

## List of Topics and Modules (2010)

Code	Title	Credits for Live course	Credits for on-line course	Credits for Grading Quiz
<b>Topic 0 Introduction in Nutrition</b>		3		
<b>Topic 1 Metabolism of Metabolism of Macronutrients , Pro - Pre biotics and Fibre</b>		3	1	
EDU T1 M 1.1	Metabolism of Carbohydrates			1
EDU T1 M 1.2	Metabolism of Amino Acids and Proteins			1
EDU T1 M 1.3	Metabolism of Lipids			1
EDU T1 M 1.4	Pre-Probiotics in Nutrition			1
EDU T1 M 1.5	Fibre in Nutrition			1
<b>Topic 2 Water, Electrolytes and Micronutrients</b>		3		
EDU T2 M 2.1	Water and Electrolytes in Health and Disease			1
EDU T2 M 2.2	Metabolism of Minerals and Trace Elements			1
EDU T2 M 2.3	Metabolism of Vitamins			1
EDU T2 M 2.4	Metabolism of Antioxidants			1
EDU T2 M 2.5	Metabolism of Phytochemicals			1
<b>Topic 3 Nutritional Assessment and Techniques</b>		3	4	
EDU T3 M 3.1	Nutritional Screening Assessment (Adult)			1
EDU T3 M 3.2	Body Composition			1
EDU T3 M 3.3	Energy Balance			1
EDU T3 M 3.4	Nutritional Evaluation of Hospitalized Children (Children)			1
<b>Topic 4 Nutritional Requirements for Health throughout Life Span</b>		3	4	
EDU T4 M 4.1	Nutritional Requirements in Neonates			1
EDU T4 M 4.2	Nutritional Requirements in Infancy, Childhood and Adolescence			1
EDU T4 M 4.3	Nutritional Requirements in Pregnancy and Lactation			1
EDU T4 M 4.4	Nutritional Requirements in Adults			1
EDU T4 M 4.5	Nutritional Requirements in Elderly			1
<b>Topic 5 Malnutrition</b>		3*	3	
EDU T5 M 5.1	Undernutrition - Simple and Stress Starvation			1
EDU T5 M 5.2	Undernutrition - definition and epidemiology			1
EDU T5 M 5.3	Overnutrition - definition and epidemiology			1
<b>Topic 6 Nutritional Support in Severe Malnutrition</b>		3	2	
EDU T6 M 6.1	Principles of Nutritional Support in Severe Undernutrition			1

EDU T6 M 6.2	Refeeding syndrome			1
<b>Topic 7 Enteral/Parenteral Nutrition - Substrates</b>		<b>3*</b>	<b>2</b>	
EDU T7 M 7.1	Substrates for Enteral and Parenteral Nutrition			1
EDU T7 M 7.2	Immunonutrition in Enteral and Parenteral Nutrition			1
<b>Topic 8 Approach to Oral and Enteral Nutrition (EN)</b>		<b>3</b>	<b>4+1</b>	
EDU T8 M 8.1	Indications and Contraindications of Enteral Nutrition			1
EDU T8 M 8.2	Oral and Sip Feeding			1
EDU T8 M 8.3	Techniques of Enteral Nutrition			1
EDU T8 M 8.4	Formulae for Enteral Nutrition			1
EDU T8 M 8.5	Monitoring and Complications of Enteral Nutrition			1

<b>Topic 9 Approach to Parenteral Nutrition (PN)</b>		<b>3</b>	<b>4</b>	
EDU T9 M 9.1	Indications and Contraindications for Parenteral Nutrition			1
EDU T9 M 9.2	Techniques of PN			1
EDU T9 M 9.3	Compounding , Drugs and Nutritional Admixtures in PN			1
EDU T9 M 9.4	Monitoring and Complications of PN			1
<b>Topic 10 Nutritional Support in Pediatric Patients</b>		<b>3</b>	<b>3</b>	
EDU T10 M 10.1	Nutritional support in ICU Pediatric Patients			1
EDU T10 M 10.2	Parenteral Nutrition in Pediatric Patients			1
EDU T10 M 10.3	Enteral Nutrition in Pediatric Patients			1
<b>Topic 11 Organization of Nutritional Care. Ethic and Legal Aspects</b>		<b>3*</b>	<b>2</b>	
EDU T11 M 11.1	How to Organise Nutrition Support Team			1
EDU T11 M 11.2	Ethical and Legal Aspects			1
<b>Topic 12 Nutritional Support in Gastrointestinal Diseases</b>		<b>3</b>	<b>4+2</b>	
EDU T12 M 12.1	The Compromised Gut			1
EDU T12 M 12.2	Challenges in Treating Intestinal Failure in Short Bowel Syndrome (After Extensive Gut Resections)			1
EDU T12 M 12.3	Nutritional Support in Gastrointestinal Fistulas			1
EDU T 12 M12.4	Nutritional Support in Inflammatory Bowel Diseases			1
EDU T12 M 12.5	Nutritional Support in Acute and Chronic Diarrhoea			1
EDU T12 M 12.6	Nutrition in Prevention of Irritable Bowel Syndrome (IBS); Constipation and Diverticulosis			1
<b>Topic 13 Nutritional Support in Liver Disease</b>		<b>3*</b>	<b>2</b>	
EDU T13 M 13.1	Nutritional Support in Acute Liver Disease, including Liver Failure			1
EDU T13 M 13.2	Nutritional Support in Chronic Liver Disease, including Liver Failure			1
<b>Topic 14 Nutritional Support in Pancreatic Disease</b>		<b>3*</b>	<b>2</b>	
EDU T14 M 14.1	Nutritional Support in Acute Pancreatitis			1

