Certificate for Health Professions Education (CHPE)
Course Outline

Module: Instructional Design in Healthcare Education

Instructors:

Dr. Asghar Naqi | Dr. Alia Khalique | Dr. Ammar Ahmad | Anusheh Attique | Rehana Kazi | Eilya Mohsin

To successfully train the next generation of healthcare professionals, medical educators must utilize innovative teaching strategies and techniques in both classroom and clinical settings. This contemporary program integrates traditional and novel pedagogical methods to develop skilled clinical educators who can apply educational theories and teaching best practices to instruct medical students and physicians-in-training. Participants will go through various teaching methodologies ideal for large classroom instruction and explore different models of instruction, such as blended, online, hybrid, and flipped.

Module: Health Data Science (Quantitative Techniques)

Instructor:

Dr. Ihsan Ayyub Qazi

Data science is revolutionizing healthcare, offering unparalleled opportunities to enhance patient care, streamline diagnosis processes, and improve overall health outcomes. In this module, participants will learn about data design principles, descriptive statistics, and various health data sources. They will gain hands-on experience in data cleaning, exploratory analysis, and visualization using cutting-edge tools. Participants will learn how to leverage predictive analytics, causal inference, and generative artificial intelligence (AI) to uncover patterns, make predictions, and drive informed decision-making in healthcare. Case studies will be used to illustrate the real-world applications of these methods, ensuring participants can translate theory into practice. Participants will explore ethical principles and guidelines to ensure ethical data analysis and management. Upon completion, participants will be well-versed in the principles and practices of health data science.

Module: Course Design & Development

Instructor:
Dr. Launa Gauthier (online, self-paced)

When delivering a course or training, have you ever felt that you had the best knowledge of your subject content, but your learners were still unable to achieve the desired skills and knowledge you were aiming for? This means that you need to re-assess and re-evaluate how to deliver your content knowledge to best be able to meet your learners needs and help them achieve the course/training goals. The first step to do this, is develop a robust and learner-centered course design!

Course Design and Development is your one-stop solution for developing a well-designed and holistic course in any educational context. So regardless of whether you are planning a course in a university, developing a corporate training, or creating a series of workshops, having a well-designed and purposeful plan will help your learners to acquire the skills, knowledge and values that you want them to gain by the end of the course/ training/ workshop.

Module: Artificial Intelligence in Medical Education

Instructor:
Dr. Agha Ali Raza
Embark on a transformative journey with the Artificial Intelligence course tailored for health professionals. The course has been designed to redefine teaching and research in healthcare in the era of Generative AI. This cutting-edge program delves into the core of Artificial Intelligence, from its fundamental principles to advanced applications in healthcare. Discover how AI revolutionizes clinical diagnostics, personalized medicine, and healthcare operations. Learn to harness Generative AI for creative and analytical tasks, enhancing lesson planning, data analysis, and decision-making. Equip yourself with skills to train custom chatbots, augmenting your role as a researcher and educator. Emphasizing ethical AI use, this course augments the skills of health professionals aspiring to integrate AI into their practice and pedagogy, elevating their expertise in preparation for the AI-symbiosis.

Module: Research Design (Qualitative Techniques) & Grant Writing

Instructors:
Dr. Shaper Mirza | Dr. Jessica Catherine Albrent | Dr. Ayesha Masood

The module is developed to provide insight into Research Design and Grant writing.

Research Design & **Grant writing:** The sessions cover an extensive range of topics within research design, beginning with an overview of its importance in contemporary research. Grant writing basics will help you navigate through funding opportunities, provide insight into how to identify research gaps, frame appropriate questions, and develop a research plan that is sure to score big. Furthermore, the module will also guide students into understanding funders' vocabulary and how it can be addressed without sounding complicated or overwhelmed. For assessment and to ensure that students are following materials discussed during the module, students will be required to build a proposal as we go along discussing different aspects of grant writing. This group exercise will provide ample opportunities for students to receive expert feedback on each component of their proposal.

Please note that LUMS Learning Institute reserves the right to make amendments to the course outline as deemed necessary by the instructors. Any changes will be communicated to all participants in advance, and an updated outline will be provided to ensure a seamless learning experience. We appreciate your understanding and flexibility as we strive to deliver the most relevant and impactful content.