

# HEALTHCARE PROFESSIONS EDUCATION (HPE)

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## **HPE 400 Research Methods in Health Professions Education (4 Credit Hours)**

Introduction for Health Professions Education (HPE) students to the fundamentals of research design for education and scholarship in teaching and learning. This course offers a deep dive into educational research, covering problem identification, literature review, research question formulation, and the critical evaluation and synthesis of existing studies. It provides a solid foundation in quantitative research (including reliability, validity, survey construction, and validation), qualitative research (focusing on interviews and focus groups), and mixed methods research. The course emphasizes ethical principles in research and teaches effective data interpretation and presentation. Additionally, students will be introduced to grant development and introduced to their capstone project which is a research proposal. This course will equip students with the skills needed to excel in educational research., reliability, validity, survey construction, and survey validation), qualitative research (as it relates to interviews and focus groups) and mixed methods research (how to manage and use more than one method of data collection); Analyze data and ethical research practices that guide educational research; Illustrate grant development with an introduction of the capstone project research proposal.

### *Outcomes:*

Identify a research problem and method of literature review; Formulate research questions and hypothesis; Distinguish between quantitative, qualitative, and mixed methods research; Describe fundamentals of quantitative research (e.g

## **HPE 401 Fundamentals of Learning and Teaching Modalities in Health Professions (3 Credit Hours)**

Introduction to a range of teaching modalities, including large group lectures, small group teaching, case-based, problem-based, and team-based learning, flipped classrooms, standardized patients, simulation, e-learning, procedural, chalk talks, and clinical and bedside teaching. Ignatian Pedagogy will be threaded throughout the course. Rooted in adult learning theories and human cognition, students will review these fundamental concepts and seamlessly apply them throughout the course. There is a strong focus on practical application, enabling participants to create innovative and engaging learner-centered experiences, establish supportive learning environments, and adeptly integrate feedback. As a culmination of their learning, students will craft a final project, utilizing one of these teaching modalities to instruct peers on a relevant topic, applying the skills in a real-world educational context., large group lecture, small group teaching, cased-based, problem based and team-based learning, flipped classroom, standardized patients, simulation, e-learning and clinical and bedside teaching); Define the concepts of adult learning theories (e.g., learning theory, human cognition); Apply knowledge and understanding of androgyny to class work during this course; Demonstrate course skills, including the creation of innovative and engaging learner-centered experiences which will be showcased in the teaching portfolio project; Appraise experience with teaching modalities in education through reflective writing.

### *Outcomes:*

Categorize different teaching modalities (e.g

## **HPE 402 Technology in Education and Effective Lecture Skills (4 Credit Hours)**

In this engaging course, through a series of hands-on activities, participants will design and produce an electronic lecture that skillfully incorporates critical components of effective instruction. Students will not only create an educational presentation, but also assess its effectiveness through peer review, showcasing their critical evaluation skills and the ability to use feedback for continuous improvement. By the course's conclusion, participants implement peer-reviewed feedback and integrate best practices to refine their lecture into a polished, pedagogically effective resource.

### *Outcomes:*

Produce an engaging and impactful electronic lecture that incorporates critical components of effective instruction; Demonstrate critical evaluation skills through peer review of educational content; Use peer feedback to revise and enhance their lecture; Appraise use of technology in education with discussion posts

## **HPE 403 Principles of Curriculum Design (4 Credit Hours)**

The course will focus on the formal process of curriculum development. Much of the course will cover the standard medical education curriculum development process developed by Kern and Thomas (Thomas PA, Kern DE et al. Curriculum Development for Medical Education: A Six-Step Approach. 3rd ed. The Johns Hopkins University Press). Throughout this course, students will delve into essential theoretical literature specific to healthcare education, equipping participants with a solid foundation. They will learn to pinpoint educational challenges through needs assessment and distinguish between learning goals and objectives. Furthermore, students will master the art of crafting effective learning objectives using Bloom's Taxonomy and selecting fitting evaluation designs. Participants will learn educational strategies that will allow them to achieve their curriculum objectives. Finally, students will gain practical strategies for collecting and leveraging educational data to continuously enhance pedagogy, ensuring their healthcare education practices are informed, effective, and patient centered.

### *Outcomes:*

Develop familiarity with essential theoretical literature of Kern's Six-Step Approach to Medical Education curriculum development; Identify curricular problems; Formulate a needs assessment; Recall the fundamental differences between learning goals and objectives; Illustrate how to create learning objectives for courses and educational sessions utilizing Bloom's Taxonomy; Select an appropriate evaluation design based on the identified objectives; Evaluate the effectiveness and impact of various educational technologies on learning outcomes and instructional design; Develop strategies to gather, review, and utilize educational data to improve pedagogy

**HPE 404 Statistical Methods for Educational Research (4 Credit Hours)**

This course offers a foundational understanding of statistical analysis within the context of research in clinical and health professions education. Through a blend of theoretical knowledge and hands-on practice, students will become proficient in defining core statistical concepts, applying statistical methods to diverse data types, and recognizing statistical analysis as a versatile toolkit for uncovering insights in data. Additionally, they will explore how statistical thinking enhances problem-solving skills in health professions education research and gain an understanding of the purpose and proper application of statistical techniques. Practical skills include conducting statistical tests, interpreting their outcomes, and translating results into meaningful conclusions. By the course's conclusion, students will be well-prepared to engage in evidence-based research, make informed decisions, and contribute to advancements in both clinical practice and medical education.