EDU T14 M 14.2	Nutritional Support in Chronic Pancreatitis			1
<b>Topic 15 Nutritional Support in Renal Diseases</b>		<b>3</b>	<b>4</b>	
EDU T15 M 15.1	Nutritional Support in Acute Renal Diseases including Renal Failure			1
EDU T15 M 15.2	Nutritional Support in Chronic Renal Diseases including Renal Failure			1
EDU T15 M 15.3	Nutritional Support in Renal Replacement Therapy (Haemodialysis)			1
EDU T15 M 15.4	Nutritional Support in Renal Replacement Therapy (Peritonealdialysis)			1
<b>Topic 16 Nutritional Support in SIRS and Sepsis</b>		<b>3</b>	<b>1</b>	
EDU T16 M 16.1	Nutritional Support in Burns			1
<b>Topic 17 Nutritional Support in the Perioperative Period</b>		<b>3</b>	<b>4+1</b>	
EDU T17 M 17.1	The Stress Response and its Effects on Metabolism			1
EDU T17 M 17.2	Insulin Resistance and Glucose Control			1
EDU T17 M 17.3	Nutritional Support in the Perioperative Period			1
EDU T17 M 17.4	Nutritional Goals in the Perioperative Period			1
EDU T17 M 17.5	The Traumatized Patient			1
<b>Topic 18 Nutritional Support in Intensive Care Unit (ICU)Patients</b>		<b>3</b>	<b>4+4</b>	
EDU T18 M 18.1	Metabolic response to stress of critical illness			1
EDU T18 M 18.2	Energy requirement, evaluation and measurement			1
EDU T18 M 18.3	Nutritional risk profile, interaction with ICU treatment. Routes of nutrition, prescription, protocols and monitoring			1
EDU T18 M 18.4	Macro- and micronutrient requirements			1
EDU T18 M 18.5	Specific Substrates for artificial nutrition in the ICU			1
EDU T18 M 18.6	Promoting homeostasis during nutrition support			1
EDU T18 M 18.7	Barriers to oral, enteral nutrition, parenteral nutrition			1
EDU T18 M 18.8	Clinical priorities for solving ICU nutritional problems			1
<b>Topic 19 Nutritional Support outside the Hospital: Home Parenteral Nutrition(HPN) in Adult Patients</b>		<b>3</b>	<b>4</b>	
EDU T19 M 19.1	Indications and Epidemiology			1
EDU T19 M 19.2	Training and Monitoring			1
EDU T19 M 19.3	Venous Access for Home Parenteral Nutrition			1
EDU T19 M 19.4	HPN in Cancer Patients			1
EDU T19 M 19.5	Guidelines for Home Parenteral Nutrition Support in ChronicIntestinal Failure			1
EDU T19 M 19.6	Metabolic Complications of Home Parenteral Nutrition in Chronic Intestinal Failure			1
<b>Topic 20 Nutritional Support in Cardio-Vascular Diseases (CVD)</b>		<b>3*</b>	<b>2</b>	
EDU T20 M 20.1	Nutrition in the Prevention Cardio-Vascular-Disease			1
EDU T20 M 20.2	Nutritional features of patients with chronic heart			1

