NUTRITION

Minimum Award Level:	Equivalent to Advanced Diploma		
Minimum Total Hours	1355	**Total Core Component Hours**	1355

Core Components

Anatomy & Physiology	140 hours
Biochemistry & Chemistry	70 hours
Diagnosis, Symptomatology, Pathology & Pharmacology	260 hours
Natural Medicine Philosophy & Therapeutics	120 hours
Nutrition Therapeutics	400 hours
Communication	60 hours
Professional Practice	90 hours
Safe Practices	15 hours
Supervised Clinical Training	200 hours

Notes

Provide First Aid Certificate - required.

ATMS requires that all supervised clinical training be completed by face to face practical training.

For Nutrition at least 70% of the clinic hours must be spent actively assessing and treating clients under supervision (ie no more than 30% of the time spent working in reception, working in the dispensary on tasks not directly related to their consultations etc).

Within the above 70% of clinic hours, each individual student must conduct a minimum 30 consultations where the student is the primary consulting practitioner (that is taking the case history, health assessment etc, developing the provisional diagnosis and treatment plan and being the sole/primary person talking with the patient).

These are the Minimum Education Standards for ATMS Accreditation, however, no training in needling, manipulation, ingestible medication or electrophysical therapies can be included unless otherwise indicated in these Standards. The ATMS Minimum Education Standards are subject to ongoing review and therefore may change at any time without notice.

Anatomy & Physiology

Minimum total hours for this component: 140

Learning Outcomes

- Describe commonly used terminology used in anatomy and physiology
- Describe the fundamentals of cell structure and function
- Describe the nature of metabolism
- Describe the management of body fluids
- Describe tissues, organs, and systems relevant to naturopathy
- Describe the organisation of the human body from the chemical to the organism level
- Define homeostasis, and explain the significance of homeostatic mechanisms in the body
- List the components, functions, and structure of the musculoskeletal system
- Describe the structure and function of the bones of the skeleton
- Describe the structure and function of the joints and muscles
- Give an explanation of the components, functions, and structure of the circulatory system
- Give an explanation of the components, functions, and structure of the respiratory system
- Give an explanation of the components, functions, and structure of the urinary system
- Give an explanation of the components, functions, and structure of the gastrointestinal system
- Give an explanation of the components, functions, and structure of the immune system
- Give an explanation of the components, functions, and structure of the nervous system
- Give an explanation of the components, functions, and structure of the endocrine system
- Give an explanation of the components, functions, and structure of the reproductive system
- Apply knowledge of human anatomy and physiology to specific conditions, such as ageing and health problems

Biochemistry & Chemistry

Minimum total hours for this component: 70

Learning Outcomes

- Describe the nature of atoms, molecules, ions and ionic compounds
- Explain the chemical interaction of atoms
- List the characteristics of acids, bases and buffers
- Explain oxidation and reduction and the importance of antioxidants
- Provide an understanding of organic chemistry, carbon chemistry, terminology, functional groups and their reactions
- Outline the nature and properties of carbohydrate molecules, and their roles in biological systems
- Describe the types of lipid molecules, outline their common properties, and their roles in biological systems
- Give an explanation of the roles of amino acids in protein structure, and outline the general structure of a protein molecule
- Apply knowledge of the properties of biological macromolecules to specific health problems
- Give an explanation of the nature of enzymes and enzyme action, and their roles in biological systems
- List the main pathways involved in cellular energy production, and the form of this energy
- Demonstrate an understanding of the main catabolic pathways for carbohydrates, fatty acids, amino acids, and haem
- Demonstrate an understanding of the main anabolic pathways for glucose, fatty acids, membrane lipids, and amino acids
- Describe the structure of the major nucleic acids of cells, and describe their properties
- Describe the processes involved in DNA replication and protein synthesis
- Define neurotransmitter and provide examples of these molecules
- Demonstrate an understanding of the body fluid compartments, and the roles of these fluids and their associated organs
- Explain the roles and mechanism of actions of hormones, vitamins and xenobiotics

- Explain the biochemistry of systems in the body e.g. liver, brain & nervous system, kidneys and muscles
- Explain physiological processes of detoxification

