



Nutrition Diploma Year 2 - Lecture Plan 2009

Module 1 Pre-Study

WEEKEND	Lecture & Home Study Content		
	Saturday (9.30am-5.30pm)	Sunday (10.30am-5.30pm)	
MEDICAL SCIENCE SEMESTER 1	LECTURE WE1; MODULE 1 PART 1 26 th & 27 th September Lecturer TBC Venue TBC	Immunology; non-specific and specific defences, components of the immune system, different stages of inflammation, humoral immunity and cell-mediated immunity, hypersensitivity reactions, diseases associated with the immune system, infections in the body, classification and treatment of burns and the Healing Process and Scar Formation (healing by first intention and second intention)	Neoplasia; the Concepts (hypertrophy, hyperplasia, metaplasia, dysplasia, neoplasia), necrosis and apoptosis, benign and malignant neoplasia, cancer and proto-oncogenes and oncogenes Genetics; genotypes, phenotypes, diploid, haploid, allele, gene, monohybrid cross, dihybrid cross, co-dominance, pleiotropy, epistasis, polygenic inheritance, understand autosomal dominant inheritance, autosomal recessive inheritance and sex-linked inheritance, pedigree analysis, different types of mutations and genetic diseases
	LECTURE WE 2; MODULE 2 PART 1 17 th & 18 th October Lecturer TBC Venue TBC	Bowel flora; classifications of the bacteria in the human gut, functions of the lactose fermenters, effects on health of non beneficial bacteria overgrowth, dietary and lifestyle effects on bowel flora composition, bowel flora supplementation, probiotics, prebiotics, inflammation as a factor in chronic disease, Th1-Th2 imbalances & associated conditions and nutrition and inflammation	Allergies and intolerances; IgE, IgG and cellular mediated reactions, the role of GALT and IgA in intolerance reactions, nutritional approaches to allergy and intolerance: elimination diets, challenge tests, rotation diets and the 4 R programme and modulating the immune system with diet and special nutrients Live in class case study or paper based case relating to module content
	LECTURE WE 3; MODULE 1 PART 2 21 st & 22 nd November Lecturer TBC Venue TBC	Reproductive system; the anatomy and function of the male and female reproductive organs, spermatogenesis, spermiogenesis, the menstrual cycle, the process of fertilization, implantation, embryonic development, birth, lactation, the advantages, disadvantages, failure rates, and complications associated with methods of contraception, the menopause and diseases associated with the reproductive system	The special senses <ul style="list-style-type: none"> The sensory organs, their structure and functions and their pathways to the brain Diseases of the sensory organs
	LECTURE WE 4; MODULE 1 PART 3 12 th & 13 th December Lecturer TBC Venue TBC	Endocrine System; intercellular communication, paracrine and autocrine systems, basic principles, hormones, endocrine organs and glands, receptors, target cells and diseases associated with the endocrine system	The nervous system; functions, structures of the nerve cell, classifications, the names and functions of the cranial nerves 1 to 12, the autonomic nervous system, neuroglial cells and functions, blood-brain barrier, function of the different lobes of the brain, structure and functions of the spinal chord and Meninges, physiology of the nerve impulse, structure and physiology of the synapse and diseases associated with the nervous system
	LECTURE WE 5; MODULE 2 PART 2 9 th & 10 th January Lecturer TBC Venue TBC	How stress affects the endocrine and nervous systems The physiological effects of chronic stress The HPA axis and general adaptation syndrome The effects of stress on general health and different systems of the body	Therapeutics for the nervous and endocrine systems: Basic dietary and lifestyle management for: stress, thyroid conditions, infertility and reproductive hormone imbalances Paper based or taped relevant case studies
	*CP Day 1 30 th OR 31 st January	<ul style="list-style-type: none"> Practitioner TBC Venue TBC 	<ul style="list-style-type: none"> Practitioner TBC Venue TBC

