



UNIVERSITY OF NORTH BENGAL

PROPOSED COURSE STRUCTURE

**FOUR YEAR UNDERGRADUATE
PROGRAM (FYUGP)**

SEMESTER-II

Skill Enhancement Course

**MATERNAL AND CHILD
NUTRITION**

W.E.F.2024–2025

SEMESTER -II

Course Type: Skill Enhancement

Course Course Code:

CourseName: Maternal and Child Nutrition

Credits: 3 (Theory-2, Practical-1)

FullMarks: 60(Theory-40,Practical-20)

Brief Course Description:

This course provides an overview of nutrition issues affecting pregnant and postpartum women, females of reproductive age, infants, children and adolescents. The course integrates public health practice and policy recommendations with evidence-based clinical practice guidelines to provide a comprehensive view of maternal and child health (MCH) nutrition issues seen by practitioners in community settings. The course also provides an opportunity for students to develop social marketing and media communication skills and messages appropriate for maternal and child health (MCH) populations as well as to evaluate child nutrition assistance programs and policies.

Prerequisite(s)and/orNote(s):

- (1) High School Biology.
- (2) Note(s): Syllabus may be modified after and not during the term itself, depending on the circumstances. However, students will be evaluated only on the basis of topics covered in the course.

Course Objectives:

Knowledge acquired:

- (1) Summarize and critically discuss and understand both fundamental and applied aspects of maternal and child nutrition.
- (2) Able to explain functions of specific nutrients in maintaining pregnant health.

Skills gained:

- (1) Gain in basic knowledge of the different nutrients and their role in maintaining health of the mother and child
- (2) Menu Planning.

THEORY

Credits: 2

Total lectures: 30

Unit1 Introduction

(5 Lectures)

Nutrition Prior to Pregnancy, Role of Nutrition in Women's Health, Effects of preconceptional weight status and gestational weight gain on pregnancy outcomes. Promising practices and evidence-based interventions to improve nutritional status prior to and between pregnancies.

Unit2 Nutrition During Pregnancy, Postpartum Weight Issues

(9 Lectures)

Postpartum weight retention, including promising practices and evidence-based intervention strategies . Nutrient needs and metabolic adaptations of pregnancy. Role of nutrition in moderating risk of poor maternal-fetal outcomes (preterm birth, SGA/LGA, gestational diabetes, gestational hypertension/pre-eclampsia, congenital anomalies

Unit3 Infant Nutrition, Focus on Breastfeeding Promotion

(10Lectures)

Physiology of infant feeding with a focus on physiological reflexes and hunger/satiety cues. Nutrient needs of infants and overview of feeding options including breastfeeding and formula feeding. Breastfeeding support and promotion programs and interventions. Toddler and Preschool Nutrition: Effects on Health and Food Allergy Risk: Physiological and psychosocial development in early childhood as it pertains to feeding ability and food-related behaviors of early childhood. Role of childcare and early education settings in promoting healthy eating and reducing obesity risk.

Unit 4 Child Nutrition Programs: Promoting Healthy Eating and Physical Activity Behaviors

(6Lectures)

Federal programs that serve school age children and adolescents.
Reflection on challenges and opportunities in meeting school nutrition standards.

PRACTICAL

Credits:1

Total classes:20

1. 24-Hour Dietary Recall of Pregnant Woman/New mother: Conduct and record a dietary intake over 24 hours to analyze nutrient consumption
2. Menu Planning for Toddlers: Create a simple one-day meal plan for a toddler, ensuring it includes a variety of food groups.
3. Nutrition Education Materials: Create an educational flyer or poster on a topic such as the importance of breastfeeding or balanced diets for children.

Suggested Readings

1. Boyle MA, Holben D. Community nutrition in action: an entrepreneurial approach. 4th edition. Thompson Wadworth, 2006. Chapter 10, pages 311-320

2. Position of the American Dietetic Association: Nutrition and the lifestyle for a health pregnancy outcome. J Am Diet Assoc. 2002;102:1479-1490. (Note – new position due to be published early 2008)
3. Position of the American Dietetic Association: Promoting and supporting breastfeeding. J Am Diet Assoc. 2005;105:810-818.
4. Birch L, Dietz W. Eating behaviors of young child: Prenatal and postnatal influences on healthy eating. American Academy of Pediatrics, 2008. Prenatal and postnatal flavor learning in human infants, pages 59-68 and Breastfeeding and other infant feeding practices that may influence child obesity, pages69-93.
5. Erikson JG. The fetal origins hypothesis- 10 years on. BMJ 2005;330:1096-1097.
6. Textbook of Maternal and Child Health Nursing by M. Jayalakshmi (Jaypee Brothers Medical Publishers, New Delhi, India).
7. Textbook of Pediatric Nutrition by Veena Shatrugna (Parivar Prakashan, Mumbai, India).
8. Essentials of Pediatrics by O. P. Ghai (CBS Publishers, New Delhi, India).
9. Nutrition Through the Life Cycle by Judith E. Brown (Cengage Learning, Boston, USA).

QUESTION PATTERN & TOTAL MARKS DISTRIBUTION FOR SEC PAPER

Theoretical Paper (Full Marks=40)

SI No.	Questions to be answered	Out of	Marks for each Question	Total Marks
1.	5	8	1	5 × 1 = 5
2.	3	5	5	3 × 5 = 15
3.	2	4	10	2 × 10 = 20

PRACTICAL QUESTION PATTERN & EXAMINATION GUIDELINES

Practical Paper (Full Marks=20)

❖ Layout of marks for practical examination:

a)	Experiment/Demonstration	12 Marks
b)	Laboratory notebook	3 Marks
c)	Viva Voce	5 Marks
	Total	20 Marks

DURATION OF EXAMINATION FOR SEC PAPERS

Semester End Examination	Full Marks	Duration of Exams
Theoretical	40	2 Hours
Practical	20	3 Hours