

# ACADEMIC DEPARTMENTS

## College of Naturopathic Medicine Academic Departments

Dean, College of Naturopathic Medicine: Jessica Mitchell, ND, FABNP

Associate Dean of Clinical Education & Interim Residency Director:  
Joseph Vazquez, ND, MS

### Division of Clinical Education

Division Director: Jaclyn Bain, ND, FABNP

### Department of Pre-Clinical Sciences

Department Chair: Jaclyn Bain, ND, FABNP

The Department of Pre-Clinical Sciences focuses on developing, enhancing, and exercising cognitive analytical and evaluative thinking in the clinical context. These skills are enhanced through hands-on practice in the lab setting. Students develop and practice clinical skills in preparation for the clinical milestone examinations.

### Division of Human Sciences

Division Director: Yasmin Abusamra, PhD

### Department of Basic Medical Sciences

Department Chair: Yasmin Abusamra, PhD

The Department of Basic Medical Sciences focuses on principles and concepts relative to the structure and functions of the human body. Didactic courses and labs integrate anatomy, embryology, biochemistry, immunology, microbiology, physiology, pathology, and pharmacology. Emphasis is placed upon studying the human systems used to maintain health and the transitional pathophysiologic processes contributing to maintaining life.

### Department of General Medicine

Department Chair: Pamela Howell, MD

The Department of General Medicine emphasizes integrating knowledge with the practical application of primary naturopathic medicine. Didactic courses are designed and organized by body systems, integrating biomedical sciences with clinical applicability.

### Department of Research

Department Chair: Jeffrey Langland, PhD

The Department of Research provides coursework that addresses the fundamentals of advanced scientific methods in medicine and the practices and policies of the generic research community. Students learn scientific literature review and evaluation of the reliability of published data. Students with a strong interest in the conduct of research may, with the approval and supervision of a faculty member, enroll in research selectives and, taking advantage of available resources, conduct a research project which may lead to publication. Members of the research department are actively involved in research and maintain relationships with other area institutions such as the Bio-Design Institute at ASU, T-GEN North, and the University of Arizona.

Research at Sonoran University is guided by two internal institutional groups: The Research Advisory Board (RAB) is responsible for the

review of research protocols, taking into account scientific merit, ethical considerations, program relevance, and public responsibility; and the Institutional Review Board (IRB) assures compliance with medical ethics and human subjects research protection. The IRB will not accept protocols without prior RAB review and approval.

### Division of Therapeutics

Division Director: Katrina Stage, ND, RH (AHG), FABNG

### Department of Acupuncture and Chinese Medicine

Interim Department Chair: Chris Vedeler, L.Ac.

The Department of Acupuncture and Chinese Medicine prepares students to practice safely and competently while proving basic competency in Traditional Chinese Medicine. The curriculum includes didactic courses and labs in fundamental concepts of Chinese Medicine, diagnosis, meridians and points, pathology, acupuncture techniques, and case analysis and management.

### Department of Botanical Medicine

Department Chair: Patricia Gaines, ND, RH (AHG)

The Department of Botanical Medicine provides training in the medicinal and clinical application of plants. The curriculum recognizes historical and traditional use as well as modern research. Several venues offer courses, including field study, lectures, and medicine-making laboratory. Instruction focuses on clinical use, pharmacognosy, specific indication, dosage, formulation, and safety considerations. Materia medica classes are organized based on organ systems and reinforced through case studies. Emphasis is placed on understanding each herb's unique properties and how best to apply botanical medicine to various patient populations. Botanical medicine is discussed for treating acute and chronic illness, prevention, and wellness.

### Department of Homeopathy and Pharmacology

Department Chair: Vacant

The Department of Homeopathy and Pharmacology prepares students to be competent in case-taking, prescription, and patient management with an emphasis on the recognition of the body's process of healing. Students study homeopathic medicines' historical, current, and evolving use in naturopathic practice.

### Department of Mind-Body, Environmental Medicine, and Naturopathic Philosophy

Interim Department Chair: M. Dawn Jonas, NMD

The Department of Mind-Body emphasizes the intuitive, communicative, and therapeutic skills needed to be an effective practitioner. Focus is placed on the body, mind, and spirit interactions within the patient's health needs and the doctor/patient relationship. The Department of Environmental Medicine focuses on environmental toxins that adversely affect health, such as solvents, pesticides, heavy metals, plastic, and other pollutants. Labs provide opportunities to practice techniques that elicit detoxification in reducing toxicity and improving overall health. The Department of Naturopathic Philosophy introduces the naturopathic profession's basic philosophy, principles, concepts, and historical figures. They are designed to encourage the students to explore and discover their relationship to the philosophy, principles, and concepts within naturopathic medicine.

### Department of Nutrition

Interim Department Chair: Shaun Kennedy, ND

The Department of Nutrition emphasizes the body's metabolic pathways for macronutrients and micronutrients, individualized nutrient requirements, and therapeutic dietary protocols emphasizing whole foods. Based on the recognition that diet is a critical foundation for health, students learn to analyze patient diets and use specialty testing to make appropriate recommendations. Students will have the opportunity to practice nutritional counseling and utilize the teaching kitchen to integrate their knowledge. Critical analyses of the current evidence for nutritional and supplemental interventions are considered.

### **Department of Physical Medicine**

Interim Department Chair: Vacant

The Department of Physical Medicine focuses on orthopedic physical assessment techniques and treatment modalities, including therapeutic touch, palpation, soft-tissue and osseous manipulation techniques, and hydrotherapy. Patient case management is emphasized for functional improvement in injury states, postural stress conditions, pain management, and structural integration.

## **College of Nutrition Academic Departments**

Dean, College of Nutrition: Gena E. Kadar, DC, MSMEdL, CNS

Director of Nutrition Programs: Karen Siclare, MS, CNS

### **Department of Clinical Nutrition**

The courses in the Department of Clinical Nutrition prepare students for success as practitioners of clinical nutrition by emphasizing the relationship between nutrition and human health and disease. Based on the recognition that diet is a critical foundation for health, the courses incorporate evidence-based training in dietary and health assessment, individualized nutrient requirements, nutrigenomics, therapeutic dietary protocols, supporting lifestyle/behavioral change, and practice management. Critical analyses of the current evidence for nutritional and supplemental interventions are emphasized, as are practical applications of didactic training through a teaching kitchen lab and an unparalleled Virtual Health Center experience.

### **Department of Nutritional Sciences**

The courses in the Department of Nutritional Sciences focus on the physical and biological sciences as a basis for understanding the role of food and nutrients in human health and disease. The multidisciplinary courses incorporate training in clinical biochemistry, physiology, pathophysiology, microbiomics, nutrients, botanicals, and therapeutic dietary patterns. Emphasis is placed upon understanding the body's metabolic pathways for macronutrients and micronutrients; the use of food, nutrients, and botanicals in health and disease; and the responsible use of dietary and herbal supplements. Critical analyses of the current evidence for nutritional and supplemental interventions are emphasized, and self-care practices are used both to apply didactic learning and to promote personal sustainability.

### **Department of Nutrition Business Leadership**

The courses in the Department of Nutrition Business Leadership prepare students for success as a leader in the natural products industry. The multidisciplinary courses incorporate training in nutrition business fundamentals including supply chain (ingredient procurement, product manufacturing, regulations, sales, and marketing), leadership, finance, and management—all specific to the multi-billion-dollar natural foods and dietary supplement industry. The courses emphasize critical thinking, real-

life problem solving, sustainability, corporate social responsibility, and effective written and verbal communication. Students will gain leadership qualities, knowledge, and skills unique to the natural products industry.