



Diploma in Nutritional Therapy Year 1 Lecture Plan 2011 – 2012

Venue: Education & Research Centre, Our Lady's Hospice, Harold's Cross, Dublin 6W

Exit Awards at End of Year 1

Institute of Health Sciences Certificate in Dietary Coaching (if Nutrition in Society module completed at end of year 1)
ITEC Diploma in Diet and Nutrition for Complementary Therapists (on application for those with another CAM discipline or similar)

Semester 1

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am - tutorial	Sunday (9.30am-4.30pm)
YEAR 1 SEMESTER 1	LECTURE W/E1 HEALTH, HEALTHCARE AND NUTRITIONAL THERAPY 24 th & 25 th September	The history of healthcare The concept of health: Factors affecting health & healthcare The modern Western diet and lifestyle Medical conditions associated with modern diet and lifestyle Key factors in disease progression in the West: Immune dysfunction, Free radical damage, Stress, Toxicity Different healthcare models: Orthodox, functional medicine, CAM The fundamentals of being an Nutritional Therapist The importance of research in healthcare The importance of reflection in independent learning and in healthcare practice
	LECTURE W/E 2 ANATOMY & PHYSIOLOGY PART 1 22 nd & 23 rd October	An introduction to A and P and purpose of the course Cell and tissues Biochemistry Digestive System: Gross anatomy, Physiological functions, The accessory organs The digestion of carbohydrates, proteins and fats, Enzymes and their action in digestion, Hormones and their action in digestion Musculoskeletal System: Bones: Axial and Appendicular Skeleton, The major bones of the body, The anatomy and histology of compact and spongy bone, The process of ossification, Bone growth, Classification of joints, Calcium homeostasis. Muscles: Skeletal, cardiac and smooth muscle, Neuromuscular junctions and skeletal muscle contraction Genetics: Genotypes, phenotypes, genes, inheritance, mutations Enzymes: Definition and mechanism of action, Factors regulating enzyme function, Coenzymes and cofactors, Competitive and non-competitive inhibition The macronutrients and metabolism: Energy production: Specific metabolic pathways (glycolysis, citric acid cycle, electron Transport Chain), Key molecules involved in the process of cellular respiration
	LECTURE W/E 3 THE BASICS OF NUTRITION PART 1 12 th & 13 th November	The affects of poor digestion and absorption on health Bowel flora and health Supporting digestion The role of the micronutrients in energy production Basal Metabolic Rate Calories Official recommendations for calorie consumption Protein: Chemical structure, Amino acids, Protein quality, Recommended levels of consumption, Deficiency and toxicity symptoms, Dietary sources Individual amino acids and their specific roles in the body Protein derivatives

<p>LECTURE W/E 4 THE BASICS OF NUTRITION PART 2 10th & 11th December</p>	<p>Carbohydrates: Chemical structure, Mono, di- and polysaccharides, Biological functions at a cellular level, Recommended levels of consumption, Carbohydrate as an energy source, Glycaemic load, Deficiency and toxicity symptoms, Hypoglycaemia, Diabetes, Syndrome X, Dietary sources Lipids: Chemical structure, Fatty acids, Phospholipids, Cholesterol, Essentiality, Quality, Biological functions at a cellular level, Recommended levels of consumption, Lipids as an energy source, Deficiency and toxicity symptoms, Dietary sources Overweight and obesity: Different nutrients and diets and their effects on weight loss and health, Barriers to weight loss, The Dietary Coaching approach to weight loss, Anorexia nervosa and bulimia, Adverse effects of malnutrition</p>
<p>LECTURE W/E 5 ANATOMY & PHYSIOLOGY PART 2 7th & 8th January</p>	<p>Endocrine System: Intercellular communication, Paracrine and autocrine systems Hormones, Endocrine organs and glands, Receptors, Target cells The nervous system: The functions of the nervous system, The structures of the nerve cell, Classifications of the nervous system, The names and functions of the cranial nerves 1 to 12, The autonomic nervous system, Neuroglial cells and functions, The blood-brain barrier, The function of the different lobes of the brain, The structure and functions of the spinal cord and meninges, The physiology of the nerve impulse, The structure and physiology of the synapse Reproductive system: The anatomy and functions of the male reproductive organs, Spermatogenesis, spermiogenesis, The anatomy and functions of the female reproductive tract, The menstrual cycle, The process of fertilization, implantation, embryonic development, birth, lactation, The menopause The special senses: The sensory organs, Their structure and functions, Their pathways to the brain</p>