Diagnosis, Symptomatology, Pathology & Pharmacology

Minimum total hours for this component: 260

Learning Outcomes

- Define the key terms used in pathology
- Demonstrate an understanding of the general concepts related to cell injury, inflammation, and repair, regeneration and fibrosis
- Demonstrate an understanding of health conditions which have an immunological origin
- Demonstrate an understanding of health conditions which have a genetic origin
- Demonstrate an understanding of the nature of the important neoplasias
- Demonstrate an understanding of important health conditions which have an environmental or nutritional origin
- Demonstrate an understanding of important health conditions which are caused by infectious or parasitic organisms
- Demonstrate an understanding of important health conditions of the cardiovascular system, respiratory system, gastrointestinal system, excretory system, male and female reproductive systems, endocrine system, skin, musculoskeletal system, and nervous system
- Demonstrate ability to interpret pathology and haematology reports
- Demonstrate ability to utilise diagnostic/health analysis equipment appropriate to the natural therapist (eg sphygmomanometer) and interpret and apply findings
- Identify emotional symptoms associated with health conditions and disease processes
- Demonstrate a basic understanding of common psychiatric disorders
- Demonstrate an understanding of the processes for health analysis/disease diagnosis, including the role of investigation
- Demonstrate an ability to take case histories and conduct a physical examination
- Demonstrate an understanding of the relationship between disease processes and healing

Natural Medicine Philosophy & Therapeutics

Minimum total hours for this component: 120

Learning Outcomes

- Define naturopathic philosophy & principles
- Critically evaluate naturopathic philosophy & principles and their application to naturopathic clinical practice
- Critically discuss the historical development of healing and medicine, and its impact on contemporary biomedicine & natural medicine
- Compare & contrast the biomedical and naturopathic approaches to health care
- Critically discuss the advantages and limitations of naturopathic health care
- Define the scope of naturopathic practice
- Describe the advantages and disadvantages of the Integrated Health Care model
- Discuss the characteristics (scope of practice, advantages, limitations) of other natural medicine modalities, including Herbal Medicine, Homoeopathy, & Massage
- Critically discuss the various types of evidence (eg research-based, traditional, clinical expertise) that are used in naturopathic clinical practice
- Demonstrate an understanding of the analytical, rationalistic approach to an understanding of disease and its management
- Discuss the current political context of health care
- Describe the dynamic interchange between the physical, emotional, psychological, spiritual and environmental aspects of the human condition and how these are influenced by health and disease

- Demonstrate an understanding of the sociology of health and the health care system
- Critically discuss various health analysis methods used in Naturopathic practice (these may include iris analysis, tongue & nail analysis, pathology laboratory tests, bioelectromagnetic testing techniques – vega/mora/Listen, etc)
- Demonstrate an understanding of the contribution of Naturopathic health analysis methods to the evaluation & management of clients' health

Nutrition Therapeutics

Minimum total hours for this component: 400

Learning Outcomes

- Give an explanation of the general principles associated with the philosophy of naturopathic nutrition
- Demonstrate an understanding of the basic human nutrient requirements
- Understand the characteristics of the Australian diet and identify those areas which require changes for improved health
- Explain the meaning of RDI and its relevance in human nutrition
- Outline the characteristics of the Australian diet, and explain how it has changed over the past several years
- Demonstrate an understanding of the functions of carbohydrate, lipids and proteins in the body, outline the different types of each, and list food sources of each
- Describe the processes of digestion and absorption, and factors which influence them
- Define metabolism, and identify the factors which contribute to metabolism
- Distinguish the terms hunger and satiety, and outline the factors which influence these
- Demonstrate an understanding of the health problems associated with obesity, and factors which can lead to obesity
- Explain how good dietary advice assists in weight control
- Relate the level and nature of nutrition to the level of fitness
- Give an explanation of the functions and food sources of vitamins, water, and minerals in the body
- Give an explanation of the special nutritional requirements associated with the various stages of development, and with ageing
- Give an explanation of the special nutritional needs associated with pregnancy and lactation
- Give an explanation of the special nutritional needs for various health conditions associated with the different body systems
- Explain the role of nutrition in anorexia nervosa and bulimia
- Identify factors which affect the safety of foods, and measures which increase food safety in the community
- Asses a client's nutritional status using appropriate analytical/diagnostic tests
- Asses a client's condition from a naturopathic philosophical perspective
- Plan nutrition programs (including diet, food therapy and nutrient supplements) for managing specific conditions associated with the major body systems
- Treat a client for an assessed nutrition disorder (from a naturopathic perspective)
- Critically evaluate commercially available nutrition products for client use
- Educate clients in dietary and lifestyle modification programs
- Understand the clinical applications of vitamins, minerals, fatty acids and amino acids
- Explain nutritional approaches to the management of environmental hazards to health
- Describe the use of supplements in the management of drug-induced nutritional deficiencies
- Demonstrate an understanding of possible interactions between pharmaceutical drugs and foods, and nutrient supplements
- Conduct a client interview or conduct a questionnaire to collect data on a client's nutritional status
- Demonstrate an ability to write a professional report about a client
- Demonstrate an ability to assess a dietary regimen in terms of the nutrition provided and what may be deficient
- Demonstrate the ability to be flexible in dietary recommendations based upon the individual's likes, dislikes, socio-economic factors, allergies, intolerances and religious and cultural beliefs
- Demonstrate an understanding of the therapeutic and culinary values of food
  Demonstrate an understanding of the cultural aspects of food

