

In the Name of God

School of Nutritional Sciences and Dietetics Tehran University of Medical Sciences

Pediatric Nutrition Master of Science (MSc)

Total Course Credits: 32

- Compensatory courses: 12
- Core: 28
- Thesis for MSc: 4

Duration: 2 years (Maximum 6 semesters)

Program Description:

Specialization in nutritional sciences is essential for health professionals considering the diverse needs of the population in matters of food and health. Pediatric nutrition is the maintenance of a proper well-balanced diet consisting of the essential nutrients and the adequate caloric intake necessary to promote growth and development of infants, children, and adolescents, and it can have a significant impact on one's long-term health and well-being. Proper nutrition during these era can help prevent chronic diseases (particularly non-communicable diseases, such as obesity, cardiovascular diseases, type 2 diabetes and some cancers) later in life besides promoting healthy growth and development. By nourishing our future generations, we can help ensure a healthy and thriving society.

Aims and Objectives (including its vision and mission)

The aim of the program is to inform and train those to whom the public turns for advice on nutrition-related aspects of infants and children's health and disease.

In keeping with modern concepts concerning master graduates in the field of nutrition, all graduates will be expected to enthusiastically inform and inspire their patients and clients to adopt health-protecting and the healthy diets and develop plans to prevent, and even reverse all nutrition related-diseases in enhanced health and well-being of the patients and the community.

The mission is to develop pediatric nutrition graduates who have:

- To provide a planned program which complements the skills of the dietitian, providing additional expertise necessary for advanced, evidence-based practice in the field of pediatric dietetics.
- To enable students to apply theoretical knowledge and practical skills to an increasingly complex caseload in order to provide the most appropriate advice for infants (including preterm infants), children and adolescents.
- To develop students' ability to analyze, interpret and synthesize new and emerging scientific knowledge in the field of pediatric nutrition and dietetics.
- To give students confidence in handling a variety of pediatric cases of increasing complexity as they progress through the five modules.

- To encourage effective communication of pediatric dietetics to patients, healthcare professionals and other groups.
- To support students to critically analyze and interpret their own work to advance their practice.

Expected Competencies at the End of the Program

General Competencies:

The graduate of M.Sc. degree in Pediatric Nutritional is a professional who can perform a precise pediatric nutritional assessment, identify causes of health issues and special nutritional requirements of children, educate the patients and their families and develop nutritional advices and programs to re-establish and promote ongoing optimal health and wellbeing.

Specific Competencies and Skills (Special Qualifications):

The graduate of MSc degree in Nutritional Sciences has competency to:

- Demonstrate an extended knowledge of nutritional principles, growth, feeding, nutrient requirements and nutritional assessment in the field of pediatric dietetics.
- Demonstrate an appreciation of how psychosocial, financial and cultural factors affect families and children, and the importance of the multidisciplinary team in their management.
- Apply and synthesize theoretical knowledge to recommend the most appropriate and current dietary regimens for normal infants, children and adolescents, and those with particular needs, such as over and undernutrition and clinical conditions requiring a dietetic input.
- Communicate their nutritional knowledge to groups or individuals and evaluate outcomes.
- Critically evaluate new scientific and other evidence which may impact on dietetic practice.
- Make recommendations regarding public policy, such as food fortification and nutrition standards for infants and children.
- Participate in planning and conducting research projects on pediatric nutrition.

Admission Requirements:

General guidelines:

The following can apply:

- Qualified graduates of recognized universities, colleges or schools who hold an MD Degree, PharmD Degree, Bachelor's degree in Nutritional Sciences as well as health care workers with a Bachelor's or master degree in medical sciences.
- Students who are considered to have inadequate background in Nutrition maybe required to take additional prerequisite courses to make up for the deficiencies, without graduate credit.
- Documents to be submitted for admission: transcript of records, copy of last degree, certificate of English proficiency, and a medical certificate.