Semester 2

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am - tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E6 ANATOMY & PHYSIOLOGY PART 3 4th & 5th February	Urinary system: The gross anatomical and histological structure of the kidney, ureters, bladder, and urethra, The blood supply to the kidney, The structure of the nephron and its related functions, The basic process of urine formation Electrolyte balance: "Fluid balance," "electrolyte balance," and "acid-base balance", The compositions of intracellular and extracellular fluids and how this balance is maintained, The hormones, compensatory and buffering systems that play important roles in regulating fluid and electrolyte balance 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, Cardiac output, stroke volume, heart rate (and factors influencing these) Blood: The key functions of the blood, The composition of blood and its components, Different blood groups and typing	
LECTURE W/E 7 THE BASICS OF NUTRITION PART 3 3 rd & 4 th March	Minerals (macro and micro) and vitamins: Classification, Chemical structure, Transportation, utilisation and storage within the body, Functions and interactions at a cellular level, Ionic balance, Recommended levels of intake, Mineral/mineral antagonism, Deficiency, imbalance and toxicity symptoms, Dietary sources of each, Bioavailability of dietary sources, Interactions with other macro/micro nutrients affecting bioavailability, Assessing individual needs for different minerals The Phytonutrients: Classification, Chemical structure, Transportation and storage within the body, Functions and interactions at a cellular level, Dietary sources of each, Bioavailability of dietary sources, Interactions with other macro/micro nutrients affecting bioavailability, Potential for deficiency and toxicity Nutritional supplements : How to use basic supplements for therapeutic gain, Basic vitamin and mineral formulations, Single supplements, Nutrient complexes	
LECTURE W/E 8 ANATOMY & PHYSIOLOGY PART 4 31 st March & 1 st April	Lymphatic System: Functions and anatomical organization, The structure and function of the lymph vessels (lymph capillaries, lymphatics, lymph ducts), The structure and function of lymph nodes, thymus, tonsils, spleen and Peyers patches The Immune System: Non-specific and specific defences, The components of the immune system, The different stages of inflammation, Humoral immunity and cell-mediated immunity, Hypersensitivity reactions, The Healing Process and Scar Formation The skin: The structure and functions of skin Respiratory System: The anatomical components and functions of respiratory system, The mechanics of breathing, Respiratory Rate, Respiratory Volumes, Gas Exchange, The oxygen Haemoglobin Saturation Curve, The control of Respiration	
LECTURE W/E 9 CLINICAL PRACTICE 21 st & 22 nd April	Case studies and group activities	
LECTURE W/E 10 THE BASICS OF NUTRITION PART 4 12 th and 13 th May	Food Groups: Classification of foods (fruit, vegetables, grains, pulses, meat, dairy, nuts, seeds, fish), Important sources of each, Their composition, How they are processed, Their effects on health – positive and negative, Their place in a therapeutic diet Healthy alternatives to common foods: adding variety to the diet Maximising the nutrient content of food groups e.g. sprouting, grinding, soaking Common anti nutrients: Chemical additives and preservatives: Sources, Classifications, Regulation, Research Natural toxins: Caffeine, Oxalates, Phytates, Tannins, Alkaloids, Goitrogens Non food based toxins: smoking, cooking and storage vessels, medication Reducing toxins in the diet and lifestyle – basic introduction Acid and alkaline balance in the body	

