition Table                                                                                          |             | Normal and Therapeutic Nutrition<br>Ch#4, pg.35                    |              |        |
| Week 8                                                                                                                                                                                                                                                                                                                                                     | Food Composition Table                                                                                          |             | Normal and Therapeutic Nutrition<br>Ch#4, pg. 35                   |              |        |
| Week 9                                                                                                                                                                                                                                                                                                                                                     | Mid Term Exam                                                                                                   |             |                                                                    |              |        |
| Week 10                                                                                                                                                                                                                                                                                                                                                    | Concept of serving size with respect to food groups                                                             |             | Understanding Nutrition Ch#2, pg 42,43                             |              |        |

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| <b>Week 11</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effect of preparation and cooking on color ,texture and palatability of cereals                         | Understanding Food: Principles and Preparation<br>Ch#16, pg. 338,339                                          |
| <b>Week 12</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effect of preparation and cooking on color ,texture and palatability of different protein foods         | Understanding Food: Principles and Preparation<br>Ch#12, pg. 244<br>Ch#7, pg. 153                             |
| <b>Week 13</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effect of preparation and cooking on color ,texture and palatability of milk                            | Understanding Food: Principles and Preparation<br>Ch#10, pg. 210,211                                          |
| <b>Week 14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effect of preparation and cooking on color ,texture and palatability of sugar                           | Understanding Food: Principles and Preparation<br>Ch#25, pg. 491                                              |
| <b>Week 15</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effect of preparation and cooking on color ,texture and palatability of different fruits and vegetables | Understanding Food: Principles and Preparation<br>Ch#13, pg 275, 302                                          |
| <b>Week 16</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Revision</b>                                                                                         | Understanding Food: Principles and Preparation<br>Understanding Nutrition<br>Normal and Therapeutic Nutrition |
| <b>Week 17</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | File Signing                                                                                            |                                                                                                               |
| <b>Week 18</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Final Term Exam</b>                                                                                  |                                                                                                               |
| <b>Textbooks and Reading Material</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                         |                                                                                                               |
| 1. USA Geissler, C. A., & Powers, H. J. (2010). Human nutrition (12th ed.). Churchill Livingstone.<br>2. Mudambi, Sumati, R. and Rajagopal, M.V. (2013). Fundamentals of Food, Nutrition, and diet therapy. New Age International.<br>3. Srilakshmi, B. (2023). Food science (8th ed., Multi-Colour Edition). New Age International Publishers<br>4. Whitney, E. N., & Rolfes, S. R. (2022). Understanding nutrition (16th ed.). Cengage Learning<br>5. Robinson, C. H., Lawler, M. R., Chenoweth, W. L., & Garwick, A. E. (1986). Normal and therapeutic nutrition (17 <sup>th</sup> ed.). Macmillan Publishing Company. |                                                                                                         |                                                                                                               |
| <b>Teaching Learning Strategies</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                         |                                                                                                               |
| Lecture-based learning through lectures and presentations.<br>Group learning through group assignments discussion and laboratory work.<br>Individual learning through practical work and application of theory principles.                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                         |                                                                                                               |
| <b>Assignments: Types and Number with Calendar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                         |                                                                                                               |
| Assignment 1 (Week 7): Food Composition Table<br>Assignment 2 (Week 10): Concept of serving size with respect to food groups                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                         |                                                                                                               |