## 1

## CLINICAL AND HEALTH INFORMATICS, CAPSTONE CERTIFICATE

## LEARNING OUTCOMES

- Health: Describe and explain background knowledge of the history, goals, methods and challenges of the major health sciences, including human biology, genomics, clinical and translational science, healthcare delivery, personal health and population health.
- Information Science and Technology: Demonstrate background knowledge of concepts, terminology, methods and tools of information science and technology for managing and analyzing data, information and knowledge.
- Social and Behavioral Science: Evaluate the effects of social, behavioral, legal, psychological, management, cognitive, and economic theories, methods, and models applicable to health informatics from multiple levels including individual, social group, and society.
- 4. Health Information Science and Technology: Determine concepts and recognize tools for managing and analyzing biomedical and health data, information, and knowledge. Key foci include systems design and development, standards, integration, interoperability, and protection of biomedical and health information.
- 5. Human Factors and Socio-technical Systems: Apply social behavioral theories and human factors engineering to better understand the interaction between users and information technologies within the organizational, social, and physical contexts of their lives, and apply this understanding in information system design.
- 6. Social and Behavioral Aspects of Health: Evaluate and apply social determinants of health and patient-generated data to analyze problems arising from health or disease, to recognize the implications of these problems on daily activities, and to recognize and/or develop practical solutions to managing these problems.
- Social, Behavioral, and Information Science and Technology Applied to Health: Appraise the diverse foundation concepts and facets to develop integrative approaches to the design, implementation, and evaluation of health informatics solutions.
- Professionalism: Demonstrate conduct that reflects the aims or qualities that characterize a professional person encompassing especially a defined body of knowledge and skills and their lifelong maintenance as well as adherence to an ethical code.
- Inter-professional Collaborative Practice: Exhibit behavior that reflects the foundations of values/ethics, roles/responsibilities, inter-professional communication practices, and inter-professional teamwork for team-based practice.
- Leadership: Demonstrate the following characteristics: credibility, honest, competence, ability to inspire, and ability to formulate and communicate a vision