<p style="text-align: center;">A AND P EXAM + LECTURE W/E 11 NUTRITION IN SOCIETY PART 1 2nd and 3rd June Venue for cooking demo: TBC</p> <p style="text-align: center;">OPTIONAL (for completion of IHS Certificate in Dietary Coaching)</p>	<p>A and P exam (Saturday morning)</p> <p>Cooking demonstration (Saturday afternoon) *Joint class with 2nd and 3rd year students</p> <p>The effects of cooking on food: The positives and negatives of cooking, Raw food Different ways of eating and their affects on health: Macrobiotics, Vegetarianism, lacto vegetarianism and veganism, Raw food, Cultural and ethical eating, The Mediterranean diet, The Eastern approach to diet Healthy eating on a budget Food labelling Basic novel foods and how to use them Growing your own: Vegetables, herbs, fruit Whole food initiatives: The slow food movement, GIY (Grow it yourself) Introduction to herbs used for common health disorders Using herbs in cooking, teas etc, over the counter remedies, Safety when using herbs Food - from farm to fork (Ireland): Regulatory bodies, State departments and agencies, Traceability, Implications on our industry Food processing/manufacturing methods: Past and present, Effects on health, Research to back up links to chronic disease, The future outlook EU food regulation: Governing bodies, General food law, Policies and procedures Organic food: Organic food and health, Nutrition in organic food, Organic food and the environment, Sustainable agriculture</p>
<p style="text-align: center;">LECTURE W/E 12 NUTRITION IN SOCIETY PART 2 23rd and 24th June</p> <p style="text-align: center;">OPTIONAL (for completion of IHS Certificate in Dietary Coaching)</p>	<p>The physiology of and nutrition for different groups of the population: Possible physiological, metabolic and endocrine changes Vulnerable groups: The elderly, Children, Babies, Infants, Adolescents, Pregnancy and lactation, The chronically ill/injured, Lower socio economic groups, sports enthusiasts The affects of diet on common disorders: Digestive disorders, Heart disease, Immune disorders, Inflammatory conditions, Frequent infections, Hormonal imbalances, Skin conditions, Osteoporosis, Headache and migraine, Stress related disorders Using questionnaires for Dietary Coaching: Producing diet plans and fact sheets Case studies Counselling skills Managing resistance to change</p>

Anatomy & Physiology exam date is 2nd June 2012



Diploma in Nutritional Therapy Year 2 Lecture Plan 2010 – 2011

Venue: Education & Research Centre, Our Lady's Hospice, Harold's Cross, Dublin 6W

Exit Award at End of Year 2

IHS Certificate in Dietary Coaching (if not completed at end of year 1)

ITEC Diploma in Anatomy and Physiology (On application. May be completed after Pathophysiology module in Year 2)

Semester 1

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am – tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E 1 PATHOPHYSIOLOGY PART 1 24 th & 25 th September	Diseases and disorders of the immune and lymphatic systems Diseases and disorders of the digestive system Diseases and disorders of the cardiovascular system The skin. Diseases and disorders of the skin Revision of each associated system	
LECTURE W/E 2 NUTRITIONAL THERAPEUTICS PART 1 22 nd & 23 rd October	Key functional medicine imbalances: Immune and inflammatory, Digestive and absorptive, Microbiological Bowel flora: Classifications of the bacteria in the human gut, The balance between lactose fermenters and other non beneficial bowel bacteria, Functions of the lactose fermenters, Effects on health of non beneficial bacteria overgrowth, Dietary and lifestyle effects on bowel flora composition, Bowel flora supplementation Th1-Th2 imbalances and associated conditions, Nutrition and inflammation, Nutrition and intolerances/allergies Supporting and modulating the immune system and digestive system with diet and nutrients	
LECTURE W/E 3 NUTRITIONAL THERAPEUTICS PART 2 12 th & 13 th November	Key imbalances identified by functional medicine: Detoxification and biotransformation, Oxidation reduction imbalances Detoxification and toxic elimination: Movement of toxins out of the body, Phase 1 and 2 detoxification pathways, Problems with imbalances in the detoxification pathways, Foods and nutrients that support phase 1 and 2 detoxification, Limiting toxic intake through diet and lifestyle, Acid and alkaline diets	
LECTURE W/E 4 PATHOPHYSIOLOGY PART 2 10 th & 11 th December	Diseases and disorders of the endocrine system Diseases and disorders of the nervous system Diseases and disorders of the reproductive system Diseases and disorders of the Musculoskeletal system Revision of each associated system	

YEAR 2 SEMESTER 1

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am – tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E5 NUTRITIONAL THERAPEUTICS PART 3 8 th & 8 th January	<p>Functional medicine imbalances: Structural + hormonal and neurotransmitter</p> <p>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 including the immune system, digestive system, reproductive system, nervous system, cardiovascular system, weight control</p> <p>Therapeutics for the nervous and endocrine systems: Blood sugar regulation, Basic dietary and lifestyle management for stress, thyroid conditions, infertility and reproductive hormone imbalances</p> <p>Therapeutics of the musculoskeletal system</p>	

