

NUTRITIONAL SCIENCES

Learning Outcomes

Master of Professional Studies (M.P.S.)

1. **Know:** Graduates will demonstrate knowledge of advanced principles of food and nutrition while incorporating primary literature in the application of nutrition in practice. The core knowledge demonstration will include comprehension of current evidence in the field and an understanding of metabolism, nutrition assessment, clinical nutrition, nutrition counseling, nutrition education and program planning, research, and leadership.
2. **Apply/Create:** Graduates will be able to analyze and synthesize the research findings and the skills to translate research to best practices in various nutrition practice settings including clinical, research, management, and community. Graduates will demonstrate the ability to evaluate high-quality research to build an evidence base for practice decisions and generate ideas for a novel capstone project. Graduates will be also able to demonstrate the ability to design, implement, and evaluate a capstone project and effectively demonstrate the ability to disseminate their findings to other health care professionals and colleagues.
3. **Communicate:** Graduates will be able to convey ideas, arguments and practice-based decisions in clear, concise, well-organized papers, proposals, videos, posters, and oral presentations.
4. **Critical Thinking:** Graduates will be able to critique and interpret primary food and nutrition literature, consumer nutrition information, and contemporary discourse in the field of nutrition. Critical thinking skills will be demonstrated by the student's ability to analyze, evaluate, interpret, and apply the principles of nutrition assessment, clinical nutrition, nutrition counseling, nutrition education and program planning, research, and leadership in diverse, practical formative and summative assessments.
5. **Professional practice:** Graduates will demonstrate knowledge and comprehension of ethical principles relevant to leadership and professional practice in the field of nutrition and those related to authorship, plagiarism, conflicts of interest, and will develop a breadth and depth of understanding relevant to diversity, equity, inclusion, and belonging. Students will also demonstrate the skills needed to become innovators and leaders in today's dynamic health and wellness sector. These skills include critical thinking, problem solving, collaboration, communication, leadership, cultural humility.

Master of Science (M.S.)

1. **Know:** Students will demonstrate knowledge of the basic principles of nutrition science and an understanding of the primary literature both in basic and applied areas of research. The core demonstration will include comprehension of current knowledge in the field and an understanding of study design, methods, results, and significance and the application of this comprehension/understanding to problems in biology, biochemistry, medicine, and public health.
2. **Apply/Create:** Students will be able to synthesize the research findings in their specialty area and generate ideas for a novel research project; they will be able to articulate the rationale for the proposed novel research project and clearly describe a specific hypothesis to be tested; they will demonstrate the ability to use best practices in the field of nutrition science to design a research study to test this hypothesis and carry it to completion.

3. **Communicate:** Students will be able to convey ideas or arguments in clear, concise, well-organized papers and proposals as well as in formal, oral presentations.
4. **Critical thinking:** Students will master the ability to critique the primary nutrition science literature. This will be demonstrated by the student's ability to identify the research question, experimental design and conclusions in a scientific article in the field; they will also be able to apply their knowledge of statistics and experimental design to critique methodology and conclusions in a scientific article in the field.
5. **Professional practice:** Students will demonstrate knowledge and comprehension of research ethics issues which are relevant to the field of nutrition science including working with animal and human populations, ethical principles related to authorship, plagiarism, and conflicts of interest. They will also contribute to the profession through service.

Doctor of Philosophy (Ph.D.)

1. **Know:** Students will demonstrate knowledge of the basic principles of nutrition science and an understanding of the primary literature both in basic and applied areas of research. The core demonstration will include comprehension of current knowledge in the field and an understanding of study design, methods, results, and significance and the application of this comprehension/understanding to problems in biology, biochemistry, medicine, and public health.
2. **Apply/Create:** Students will be able to synthesize the research findings in their specialty area and generate ideas for a novel research project; they will be able to articulate the rationale for the proposed novel research project and clearly describe a specific hypothesis to be tested; they will demonstrate the ability to use best practices in the field of nutrition science to design a research study to test this hypothesis and carry it to completion.
3. **Communicate:** Students will be able to convey ideas or arguments in clear, concise, well-organized papers and proposals as well as in formal, oral presentations.
4. **Critical thinking:** Students will master the ability to critique the primary nutrition science literature. This will be demonstrated by the student's ability to identify the research question, experimental design and conclusions in a scientific article in the field; they will also be able to apply their knowledge of statistics and experimental design to critique methodology and conclusions in a scientific article in the field.
5. **Professional practice:** Students will demonstrate knowledge and comprehension of research ethics issues which are relevant to the field of nutrition science including working with animal and human populations, ethical principles related to authorship, plagiarism, and conflicts of interest. They will also contribute to the profession through service.