*Outcomes:*

Define basic statistical concepts; Analyze statistics from clinical and educational data; Classify statistical analysis as a collection of techniques that are intended to uncover information in data; Discuss how statistical methodology is used to aid thinking in health professions education research; Describe proper use of the statistical techniques that are presented in this course; Compute statistical tests of research hypotheses using methods presented in this course; Interpret the meaning of tests of hypotheses and other statistical computations

**HPE 405 Strategies in Assessment, Implementation, and Evaluation in HPE (4 Credit Hours)**

This course is designed to equip students with the advanced skills and knowledge required to navigate the evolving landscape of healthcare education. This program offers a dynamic blend of theory and practice. Dive deep into the art and science of designing effective assessment strategies, implementing innovative educational techniques, and rigorously evaluating the outcomes in health professions education. Through critical analysis and synthesis, students will gain the skills to create holistic, evidence-based educational approaches.

*Outcomes:*

Apply advanced theoretical knowledge to real-world scenarios within the evolving landscape of healthcare education; Employ a blend of theory and practice to effectively address complex challenges and opportunities; Analyze the art and science of effective assessment strategies, innovative educational techniques, outcomes evaluations in health professions education; Demonstrate an understanding of various assessment and testing methods; Appraise educational practices, leveraging advanced skills and knowledge to lead positive change and innovation in healthcare education

**HPE 406 Leadership in Health Professions Education (3 Credit Hours)**

This course is designed to provide students with an understanding of the various theories that underpin leadership education and practice within the context of health professions education. As an active participant in this class, students will explore the presented leadership theories to shape their approach as an educator but also examine how these theories inform their interactions and engagement with the world within and beyond the healthcare and education domains. Participants will gain insights into how leadership principles can be applied to address the unique challenges and opportunities faced by health professions educators, helping them become a more effective leader and educator in the healthcare field, ultimately contributing to the advancement of healthcare education and practice.

*Outcomes:*

Review the fundamental concepts of leadership and the theories in the context of health professions education; Analyze ideas, arguments, and viewpoints related to leadership theories within healthcare and educational settings; Assess the effectiveness of different leadership styles, change agent qualities, and approaches in various organizational contexts, especially in the context of driving change; Articulate how one's personal developmental perspective influences both philosophical beliefs and practical applications in healthcare leadership and education

**HPE 407 Administrative Skills and Organizational Change (3 Credit Hours)**

This course has a clear focus on two main aspects: understanding how organizations undergo transformations and equipping individuals to drive change within an organization. It covers several key areas, including the driving forces behind change, the process of implementing change, the qualities, and skills necessary for effective change agents, and the behavioral theory explaining how both individuals and organizations evolve. A comprehensive grasp of the various theoretical frameworks shaping the organization and structure of higher education is integral to achieving proficiency in these areas. The goal of this course is to provide students with valuable insights into the major functions and structures within higher education. In essence, it's not focused on teaching administrative or faculty tasks but rather on helping participants understand the context within which they operate within higher education. This course introduces students to important concepts, theories, and fiscal practices in higher education. Moreover, it offers opportunities for students to analyze, test, and receive feedback on their financial decision making and its impact on critical higher education issues.

*Outcomes:*

Explain the significance of theoretical frameworks in shaping the structure of higher education and organizational dynamics; Apply knowledge of organizational change forces; Analyze real-world scenarios of organizational transformation; Examine the various factors contributing to the success or failure of change initiatives within organizations; Demonstrate competence in financial decision-making processes by making informed decisions that address critical higher education issues; Develop innovative approaches for implementing change within an organization

**HPE 408 Health Professions Education Capstone Project (3 Credit Hours)**

In this course students craft a research proposal primed for submission to the Institutional Review Board (IRB). Guided by seasoned educators and researchers, participants skillfully construct essential components of a robust research proposal that fills a current gap in the literature. Proposals will include an introduction, background, significance, thorough literature review, research methods, budget, and thoughtful implications and conclusions. By course end, students will not only have a well prepared research proposal but also the knowledge and confidence to undertake impactful research in the dynamic landscape of health professions education.

*Outcomes:*

Demonstrate a grasp of health professions education research principles; Construct an effectively structured research proposal that includes a well-defined introduction, background/significance, and literature review; Develop the research methods, implications, and conclusion sections of a health professions educational research proposal; Generate a coherent, complete, well-structured, and insightful proposal ready for IRB submission