Semester 2

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am – tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E 6 CLINICAL PRACTICE 4 th & 5 th February	Case studies and group activities *Joint class with 3 rd year students	
LECTURE W/E 7 CLINICAL PRACTICE 3 rd and 4 th March	Case studies and group activities	
LECTURE W/E 8 PATHOPHYSIOLOGY PART 4 31 st March & 1 st April	Diseases and disorders of the urinary system The respiratory system. Diseases and disorders of the respiratory system The sensory organs. Diseases and disorders of the sensory organs Revision for exam	
LECTURE W/E 9 CLINICAL PRACTICE 21 st & 22 nd April	Case studies and group activities *Joint class with 3 rd year students	
PATHOPHYSIOLOGY EXAM + LECTURE W/E 10 NUTRITION IN SOCIETY PART 1 2 nd & 3 rd June Venue for cooking demo: TBC	Pathophysiology exam (Saturday morning) Cooking demonstration (Saturday afternoon) The effects of cooking on food: The positives and negatives of cooking, Raw food Maximising the nutrient content of food groups e.g. sprouting, grinding, soaking Healthy eating on a budget Food labelling Basic novel foods and how to use them Growing your own: Vegetables, herbs, fruit Wholefood initiatives: The slow food movement, GIY (Grow it yourself) Introduction to herbs used for common health disorders Using herbs in cooking, teas etc, over the counter remedies, Safety Food - from farm to fork (Ireland): Regulatory bodies, State departments and agencies, Traceability, Implications on our industry Food processing/manufacturing methods: Past and present, Effects on health, Research to back up links to chronic disease, The future outlook EU food regulation: Governing bodies, General food law, Policies and procedures Organic food: health and the environment, Sustainable agriculture	
LECTURE W/E 11 NUTRITION IN SOCIETY PART 2 23 rd & 24 th June	The physiology of and nutrition for different groups of the population: Possible physiological, metabolic and endocrine changes Vulnerable groups: The elderly, Children, Babies, Infants, Adolescents, Pregnancy and lactation, The chronically ill/injured, Lower socio economic groups, sports enthusiasts The affects of diet on common disorders: Digestive disorders, Heart disease, Immune disorders, Inflammatory conditions, Frequent infections, Hormonal imbalances, Skin conditions, Osteoporosis, Headache and migraine, Stress related disorders Using questionnaires for Dietary Coaching: Producing diet plans and fact sheets Case studies Counselling skills	

Pathophysiology Exam Date is 2nd June 2011



Diploma in Nutritional Therapy Year 3 Lecture Plan 2011 – 2012

Year 3 Semester 1

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am - tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E 1 PRACTITIONER DEVELOPMENT PART 1 24 th & 25 th September	<p>The patient practitioner relationship: Initiating the consultation, Confidentiality, Record keeping, Duty of care, Informed and implied consent, Professionalism and approach, Building rapport, Questioning techniques, Chunking and checking etc, Verbal and non verbal communication, Body language, Active listening, Boundary setting</p> <p>Taking a case history: The use of questionnaires, Obtaining relevant and important information, Time management, Implied and informed consent</p> <p>Reflection in Practice: How to use the reflective process</p>	
LECTURE W/E 2 PRACTITIONER DEVELOPMENT PART 2 22 nd & 23 rd October	<p>Using research to inform your interpretations and clinical decisions: Different types of research and their relevance to healthcare, Differentiating between qualitative and quantitative research, Understanding basic research and review articles, Sampling, Bias</p> <p>Interpreting case histories: Assessing the antecedents, triggers and mediators in different cases, Differential diagnosis, Assessing cases using the functional medicine model and key imbalances</p> <p>Obtaining information on pathologies and diseases</p>	
LECTURE W/E 3 NUTRITIONAL THERAPEUTICS 2 PART 1 19 th & 20 th November	<p>Choosing appropriate supplements: Assessing quality, practitioner products, Advanced supplements</p> <p>Special nutrients, including: Aloe vera, Algae, Glucosamine and chondroitin, HCL, Digestive enzymes, Individual amino acids, Mushroom preparations</p> <p>Novel and functional foods: The inclusion of specific foods with particular therapeutic properties: Juices, Culinary herbs, Spices, Antioxidant foods, Seaweeds, Fermented foods</p> <p>EU regulation of the health food and natural healthcare industry: The food vs. medicinal law, The supplements directive, The nutrition and health claims directive, The Traditional Herbal Medicinal Products Directive, The Human Medicinal Products Directive</p>	
LECTURE W/E 4 NUTRITIONAL THERAPEUTICS 2 PART 2 10 th & 11 th December	<p>Designing your therapeutic diet and supplement programme – 1st consultations and follow-ups: Considerations and limitations, Acknowledging potential side effects to dietary and supplement programme</p> <p>Formatting dietary and supplement information for your client: How much information to give, How specific do you need to be, Clarity of explanations</p> <p>Follow-up consultations: Dietary and supplement protocols</p> <p>Referrals and collaboration: Identifying when referral to or collaboration with another health care professional is necessary, Handling deferrals, Managing a case with other healthcare professionals: GPs, Other alternative practitioners</p>	
LECTURE W/E 5 CLINICAL PRACTICE 7 th & 8 th January	<p>The application of nutritional therapy: Protocols for individuals</p> <p>Nutrition in common conditions: Differential diagnosis, Dietary, lifestyle and supplement protocols</p> <p>Case studies involving: Overweight and obesity, Inflammation and immune dysregulation, CVD, Digestive complaints, Musculoskeletal conditions, Hormonal imbalances, Chronic stress</p>	

