

WESTERN HERBAL MEDICINE

Minimum Award Level: Equivalent to Advanced Diploma

Minimum Total Hours	1355	Total Core Component Hours	1355
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Core Components

Anatomy & Physiology	140 hours
Biochemistry & Chemistry	70 hours
Diagnosis, Symptomatology, Pathology & Pharmacology	260 hours
Natural Medicine Philosophy & Therapeutics	120 hours
Herbal Medicine 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 Western Herbal Medicine 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
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- 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 Naturopathic Nutrition, 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

Herbal Medicine Therapeutics

Minimum total hours for this component: 400

Learning Outcomes

- Outline the history of herbal medicine from ancient civilisations to today with emphasis on the work of Dioscorides, Galen, Hippocrates, Paracelsus, Culpeper and Samuel Thomson
- Outline the philosophical principles of the doctrine of signatures, humoral theory, physiomedicalism and the eclectic movement
- Describe the philosophy of western herbal medicine in relation to the philosophy of holism
- Describe the basic concepts of ayurveda and traditional Chinese medicine
- Demonstrate skills in identifying medicinal plants
- Outline the general principles in growing, harvesting, drying and storage of medicinal plants
- Describe the main classes of phytochemicals found in medicinal plants
- Define the parameters of pharmacognosy and relevance to medicinal plant research
- Describe the general physiological activities of alkaloids, glycosides, polysaccharides, fixed oils, resins, essential oils and polyphenols
- Describe the general chemistry of alkaloids, glycosides, polyphenols, polysaccharides, fixed oils, resins, essential oils
- Describe the environmental factors affecting plant phytochemical content
- Compare the toxicity of pharmaceutical drugs and herbal medicines
- Describe the manufacture of water based preparations
- Describe the steps involved in the manufacture of a fresh plant tincture
- Describe the steps involved in the manufacture of dried plant alcohol based preparations
- Describe the steps involved in the manufacture of topical preparations
- List of advantages and disadvantages of using different types of solvents
- List the situations where alcohol based preparations are contraindicated
- Describe the removal of alcohol from herbal medicines
- Describe the classes of herbal medicines i.e. demulcents, immunomodulators, diaphoretics, diuretics, organ tonics, expectorants, alternatives, bitters, mucolytics, organ and hormonal normalisers, hepatics, lymphatics, stimulants, relaxants, adaptogens, laxatives, anti-inflammatories, anti-virals, anti-depressants
- Described the physiological activity of each class of herbal medicines
- Describe the indications, actions, general chemistry, contraindications and dosage regime of 75 herbal medicines that are commonly available in Australia
- Describe the principles of the herbal medicine management of conditions
- Describe the steps in developing an individual herbal medicine formula with an understanding of actions of the herbal medicines, the chemistry of the herbal medicines and the desired pharmacological response
- Describe the management of the range of conditions, which present to a herbal medicine practitioner of the gastrointestinal tract, respiratory system, musculoskeletal system, female reproductive system, genitourinary tract, male reproductive system, endocrine system, integumentary system, cardiovascular system and nervous system
- Demonstrate case taking skills within a holistic framework and in accordance with herbal medicine prescribing
- Demonstrate skills in assessing conditions that present to a herbal medicine practitioner and the possible pathological processes underlying the conditions
- Describe the situations where a herbal medicine practitioner would not treat a client but refer the client to another health care professional



- Demonstrate herbal medicines dispensing skills
- List the possible adverse interactions between herbal medicines and pharmaceutical drugs
- Describe how to calculate the dosage of a herbal medicine formula, including the child's dosage
- Describe the use of Bach flowers in the holistic management of a client
- Describe the application of dietary advice in the management of conditions
- List the factors to take into account when assessing the biomedical literature
- Describe the different approaches in which herbal medicine is practised in Australia i.e an empirical approach, an evidence-based approach, a constitutional approach, a holistic approach, a symptomatic approach etc
- Describe the concept of synergism in herbal medicine
- List the information to be included on the label of the dispensed herbal medicines

Communication

Minimum total hours for this component: 60

Learning Outcomes

- Demonstrate effective professional communication skills and relationships with staff, clients and other health care professionals
- Record information from interviews and client contacts
- Plan and conduct interviews 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
- Describe the ethical issues associated with the practice of herbal medicine
- Demonstrate skills to maintain professional expertise
- Demonstrate basic counselling skills to facilitate the treatment

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

- Describe the daily operations of a herbal medicine clinic
- Demonstrate the procedures of taking a case history, diagnosing, observing, listening and recording all relevant details in assessing patients
- Demonstrate a competent, honest and professional manner with patients
- Describe the procedures for maintaining a herbal medicine dispensary
- Describe the strategies to gain knowledge of new herbal medicines and formulas including their applications and contraindications
- Demonstrate knowledge of cross-cultural issues with patients
- Describe the situations in which a patient is referred to another healthcare practitioner
- Describe the requirements, advantages and disadvantages of a solo and group practice
- Demonstrate an ability to write a professional report about a patient

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 Herbal Medicine 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).

