NNI-Nursing-Informatics

NNI 621. Conceptual Basis for Informatics Practice. 3 Hours.
This course is based on the concepts underpinning nursing informatics practice as delineated in the American Nurses Association’s Scope and Standards of Nursing Informatics Practice. Students will explore theories of adult education, communication, systems, decision making, human-computer interaction and the concepts of data, information and knowledge. They will have the opportunity to learn how these theories and concepts are utilized in informatics practice. Prerequisite: NUR 643.
Prerequisites: NUR 643 [Min Grade: C] (Can be taken Concurrently)

NNI 622. The Information System Life Cycle. 3 Hours.
This offering is designed to be the culminating course of the nursing informatics specialist curriculum. This course ties together all previous course work together in an application based review of the information system life cycle from systems analysis to system evaluation and maintenance. The course is designed to be taken in conjunction with a clinical experience in which the student will be exposed to aspects of the hands on application of course content.
Prerequisites: NUR 643 [Min Grade: C] and NNI 621 [Min Grade: B]

NNI 625. Organizational Process and Behavior. 3 Hours.
This course will assist the Nurse Informatician to understand and evaluate how organizations change and innovate with new information technologies to compete in the marketplaces, collaborate with partners, serve customers, motivate employees, and improve operations. This course provides students with the opportunities to: learn the main theoretical perspectives on managing IT change through innovations: familiarize with current best practices and models of change of innovation through IT; and develop innovation skills in various organizational settings and within the framework of project management.
Prerequisites: (NUR 610 [Min Grade: C] or NUR 610 [Min Grade: C]) and (NHSA 631 [Min Grade: C] or NHSA 631 [Min Grade: C]) and NUR 643 [Min Grade: C] (Can be taken Concurrently)

NNI 630. Biomedical Informatics Research. 3 Hours.
This course provides an overview of the field of biomedical informatics, including subfields ranging from bioinformatics to public health informatics, from the perspective of research accomplishments and challenges. Each topic will be taken from a historical perspective where are we now and how did we get here 0 and then explore the current research directions. There will be emphasis on underlying concepts, theories and methods. Although this course can serve as a survey of the field, it is also intended for students who will pursue research in some area of biomedical informatics. This course would be useful for any students doing research using healthcare data.

NNI 631. Foundations of Nursing Informatics-Scope of Practice, Models, Standards, and Theories. 3 Hours.
In this course, the graduate nursing informatics student will be grounded in the Scope and Standards of Nursing Informatics (NI) Practice beginning with forming an understanding of the foundational model of all informatics: data to information to knowledge to wisdom (DIKW). NI students will then apply the DIKW model to an examination of concept oriented, standardized terminologies and the impact of this on evidence formation, outcomes, evaluation, and the calculation of the value of nursing. The graduate nursing informatics student will explore standards guiding interoperability, security, and data transfer. Lastly, the nursing informatics student will analyze and evaluate the role of the Informatics Nurse Specialist in leading change using relevant informatics theories.
Prerequisites: NHSL 604 [Min Grade: B] and NHSL 610 [Min Grade: B]
NNI 636. Data Analytics for the Informatics Nurse Specialist. 3 Hours.
The purpose of this course is to provide the informatics nurse specialist
graduate students with an overarching knowledge of Big Data, Data
Lifecycle, and the use of advanced technologies with Big Data in
healthcare while considering the current challenges. The focus of the
course will be to master the domain knowledge and appropriate theories
while mastering the use of analytics software using a real-life large
data set. The emphasis of this course will be for the students to apply
this knowledge through the use and application of data visualization
software to answer healthcare questions/problems. students will: propose
study questions/problems; visually display data results through a data
visualization software (Tableau); and synthesize their questions and
answers. A presentation of results will be the culminating experience.
Prerequisites: NHSL 604 [Min Grade: B] and NHSL 606 [Min Grade: B]
and NHSL 610 [Min Grade: B] and NNI 631 [Min Grade: B] and NNI 632
[Min Grade: B] and NNI 634 [Min Grade: B]

NNI 685L. Nursing Informatics: Practicum I. 2 Hours.
This course provides an experimental base for students to develop
and implement the role of the informatics nurse specialist. Emphasis is
placed on the synthesis and application of the theories and concepts
that provide the basis of informatics practice. Students will develop the
ability to collaborate in multidisciplinary groups, identifying areas for the
design and implementation of administrative and clinical technological
applications. Students will spend 100 hours during the semester working
with a clinical informatics specialist in practice.

NNI 686L. Nursing Informatics: Practicum II. 2 Hours.
This course provides an experimental base for students to develop
and implement the role of the informatics nursing specialist at the
organizational level. Students will be paired with a nursing informatics
specialist working on aspects of system analysis, design, implementation
and evaluation. This experience requires the student synthesize
knowledge gained in all previous courses in the curriculum. This course
includes 100 hours of clinical practice and is designed to function as the
clinical capstone to the NNI curriculum. A comprehensive examination is
given during this residency course. Failure to pass the comprehensive
examination will delay graduation.
Prerequisites: NNI 685L [Min Grade: P]

NNI 730. Biomedical Informatics Research. 3 Hours.
This course provides an overview of the field of biomedical informatics,
including subfields ranging from bioinformatics to public health
informatics, from the perspective of research accomplishments and
challenges. Each topic will be taken from historical perspective- where
are we now and how did we get here- and then explore the current
research directions. There will be emphasis on underlying concepts,
theories and methods. Although this course can serve as a survey of
the field, it is also intended for students who will pursue research in
some area of biomedical informatics. This course would be useful for any
student doing research using healthcare data.