YEAR 3 SEMESTER 1

Year 3 Semester 2

WEEKEND	Lecture & Home Study Content	
	Saturday (9.00am-6.00pm) * 9.00am-10.00am - tutorial	Sunday (9.30am-4.30pm)
LECTURE W/E 6 CLINICAL PRACTICE 4 th & 5 th February	Case studies and group activities License to practise Live cases *Joint class with 2 nd year students	
LECTURE W/E 7: PHARMACOLOGY AND DIAGNOSTIC TESTS PART 1 3 rd & 4 th March	Diagnostic tests: Recognising and understanding when to use basic diagnostic biochemical tests, Basic biochemical tests, In clinic tests, Orthodox tests, Referring a client for tests, How to organise blood tests etc	
LECTURE W/E 8 PHARMACOLOGY & DIAGNOSTIC TESTS PART 2 31 st March & 1 st April	Common prescription drugs – e.g. Warfarin, beta blockers, NSAIDS, anti-depressants: Pharmacodynamics, Pharmacokinetics, Side effects and contra indications, Factors affecting variability of their action on individuals Drug/nutrient/herb interactions: Recognising the consequences of interactions between foods, nutraceuticals, herbal medicines and drugs Working with GPs to overcome problems Using essential reference texts – i.e. The BNF, MIMS, PDR	
LECTURE W/E 9 CLINICAL PRACTICE 21 st & 22 nd April	License to practise Live cases *Joint class with 1 st & 2 nd year students	
LECTURE W/E 10 CLINICAL PRACTICE 12 th & 13 th May	Case studies and group activities License to practise Live cases	
COOKING DEMONSTRATION (optional) 2 nd June Venue: TBC	Optional Cooking Demonstration *Joint class with 1 st and 2 nd year students	

YEAR 3 SEMESTER 2

Repeat Exam Date is 2nd June 2012.

*Please note – there is no exam in year 3 except for those students needing to repeat exams



INSTITUTE OF HEALTH SCIENCES

Diploma in Nutritional Therapy Year 4 Clinical Practice Plan 2011 – 2012

In Year 4, students complete their supervised clinical practice module. Students observe clinic consultation and take their own clients for consultation under supervision in the IHS Nutritional Therapy Clinics.

Students are divided into care groups comprised of 3 students. You will attend clinics on the weekends assigned to your care groups for observation and taking of client consultations.

Clinics Venue: Currently IHS run nutrition clinics in Cork, Galway and Dublin. We aim to conduct clinics locally where possible although this is not guaranteed.

SAMPLE TIMETABLE FOR DUBLIN CLINICS

Weekend	Saturday 9am – 6.00pm	Sunday 9am – 6.00pm
Weekend 1 3 rd & 4 th September 2011 Venue: OLH	Practitioner – Suzanne Laurie and Sally Milne Care groups - 1 and 2	Practitioner – Suzanne Laurie and Helen Corrigan Care groups – 3 and 4
Weekend 2 9 th & 9 th October 2011 Venue: OLH	Practitioner – Anneliese Dressel and Grace Kinirons Care groups – 3 and 4	Practitioner – Anneliese Dressel Care groups – 5
Weekend 3 5 th & 6 th November 2011 Venue: OLH	Practitioner – Anneliese Dressel and Helen Corrigan Care groups – 5 and 2	Practitioner – Anneliese Dressel and Helen Corrigan Care groups – 1 and 2
Weekend 4 3 rd & 4 th December November 2011 Venue: OLH	Practitioner – Anneliese Dressel and Suzanne Laurie Care groups – 3 and 4	Practitioner – Suzanne Laurie Care groups – 5
Weekend 5 14 th & 15 th January Venue: OLH	Practitioner –Sally Milne and TBC Care groups – as required	Practitioner –Sally Milne and TBC Care groups – as required