Educational Strategies, Methods and Techniques:

A strong nutritional medicine approach to nutritional problems will strengthen the evidence base for etiology, diagnostics, preventive and therapeutic interventions in solving national health problems. The guiding philosophy will be to integrate this vision into a holistic and participatory strategy to provide a foundation for more effective health strategies and programs. The strength of

the pediatric nutrition program is its focus on applied science that involves nutrition science, clinical nutrition, public health and health promotion, in order to develop effective nutritional treatment plans for communities and individuals. This Program is an evidence-based course on the role of nutrition in health and disease, covering the principles of nutrition and special subjects. The course will be offered through class training with didactic lectures and practicum content, and will focus heavily on skill learning development.

Teaching Methods

Didactic lectures
Multidisciplinary seminar lectures and workshops
Case studies, problem oriented
Laboratory practicum
Self-instructional materials
E-learning

Student Assessment (Methods and Types):

Comprehensive exam
Periodic and comprehensive (final) monitoring of progress and completion of Dissertation

Ethical Considerations:

The graduates should,

- Observe the Patient's Bill of Rights¹ when working with the patients.
- Observe the Rulebook for Dress Code².
- Strictly observe the Regulations of Working with the Laboratory Animals³.
- Carefully preserve resources and equipment.
- Truly respect faculty members, the staff, classmates and other students and work for creating an intimate and respectful atmosphere.
- Observe social and professional ethical considerations in criticism.

1, 2 and 3 are contained in the Enclosures.

* Biosafety and Patient Safety Rules will be set out by the Educational Departments and will be available to the students.

Tables of the Courses

Table 1. Compensatory Courses

Title of the Course	Number of Credits
Basic Nutrition I	3
Basic Nutrition II	3
Principles of Diet Planning	2
Principles of nutrition education and counseling	2
Food service management	1
Laboratory data interpretation	1
Total	12

Table 2. Core Courses

Title of the Course	Number of Credits	Theory	Practical	Internship
01 Bio-statistical Methods	2	2		
02 Research Methodology in Nutritional Sciences	2	2		
03 Physiology of Pediatric Nutrition	2	2		
04 Pediatrics Pharmacology	2	2		
05 Nutritional Support in Pediatrics	2	2		
06 Pediatric Supplements and Novel Foods	2	2		
07 Current Trends in Pediatric Nutrition	2	2		
08 Pediatric Clinical Nutrition and Diet Therapy 1	3	2	1	
09 Pediatric Clinical Nutrition and Diet Therapy 2	3	2	1	
10 Seminar	1	1		
11 Pediatrics Dietetics Internship	7			7
Total	28	19	2	7

Title of the Course	Number of Credits
Thesis	4

Course Details

Title of the Course: Bio-statistical Methods

Code of the course: 01

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course students should understand and apply the Bio-statistical methods to analyze nutritional data using appropriate software.

Course description:

This course is an introductory biostatistics methods course for public health students, and health career professionals who will make use of statistical methods in research projects and interpreting literature.

Main topics: 34 hours

Topics covered in this course include:

Basic biostatistics terms and notation, the concept underlying statistical analyses, exploratory and descriptive analyses, probability, estimation and hypothesis testing, one and two sample problems will be considered for both continuous and discrete variables. ANOVA, regression, correlation and nonparametric methods will be discussed.

Principal reference(s):

- 1- Rosner, B. Fundamentals of Biostatistics. Cengage Learning. Last edition.
- 2- Norman GR., Streiner DL. Biostatistics: The Bare Essentials. People's Medical Publishing House - USA, Ltd. Last edition.
- 3- Elmore JG. Et al. Jekel's Epidemiology, Biostatistics, Preventive Medicine, and Public Health.
6. Latest related published articles in accordance with the lecturer's opinion Student

Assessment practices:

Student Assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Research Methodology in Nutritional Sciences

Code of the course: 02

Number of Credits: 2

Type of the course: Theory

Prerequisites or Concurrent Courses: -

Principal objective(s) of the course:

By the end of the course students should be able to develop a framework for understanding nutrition and public health research, formulate a scientific research question and relevant hypotheses for a given topic, conduct a review of the literature, understand the components of a research manuscript and styles of scientific writing, develop the major components of a research proposal and develop a data analysis plan.