MEDICAL SCIENCE SEMESTER 2

<p>LECTURE WE6: MODULE 1 PART 4 13th & 14th February Lecturer TBC Venue TBC</p>	<p>Cardiovascular system: the anatomy and physiology of the heart, the anatomical and histological structure and function of blood vessels, homeostasis of blood pressure, systole, diastole, cardiac cycle, heart sounds, the conduction system of the heart, electrocardiograms, the concept of cardiac output, stroke volume, heart rate (and factors influencing these) and diseases associated with the cardiovascular system</p>	<p>Blood: key functions of the blood, composition of blood and its components, key functions of the different cells of the Blood including, different blood groups and typing, the process of blood transfusions and disorders associated with the blood and different blood cells</p>
<p>*CP Day 2 27th OR 28th February</p>	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC 	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC
<p>LECTURE WE 7; MODULE 3 PART 1 13th & 14th March Lecturer TBC Venue TBC</p>	<p>Food Groups: classification of foods, important sources, their composition, how they are processed, their effects on health – positive and negative, their place in a therapeutic diets and orthodox and naturopathic views</p>	<p>Common anti nutrients: chemical additives and preservatives, sources, classifications, regulation, research showing links to chronic disease and natural toxins</p> <p>Nutritional supplements; how to use supplements for therapeutic gain, basic vitamin and mineral formulations and nutrient complexes</p> <p>Paper based or taped case study</p>
<p>*CP Day 3 27th OR 28th March</p>	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC 	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC
<p>LECTURE WE 8; MODULE 4 PART 1 10th & 11th April Lecturer TBC Venue TBC</p>	<p>Different ways of eating: macrobiotic diets, vegetarianism and veganism and religious and ethical eating</p> <p>Popular therapeutic diets: food combining, anti-candida, metabolic typing, bio-typing and eat right for your type</p>	<p>The physiology of and nutrition for different groups of the population; orthodox and naturopathic theories, vulnerable groups and nutritional considerations for social groupings</p> <p>Job/hobby specific nutrition</p>
<p>*CP Day 4 24th OR 25th April</p>	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC 	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC
<p>LECTURE WE 9; MODULE 4 PART 2 8th & 9th May Lecturer TBC Venue TBC</p>	<p>Food processing/manufacturing methods; past and present, effects on health, research to back up links to chronic disease and the future outlook</p> <p>Food labelling; how to read a food label</p> <p>The effects of cooking on food; the positives and negatives of cooking and raw food</p> <p>The conventional Western (Irish) diet; nutrient intake, anti nutrient intake and effects on health</p>	<p>Food - from farm to fork (Ireland); regulatory bodies, state departments and agencies, traceability, implications on our industry</p> <p>EU food regulation; governing bodies, general food law and policies and procedures</p> <p>Organic food; organic food and health, nutrition in organic food. organic food and the environment and sustainable agriculture</p> <p>EU regulation of the health food and natural healthcare industry; the food vs medicinal law, supplements directive, nutrition and health claims directive, The Traditional Herbal Medicinal Products Directive and The Human Medicinal Products Directive</p>
<p>*CP Day 5 22nd OR 23rd May</p>	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC 	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC
<p>LECTURE WE 10; 12th & 13th June Lecturer TBC Venue TBC</p>	<p>Revision and tutorials</p>	<p>Cooking demonstration</p>
<p>*CP Day 6 26th OR 27th May</p>	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC 	<ul style="list-style-type: none"> • Practitioner TBC • Venue TBC
<p>EXAM DAY TBC</p>	<p>END YEAR EXAMS</p>	

ASSESSMENT TIMTABLE

Semester	W/end	Homework collected	In class activity (%age = weighting)	Homework set (%age = weighting)	Semester	W/end	Homework collected	In class activity (%age = weighting)	Homework set (%age = weighting)
1	1			Module 1	2	6	Module 2	FIRST SEMESTER EXAM (25%) CA module 2 part 2 (Sunday)	Module 3
	2					7		CA Module 3 part 1	
	3		CA Module 1 part 1&2			CP		Relevant CP Forms	
	4	Module 1	CA module 1 part 3	Module 2		8	Module 3	CA Module 3 part 2	Module 4
	5		CA module 2 part 1			9		CA module 4 Module 4 assignment	Module 5
				CP			Relevant CP Forms		
				10		Module 5	CA module 5		
				EXAM			SECOND SEMESTER EXAM (25%)		

NB – Exams contribute 50% in total to overall grade, remaining 50% is taken from coursework.
Please see course handbooks for further information.