



<b>Course Code</b> NUTR-570	<b>Course Title</b> Pediatric Diet Therapy	<b>Credits (ECTS)</b> 7.5
<b>Department</b> Life and Health Sciences	<b>Semester</b> Fall	<b>Prerequisites</b> None
<b>Type of Course</b> Required	<b>Field</b> Dietetics/Nutrition	<b>Language of Instruction</b> English
<b>Level of Course</b> 2 <sup>nd</sup> Cycle	<b>Year of Study</b> 2 <sup>nd</sup> year	<b>Lecturer</b> Dr. Dimitris Papandreou
<b>Mode of Delivery</b> Face-to-face	<b>Work Placement</b> N/A	<b>Co-requisites</b> None

**Objectives of the Course:**

- Designed to provide a comprehensive understanding of the role of diet of children and young people and their requirements in health and disease. The treatment of disease with nutritional therapy including obesity, diabetes, cystic fibrosis, phenylketonuria, allergy, coeliac disease, eating disorders and cancer
- To review nutrition support topics including GI physiology, nutrition assessment, parenteral nutrition, and enteral nutrition.
- To highlight specialty areas of nutrition support such as food hypersensitivity, pa micronutrient deficiency disorders, overweight and obesity, nutrition and HIV, nutrition and cardiology, nutrition and diabetes etc.

**Learning Outcomes:**

At the end of this course the students will be able to:

- To provide adequate nutrition to provide optimal normal growth and development
- To provide information on current research to help the family with appropriate nutrition decisions
- To critical evaluate a pediatric assessment
- To calculate nutrients , vitamins and minerals for specific diseases
- To translate nutrient information and construct a diet plan for specific diseases

## Course Contents:

- 1. Nutrition and Dietetics in Infancy and Childhood**
  - Growth and nutritional requirements
  - Infant feeding: breast and formula; weaning onto solids
  - Nutrition in children and adolescents
  - Problems in the early years: faltering growth, gastro-oesophageal reflux, anaemia, rickets
  - Constipation, colic, dental caries, obesity
  - Social and cultural impacts on nutrition
  - Multidisciplinary team working
  - Government initiatives: Sure Start, Healthy Start, food policy in schools, Better Hospital Food
- 2. Nutrition and Dietetics in Common Paediatric Disorders**
  - Nutrition for the preterm infant
  - Assessment of children requiring nutrition support
  - Multidisciplinary management of children with special needs and feeding difficulties
  - Gastroenterology and the use of specialised formulas
  - Food allergy and intolerance
  - Cystic fibrosis
  - Diabetes mellitus
  - Eating disorders and psychological aspects of chronic disease
- 3. Clinical Dietetics for Infants and Children**
  - Neonatal surgery
  - Gastroenterology, specialised formulas and parenteral nutrition
  - Nutrition for children in ICU
  - Renal disease
  - Congenital heart disease and other cardiothoracic disorders
  - Liver disease
  - Burns and thermal injury
  - Nutrition support in oncology and HIV/AIDS
  - Ketogenic diet for epilepsy
- 4. Dietetic Management of Inherited Metabolic Disorders**
  - PKU, tyrosinaemia, MSUD, homocystinuria
  - Organic acidaemias and urea cycle disorders
  - Emergency regimens
  - Galactosaemia
  - Glycogen storage diseases
  - Fatty acid oxidation disorders
  - Peroxisomal disorders
  - Management of the newborn infant with IMD
  - Pregnancy and IMD
  - Education of children with IMD and their parents

### 5. Neonatal Nutrition

Preterm and sick term infants in the neonatal period  
Management of complex neonatal nutritional problems e.g. necrotising enterocolitis and gastrointestinal surgery  
Catch-up growth and the effect of early nutrition on later health  
Post discharge nutrition for preterm infants  
Weaning preterm infants  
Practical issues relating to breastfeeding and human milk banking

### Learning Activities and Teaching Methods:

Lectures, and Projects (Case studies, Oral presentations and Assignments).

### Assessment Methods:

Midterm exam, Assignment, Final Examination

### Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Patricia Queen Samour, Kathy King Helm	Handbook of Pediatric Nutrition 3e	Jones and Burtlett Publishers Inc	2005	978-0-76-37- 8356-

### Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
W. Allan Walker, Christopher Duggan (MD.), John B. Watkins	Nutrition in Pediatrics: Basic Science, Clinical Applications	BC Decker Inc	2003	1-55009-226- X