Course description:

This course will introduce research methods to the first year MS students. Students will develop and present their own research proposals to the class.

Main topics: 34 hours

Topics covered in this course include:

Study designs, interventions with nutrients versus foods or complete diets; methods for food consumption measurement, biochemical parameters for intake or status, nutrigenomics, energy expenditure, physical activity, and body composition, precision and validity of measurements, blinding, dosing, placebos, and compliance.

Principal reference(s):

- 1- Julie A Lovegrove et al., Nutrition Research Methodologies, First Edition, John Wiley & Sons, Ltd, Latest Edition.
- 2- Elaine R. Monsen & Linda Van Horn. Research Successful Approaches, Fourth Edition. Academy of Nutrition and Dietetics, Latest Edition.
- 3- Karen Eich Drummond & Alison Murphy-Reyes. Nutrition Research: Concepts & Applications. (2018) Jones & Bartlett Learning, Latest Edition.
- 4- Walter Willett, Nutritional Epidemiology, Oxford University Press, Latest Edition.
- 5- Latest related published articles in accordance with the lecturer's opinion.

Student Assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests, Proposal writing

Title of the Course: Physiology of Pediatric Nutrition

Code of the course: 03

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course students should understand central physiological processes in the human body, such as nervous and hormonal control, respiration and gas transport, circulation and muscular contraction, and sexual physiology. Also, they should be able to explain basic physiological and nutritional conditions which may affect child health and pathophysiology of common pediatric diseases.

Course description:

The course is about the understanding of how organ systems collaborate to ensure optimal living conditions for all cells in the human body. The constant surveillance of the body's internal environment through neural and hormonal reflexes is in focus (homeostasis), as well as why this surveillance is necessary for the body's normal functions.

Main topics: 34 hours

Topics covered in this course include:

Relationship of physiology and nutrition in the different stages of child growth and development, Pathophysiology of infancy and childhood diseases, Nutrition and immune status, psychological bases and biopsychosocial factors that affect human eating behavior, basic nutritional needs during infancy and childhood.

Principal reference(s):

1. Percy Goldthwait Stiles, Nutritional Physiology, Forgotten Books, Latest Edition.
2. B. Koletzko et al., Nutrition and Growth, Karger Publishing, Latest Edition.
3. Marcia Nelms et al., Nutrition Therapy and Pathophysiology, Cengage Learning, Latest Edition.
4. Ronald E. Kleinman et al., Pediatric Nutrition, American Academy of Pediatrics, Latest Edition.
5. Latest related published articles in accordance with the lecturer's opinion.

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Pediatrics Pharmacology

Code of the course: 04

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course students should describe the challenges of providing pharmaceutical care to pediatric patients, identify appropriate drug information resources of common pediatric disease states, appropriate patient counseling techniques about children special nutritional needs while using drugs and food drug interactions, identify controversial topics relating to the pharmaceutical care of pediatric patients for group discussions.

Course description:

This course will provide students with an understanding of the health care needs of the pediatric patients. In addition, the students will develop the knowledge for pharmaceutical care to pediatric patients in both ambulatory and inpatient settings. The course will focus on developmental stages of growth, common pediatric disease states, and specific pharmacological therapeutic considerations unique to pediatric patients.

Main topics: 34 hours

Topics covered in this course include:

What's new in pediatric pharmacology, immunization update, prescribing respiratory medications, gastrointestinal drugs, antibiotic prescribing, ADHD, food drug interactions.

