

Health and Human Physiology, MS

Learning Outcomes

Child Life Subprogram

Graduates will:

- demonstrate an understanding of developmental and psychosocial needs of children and families in health care settings and the assessment, planning, implementation, and documentation of developmentally appropriate child life interventions;
- demonstrate an understanding of stressful life experiences and coping techniques for children and families from a family systems perspective;
- demonstrate the ability to maintain relationships with children, families, peers, and an approach to teamwork and collaboration skills;
- demonstrate an understanding of therapeutic play and creating a therapeutic environment with opportunities in health care and community settings;
- demonstrate effective oral and written communication and strong critical thinking skills;
- learn to analyze and present research and evidenced-based practice related to children and families;
- prepare for the role of a certified child life specialist in hospitals and community-based facilities; and
- successfully complete a child life practicum, a child life internship, and meet all requirements and pass the certification exam.

Clinical Exercise Physiology Subprogram

Graduates will:

- demonstrate a comprehensive understanding of normal and abnormal cardiovascular, respiratory, and exercise physiology;
- demonstrate a comprehensive understanding of pharmacokinetics, mechanisms of action, indication, contraindication, and names of common cardiac, vascular, metabolic, pulmonary, hematological, and neurological drugs;
- demonstrate a comprehensive understanding of physical activity assessment, the major determinants of physical activity behaviors, and the application of physical activity behavior change strategies;
- demonstrate a comprehensive understanding of metabolic exercise testing and exercise prescription for healthy adults;
- demonstrate understanding of beginning and intermediate electrocardiography (ECG), exercise testing, and exercise prescription for adults with cardiovascular, pulmonary, or metabolic disease;
- demonstrate competency in clinical skills, including taking health screening, heart rate pulse, blood pressure, and pulse oximetry at rest and during exercise;
- understand basic research methods, study design, and statistical analysis; and

- read, interpret, and critique scientific papers in clinical exercise physiology.

MS in Health and Human Physiology Without Subprogram

Graduates will:

- demonstrate understanding and critical evaluation of the scholarly literature in the area of specialization within human physiology and/or health promotion;
- formulate testable research questions and hypotheses resulting in proper experimental study design and analysis plan;
- conduct quantitative or qualitative research including data collection, analysis, and interpretation of results in the context of current scientific knowledge; and
- present scientific results to the department, university, or regional/national scientific community.