	failure			
<b>Topic 21 Consequences of Diabetes Mellitus on the Nutritional Status</b>		<b>3*</b>	<b>4</b>	
EDU T21 M 21.1	Diabetes and Nutritional Status			1
EDU T21 M 21.2	Nutritional Support in Diabetes Type I and Type II			1
<b>Topic 22 Nutrition in Lipidemias</b>		<b>3*</b>	<b>2</b>	
EDU T22 M 22.1	Clinical consequences of Dislipidemias			1
EDU T22 M 22.2	Nutritional Support in Dislipidemias			1
<b>Topic23 Nutrition in Obesity</b>		<b>3*</b>	<b>4+1</b>	
EDU T23 M 23.1	Nutrition in the Prevention of Obesity			1
EDU T23 M 23.2	Nutritional intervention in the Obese Child/Adolescent			1
EDU T23 M23 .3	Nutritional Intervention in severe Obese Patients			1
EDU T23 M 23.4	Nutritional Support in ICU Obese Patients			1
EDU T23 M 23.5	Nutritional Support after Bariatric Surgery		1	
<b>Topic 24 Nutrition in Metabolic Syndrome</b>		<b>3</b>	<b>4</b>	
EDU T24 M 24.1	What is the Metabolic Syndrome?			1
EDU T24 M 24.2	Insulin Resistance: Identification and Consequences			1
EDU T24 M 24.3	Lifestyle Interventions in Metabolic Syndrome			1
EDU T24 M 24.4	Pharmacological Treatment			1
EDU T24 M 24.5	Molecular Aspects of Metabolic Syndrome			
EDU T24 M 24.6	Frontiers in Metabolic Syndrome Research			
<b>Topic 25 Nutritional Support in Neurological Diseases</b>		<b>3</b>	<b>4</b>	
EDU T25 M 25.1	Nutritional and Metabolic Consequences of Neurological Diseases			1
EDU T25 M 25.2	Indication and Ethical Aspects of Nutritional support in Neurological Diseases			1
EDU T25 M 25.3	Nutritional Support in Stroke			1
EDU T25 M 25.4	Nutritional Support in Chronic Neurological Diseases			1
<b>Topic 26 Nutritional Support in Cancer</b>		<b>3</b>	<b>4</b>	
EDU T26 M 26.1	Molecular Mechanisms of Muscle Wasting in Cancer Cachexia			1
EDU T26 M 26.2	Cancer Anorexia			1
EDU T26 M 26.3	Benefits and Limitations of Conventional Nutritional Support (CNS) for Cancer Patients			1
EDU T26 M 26.4	Pharmacological and Multimodal Therapy for Cancer Cachexia			1
EDU T26 M 26.5	Nutrition in the Prevention of Cancer			1
<b>Topic 27 Nutritional Support in AIDS</b>		<b>3*</b>	<b>1</b>	
EDU T27 M 27.1	Principles of Nutritional Therapy in HIV/AIDS			1
<b>Topic 28 Nutrition in Allergic Diseases</b>		<b>3*</b>	<b>1</b>	
EDU T28 M 28.1	Nutrition and Food Allergy			1
<b>Topic 29 Nutrition in Hereditary Diseases</b>		<b>3</b>	<b>4</b>	

EDU T29 M 29.1	Nutrition in Phenylketonuria			1
EDU T29 M 29.2	Nutrition in Lactose Intolerance			1
EDU T29 M 29.3	Nutrition in Celiac Disease			1
EDU T29 M 29.4	Nutrition in Cystic Fibrosis			1
<b>Topic 30 Nutrition in Skeletal and Joint Diseases</b>		<b>3*</b>	<b>2</b>	
EDU T30 M 30.1	Nutrition in Prevention of Osteoporosis			1
EDU T30 M 30.1	Nutrition in Prevention and Treatment of Arthritis			1
<b>Topic 31 Nutrition in Behavioral Disorders</b>		<b>3</b>	<b>3</b>	
EDU T31 M 31.1	Nutrition in Anorexia Nervosa			1
EDU T31 M 31.2	Nutrition in Bulimia			1
EDU T31 M 31.3	Nutrition in Alcohol and Drug Abuse			1
<b>Topic 32 Food Safety</b>		<b>3*</b>		
EDU T32 M 32.1	Food Safety. Exposure to Toxic Environment			1
<b>Topic 33 Nutrition and Public Health</b>		<b>3*</b>	<b>1</b>	
EDU T33 M 33.1	Nutrition and Public Health			1
<b>Topic 34 Nutrigenomics</b>		<b>3*</b>	<b>2</b>	
EDU T34 M 34.1	Nutrigenomics - New Research Approaches			1
EDU T34 M 34.2	From Nutrients To Genes: Response to Nutrients			1
<b>Topic 35 Economics of Nutrition</b>		<b>3*</b>	<b>1</b>	
EDU T35 M 35.1	Cost Benefit in Clinical Nutrition			1
<b>Topic 36 Nutrition in Elderly</b>		<b>3</b>	<b>4</b>	<b>1</b>
EDU T36 M 36.1	Malnutrition in the Elderly: Epidemiology and Consequences			1
EDU T36 M 36.2	Pathophysiology - Sarcopenia			1
EDU T36 M 36.3	Nutritional Screening and Assessment - Oral Refeeding			1
EDU T36 M 36.4	Artificial Nutrition			1
<b>Topic 37 Nutrition and Sports</b>		<b>3*</b>		
EDU T37 M37.1	Substrate utilization			1
EDU T37 M37.2	Muscle physiology and bioenergetics			1
EDU T37 M37.3	Nutritional requirements for physical fitness			1
EDU T37 M37.4	Fluids, electrolyte balance, and ergogenic aids			1
<b>Topic 38 Nutrition in pulmonary diseases</b>		<b>3</b>	<b>3</b>	
EDU T38 M 38.1	Prevalence and Mechanism of Undernutrition in COPD			1
EDU T38 M 38.2	Nutritional Support In COPD			1
EDU T38 M 38.3	Nutritional in Chronic Respiratory Failure (Home respiratory rehabilitation)			1
<b>Topic 39 Nutrition and Research</b>		<b>3*</b>		

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