Principal reference(s):

1. Aranda, Jacob V et al., Neonatal and Pediatric Pharmacology: Therapeutic Principles in Practice, Lippincott Williams & Wilkins (LWW), Latest Edition.
2. Evelyne Jacqz-Aigrain et al., Paediatric Clinical Pharmacology, CRC Press, Latest Edition.
3. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
4. Sylvia Escott-Stump et al., Nutrition & Diagnosis-Related Care, Academy of Nutrition and Dietetics, Latest Edition.
5. Latest related published articles in accordance with the lecturer's opinion

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Nutritional Support in Pediatrics

Code of the course: 05

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course students should be able to describe the role of human milk as a functional food, describe new formulae used in infant feeding, incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice, evaluate and monitor the supervision of children on nutritional support, Preparing and prescribing enteral and parenteral formulas.

Course description:

This course provides specialization in the field of pediatric nutrition in areas of particular interest such as artificial nutrition at home and hospital settings.

Main topics: 17 hours

Topics covered in this course include:

Evaluation of patients in need of nutritional support, general information about enteral and parenteral nutrition, dietary products used for sick children or children with special needs, Implementing and monitoring patients with nutritional support, critical patients, artificial nutrition at home, preparing and prescribing enteral and parenteral formulas

Principal reference(s):

1. Praveen S. Goday et al., Pediatric Nutrition for Dietitians, CRC Press, Latest Edition.
2. B. Koletzko et al., Pediatric Nutrition in Practice, Karger AG, Latest Edition.
3. Ronald E. Kleinman et al., Pediatric Nutrition, American Academy of Pediatrics, Latest Edition.
4. Susan H Konek, Samour & King's Pediatric Nutrition in Clinical Care, Jones & Bartlett Learning, Latest Edition.
5. Karol Prosser, Infant Nutrition: A Practical Handbook, American Medical Publishers, Latest Edition.
6. Latest related published articles in accordance with the lecturer's opinion

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Pediatric Supplements and Novel Foods

Code of the course: 06

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course, the student is expected to be able to review the chemical composition of foods, their physicochemical properties, their nutritional value, their bioavailability, their organoleptic characteristics and the modifications they undergo as a result of technological and culinary processes, describe the composition and utilities of new foods, Explain basic aspects of food microbiology, parasitology, and toxicology related to food safety, analyze the operation of milk banks, explain the new developments and available evidence on probiotics and prebiotics in infant feeding, nutritional supplements to support the conventional diet

Course description:

New child food program was implemented recently to address the shift in dietary need from ensuring essential nutrient consumption to chronic disease prevention. In this course we emphasize on the new foods and dietary supplements to improve children's health.

Main topics: 34 hours

Topics covered in this course include:

Update on Food Composition and Nutritional Databases, Phytochemicals and non-nutritive compounds, New food, Functional Nutrients and Bioactive Compounds, Probiotics, Prebiotics, and Synbiotics, Organic food, Transgenic foods, Water as a nutrient, Food safety, Physical chemical and microbiological hazards, New labelling and consumer information, Phytotherapy applied to nutritional pathologies, Dietary supplements designed for pediatric needs and conditions

Principal reference(s):

1. Gordon W. Fuller, New Food Product Development; From Concept to Marketplace, CRC Press, Latest Edition.
2. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
3. Shivani Pathania, et al., Food Formulation: Novel Ingredients and Processing Techniques, Wiley-Blackwell, Latest Edition.
4. Praveen S. Goday et al., Pediatric Nutrition for Dietitians, CRC Press, Latest Edition.
5. Latest related published articles in accordance with the lecturer's opinion.

