

## Nutrition through the Life Cycle

Course Code	Title of Course	Credit Hours
HND-222	Nutrition Through the Life Cycle	3(3-0)

### Learning Outcomes:

Students will be able to:

- Analyze the nutritional needs during conception, infancy, childhood, adolescence, male and female adults, pregnancy, lactation and during aging.
- Suggest dietary recommendations in special clinical conditions

### Course Contents:

Preconception nutrition: overview, reproductive physiology, nutrition-related disruption in fertility, nutrition and contraceptives, premenstrual and polycystic ovary syndrome, obesity and fertility, diabetes prior to pregnancy, disorders of metabolism; Nutrition during pregnancy: embryonic and fetal growth & development, pregnancy weight gain, nutrition and outcome of the pregnancy, common health problems during pregnancy, nutrient needs and dietary guidelines during pregnancy; Nutrition and lactation: human milk composition, benefits of breast feeding, breast milk supply and demand, maternal diet during lactation, factors influencing breastfeeding initiation and duration, common breast feeding conditions, medical contradictions in breast feeding; Infant nutrition: assessing new born health, energy and nutrient needs, development of infant feeding skills, common nutritional problems and concerns, infants at risk; Toddlers and pre- schooler nutrition: normal growth and development, energy and nutrient needs, common nutritional problems, nutrition related conditions, food allergies and intolerances; Child and pre-adolescent nutrition: normal growth and development, energy and nutrient needs, common nutritional problems, prevention of nutrition related disorders, dietary recommendations; Adolescent nutrition: normal physical growth and development, health and eating related behavior, energy and nutrient requirements; Adult nutrition: physiological changes of adulthood, dietary recommendations, nutrient recommendations, nutrition intervention for risk reduction; Geriatric nutrition: physiological changes, nutritional risk factors, dietary recommendations and food safety, nutrient recommendations.

**Suggested Readings Textbook:**

1. Brown, J.E. 2024. Nutrition through the Life Cycle, 8th ed. Cengage Learning, Belmont, CA, USA.

**Reference Books:**

1. Rolfes, S.R., K. Pinna and E. Whitney. 2021. Understanding Normal and Clinical Nutrition, 12th ed. Thomson and Wadsworth Publishers, USA.
2. Shetty, P. 2002. Nutrition through the Life Cycle. Leatherhead International Ltd. And Royal Society of Chemistry, Cambridge, U.K.
3. Worthington-Roberts, B.S. and S.R. Williams. 2000. Nutrition Throughout the Life Cycle, 4<sup>th</sup> ed The McGraw-Hill Education, Maidenhead, Berkshire, U.K