Communication

Minimum total hours for this component: 60

Learning Outcomes

- Demonstrate effective professional communication skills with staff, clients, and other health care professionals
- Record information from interviews and client contacts
- Plan and conduct interviews with clients and staff
- Provide clear instructions to peers, staff and other health care providers
- List the key points associated with group dynamics
- Identify positions of conflict and strategies to deal with negative and positive group dynamics
- Debate the legalities and ethical issues associated with confidentiality as relates to Nutrition

Professional Practice

Minimum total hours for this component: 90

Learning Outcomes

- Describe the role of the natural medicine practitioner within the health care system
- Identify possible job opportunities in the health care industry
- Plan the establishment of a natural medicine practice (including a business plan)
- Describe the knowledge & skills required to manage a natural medicine practice (including operational strategies, marketing strategies, stock level monitoring)
- Demonstrate an understanding of financial management procedures
- Demonstrate an understanding of personnel management procedures
- Identify methods of monitoring successful natural medicine practice (including development and implementation of policies and procedures)
- Apply safe work practices in a natural medicine practice
- Observe legal and ethical requirements in a natural medicine clinic
- Maintain a professional development program
- Monitor and evaluate one's own work practices
- Demonstrate an ability to write a professional report about a client

Safe Practices

Minimum total hours for this component: 15

Learning Outcomes

- Follow organisational procedures for hazard identification and risk control
- Contribute to occupational health and safety in the workplace
- Use and implement strategies as directed to prevent infection in the workplace
- Use strategies to prevent work overload
- Work in a safe manner
- Use and implement strategies to prevent manual handling injuries
- Collect, handle, store and manage clinical and other waste in a safe manner
- Clean and disinfect equipment and surfaces
- Demonstrate hygiene management procedures
- Identify and respond to infection risk

Supervised Clinical Training

Minimum total hours for this component: 200

Learning Outcomes

- Demonstrate the ability to record and maintain client's records
- Perform daily operations of a Nutrition clinic
- Perform routine physical assessments and simple diagnostic tests on clients
- Describe how a nutritionist applies their knowledge and skills in practice
- Formulate and test trials diagnoses for clients
- Work with clients to create treatment plans
- Demonstrate a competent and caring professional manner in a Nutrition practice
- Treat clients in a Nutrition clinic using appropriate techniques
- Describe the place of Nutrition within the framework of health and health-related services in a local community
- Demonstrate an awareness of the particular requirements for a group practice
- Demonstrate financial viability of operating a Nutrition practice
- Describe the place of Nutrition within the framework of health and health-related services in the local community
- Demonstrate behaviour conforming to ethical and legal standards when dealing with clients and other health professionals
- Demonstrate an understanding of cross-cultural issues for working with a range of clients
- Demonstrate an ability to work in a sole practice
- Demonstrate a knowledge of group practice requirements
- Demonstrate an ability to write a professional report about a client

Notes

Supervised clinical practice refers to a situation where a student consults with clients, performs an appropriate health assessment, prepares and provides treatment/management plans, in a clinic open to members of the public and while under the supervision or direction of a clinician, trainer or practitioner employed or contracted by the college or institution.

Supervised clinical practice must be undertaken in the presence of a lecturer, trainer, or qualified supervisor who must be present at and directly observing at least part of each student consultation. Selection of a clinical practice supervisor is determined by the teaching institution.

ATMS requires that all supervised clinical training be completed by face to face practical training. Supervised clinical practice does not include any unsupervised practice on family, friends or other students, or consultations/treatments provided in a classroom setting.

For Nutrition at least 70% of the clinic hours must be spent actively assessing and treating clients under supervision (ie no more than 30% of the time spent working in reception, working in the dispensary on tasks not directly related to their consultations etc).

Within the above 70% of clinic hours, each individual student must conduct a minimum 30 consultations where the student is the primary consulting practitioner (that is taking the case history, health assessment etc, developing the provisional diagnosis and treatment plan and being the sole/primary person talking with the patient).