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Current Trends in Pediatric Nutrition

Code of the course: 07

Number of Credits: 2

Type of the course: Theory

Prerequisites: -

Principal objective(s) of the course:

By the end of the course students should be able to Review the new dietary guidelines, nutritional objectives, and recommended dietary allowances (RDA), Explain the proper reading of new food labeling, Incorporate phytotherapy as a coadjuvant treatment in clinical practice, Identify and classify foods, food products, and food ingredients, Review current trends in premature infant nutrition, Explain the latest evidence on food allergies and intolerances

Course description:

This course will outline

Main topics: 34 hours theory and 51 hours practical

Topics covered in this course include: Nutrigenetics/Nutrigenomics Fundamentals and Methods, Immunonutrition, Physiological Regulation of Feeding Appetite and Satiety, Psychology and Nutrition, Nutrition and the Circadian System Timing is the Key, Update on Nutritional Objectives and Recommended Intakes, New Evidence on Dietary patterns

Principal reference(s):

6. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
7. A. Catharine Ross et al., Modern Nutrition in Health and Disease, Jones & Bartlett Learning, Latest Edition.
8. J. S. Garrow et al., Human Nutrition and Dietetics, Churchill Livingstone, Latest Edition.
9. Sareen S. Gropper et al., Advanced Nutrition and Human Metabolism, Cengage Learning, Latest Edition.
10. Sylvia Escott-Stump et al., Nutrition & Diagnosis-Related Care, Academy of Nutrition and Dietetics, Latest Edition.
11. Latest related published articles in the field of pediatric nutrition.

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Pediatric Clinical Nutrition and Diet Therapy 1

Code of the course: 08

Number of Credits: 3

Type of the course: Theory (2) and Practical (1)

Prerequisites: 03, 04, 05

Principal objective(s) of the course:

By the end of the course students should describe major nutritional requirements during each phase of life beginning with gestation and infancy to early childhood, assess nutritional status of infants, Understand the importance of breastfeeding, describe the process of introducing solid foods, identify the special nutritional needs of infants with special issues (preterm newborn, inherited metabolic disorders, digestive problems, allergies, etc.)

Course description:

This course will cover fundamental aspects of how and why nutritional requirements change from gestation through childhood into adulthood and pregnancy, focusing on the first two years as a key period that establishes health throughout the lifespan.

Main topics: Main topics: 34 hours theory and 51 hours practical

Topics covered in this course include:

Assessment and calculating nutritional requirements in health and disease at any stage of infancy, analyze the different methods for assessing nutritional status, interpretation of anthropometric, clinical, biochemical, hematological, immunological, and pharmacological data in the infant's nutritional assessment and dietary-nutritional treatment, breastfeeding and introduction of solid food, infants' malnutrition, inborn errors of metabolism, gastrointestinal problems, neonatal critical care.

In addition to practical training of the above contents.

Principal reference(s):

1. Ronald E. Kleinman et al., Pediatric Nutrition, American Academy of Pediatrics, Latest Edition.
2. American Academy of Pediatrics (AAP), Newborn and Infant Nutrition: A Clinical Decision Support Char, American Academy of Pediatrics, Latest Edition.
3. Susan H Konek, Samour & King's Pediatric Nutrition in Clinical Care, Jones & Bartlett Learning, Latest Edition.
4. Karol Prosser, Infant Nutrition: A Practical Handbook, American Medical Publishers, Latest Edition.
5. American Academy of Pediatrics (AAP), Healthy Development and Well-Child Support Chart, American Academy of Pediatrics, Latest Edition.
6. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
7. A. Catharine Ross et al., Modern Nutrition in Health and Disease, Jones & Bartlett Learning, Latest Edition.
8. J. S. Garrow et al., Human Nutrition and Dietetics, Churchill Livingstone, Latest Edition.

9. Sareen S. Gropper et al., Advanced Nutrition and Human Metabolism, Cengage Learning, Latest Edition.
10. Sylvia Escott-Stump et al., Nutrition & Diagnosis-Related Care, Academy of Nutrition and Dietetics, Latest Edition.
11. Latest related published articles in accordance with the lecturer's opinion

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Pediatrics Clinical Nutrition and Diet Therapy 2

Code of the course: 09

Number of Credits: 3

Type of the course: Theory (2) and Practical (1)

Prerequisites: 03, 04, 05

Principal objective(s) of the course:

By the end of the course students should describe major nutritional requirements during each phase of life through 2-18 years old children, assess nutritional status of children, and identify the special nutritional needs of children with special issues (preterm newborn, inherited metabolic disorders, digestive problems, allergies, etc.) and school nutrition.

Course description:

This course provides tools to understand nutritional needs of children and adolescents aged 2 to 18 years as a key period that establishes health throughout the lifespan

Main topics: 34 hours theory and 51 hours practical

Topics covered in this course include: the implications of nutrition in the growth process and in the prevention and treatment of different childhood diseases, the etiology, repercussions, and treatment of childhood obesity, the nutritional treatment of the most common deficiency diseases in our environment, the physiological aspects involved in eating disorders in young children, exclusion foods in the diets of children with celiac disease, in tolerations and allergies, dietary factors related to bone metabolism, managing children with gastrointestinal issues, nutrition in children with diabetes, autism and cancer. School nutrition.

In addition to practical training of the above contents.

Principal reference(s):

1. Ronald E. Kleinman et al., Pediatric Nutrition, American Academy of Pediatrics, Latest Edition.
2. American Academy of Pediatrics (AAP), Healthy Development and Well-Child Support Chart, American Academy of Pediatrics, Latest Edition.
3. Susan H Konek, Samour & King's Pediatric Nutrition in Clinical Care, Jones & Bartlett Learning, Latest Edition.
4. Karol Prosser, Infant Nutrition: A Practical Handbook, American Medical Publishers, Latest Edition.
5. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
6. A. Catharine Ross et al., Modern Nutrition in Health and Disease, Jones & Bartlett Learning, Latest Edition.
7. J. S. Garrow et al., Human Nutrition and Dietetics, Churchill Livingstone, Latest Edition.
8. Sareen S. Gropper et al., Advanced Nutrition and Human Metabolism, Cengage Learning, Latest Edition.

9. Sylvia Escott-Stump et al., Nutrition & Diagnosis-Related Care, Academy of Nutrition and Dietetics, Latest Edition.
10. Latest related published articles in accordance with the lecturer's opinion

Student assessment practices:

Formative Assessment: Students' evaluation during the course (projects, periodic diagnostic tests, midterm exams, and class quizzes)

Summative Assessment: Written, oral, and practical tests

Title of the Course: Seminar

Code of the course: 10

Number of Credits: 1

Type of the course: Theory

Prerequisites: 02

Principal objective(s) of the course:

By the end of the course, the student is expected to be able to collect, review and summarize new scientific materials on a topic related to pediatric nutrition and present it in the form of a review article.

Course description:

This course is the basis of familiarizing students with the method of collecting, reviewing and summarizing new scientific data and presenting it in the form of an article and lecture.

Main topics: 17 hours

Topics covered in this course include:

How to use scientific resources and databases, collect, review and summarize new scientific materials, writing a review article, application of Endnote software, presentation skills

Principal reference(s):

1. Edward J. Huth, How to Write and Publish Papers in the Medical Sciences, Williams & Wilkins, Latest Edition.
2. Michael Hanna, How to Write Better Medical Papers, Springer, Latest Edition.
3. Paul Glasziou, Systematic Reviews in Health Care: A Practical Guide, Cambridge University Press, Latest Edition.
4. Latest related published articles in accordance with the lecturer's opinion

Student assessment practices:

Class presentations

Review article

Title of the Course: Pediatrics Dietetics Internship

Code of the course: 11

Number of Credits: 7

Type of the course: Internship

Prerequisites: 07, 08, 09

Principal objective(s) of the course:

By the end of the course the student is expected to be able to practically and independently examine the patients in terms of nutritional status and diseases and provide the necessary nutritional advice.

Course description:

This course forms the principal of the practical work of pediatric nutrition graduates in the assessment of nutritional status, diet therapy and nutrition counseling.

Main topics: 34 hours theory and 51 hours practical

Internship in the fields of:

Diet therapy and nutritional counseling in patients with endocrine disorders, inherited metabolic disorders, premature birth, cardiovascular diseases, renal diseases, gastrointestinal issues, neurological diseases, cancer, Immune system disorders, infection, acute illnesses, burn and surgery

Principal reference(s):

1. Ronald E. Kleinman et al., Pediatric Nutrition, American Academy of Pediatrics, Latest Edition.
2. American Academy of Pediatrics (AAP), Healthy Development and Well-Child Support Chart, American Academy of Pediatrics, Latest Edition.
3. Susan H Konek, Samour & King's Pediatric Nutrition in Clinical Care, Jones & Bartlett Learning, Latest Edition.
4. Karol Prosser, Infant Nutrition: A Practical Handbook, American Medical Publishers, Latest Edition.
5. Janice L Raymond et al., Krause and Mahan's Food and the Nutrition Care Process, Elsevier, Latest Edition.
6. A. Catharine Ross et al., Modern Nutrition in Health and Disease, Jones & Bartlett Learning, Latest Edition.
7. J. S. Garrow et al., Human Nutrition and Dietetics, Churchill Livingstone, Latest Edition.
8. Sareen S. Gropper et al., Advanced Nutrition and Human Metabolism, Cengage Learning, Latest Edition.
9. Sylvia Escott-Stump et al., Nutrition & Diagnosis-Related Care, Academy of Nutrition and Dietetics, Latest Edition.

Student assessment practices:

Formative Assessment: Students' evaluation during the course (Written and oral daily reports)

Summative Assessment: Written, oral, and practical skill assessment

Course Evaluation

1. Course Content and Structure: (Rate from 1 - Poor to 5 - Excellent)

- Relevance of Content: How relevant was the content to your field and career aspirations?
- Current and Up-to-Date: Were the courses reflecting the latest trends and developments in the field?
- Balance of Theory and Practice: Did the program effectively balance theoretical knowledge with practical application?
- Depth and Breadth: Was the curriculum comprehensive, covering all necessary areas of your field?

2. Faculty and Teaching Quality: (Rate from 1 - Poor to 5 - Excellent)

- Expertise and Knowledge: Rate the faculty's expertise and depth of knowledge in their subjects.
- Teaching Effectiveness: How effective were the teaching methodologies and delivery?
- Accessibility and Support: Did the faculty provide adequate office hours, feedback, and support?
- Engagement and Enthusiasm: Rate the faculty's ability to engage students and stimulate interest.

3. Research Opportunities and Resources: (Rate from 1 - Poor to 5 - Excellent)

- Opportunities for Research: Were you given adequate opportunities for engaging in research?
- Quality of Resources: Assess the quality of research resources like labs, equipment, and libraries.
- Support and Guidance: Evaluate the support provided for research, including supervision and funding.

4. Coursework and Assessment: (Rate from 1 - Poor to 5 - Excellent)

- Challenge and Stimulation: Was the coursework challenging and intellectually stimulating?
- Fairness of Assessment: Were the methods of assessment fair and did they accurately evaluate your understanding?
- Feedback and Improvement: Evaluate the quality and usefulness of feedback provided for your work.

5. Skills and Knowledge Gained: (Rate from 1 - Poor to 5 - Excellent)

- Professional Development: How has the program contributed to your professional growth?
- Skill Acquisition: What specific skills or knowledge have you gained that are most valuable?

6. Career Preparation: (Rate from 1 - Poor to 5 - Excellent)

- Career Services and Support: How effective were the career services and support offered by the institution?
- Internship and Networking Opportunities: Were there sufficient opportunities for internships and networking with industry professionals?

7. Overall Satisfaction: (Rate from 1 - Very Dissatisfied to 5 - Very Satisfied)

- Overall Experience: How would you rate your overall experience in the program?
- Recommendation Likelihood: Would you recommend this program to others?

8. Suggestions for Improvement:

- Areas of Improvement: What aspects of the program do you think need improvement?
- Specific Recommendations: Provide any specific suggestions for enhancing the program.