Master of Science in Nursing with Specialization in Anesthesia Nursing

PREREQUISITE COURSE CRITERIA

NURSING COURSES

Applicants are required to demonstrate satisfactory course completion with a letter grade of a C or better for the below courses. All courses need to be completed at the junior college or university level. For the Statistics course, the course taken must be transfer-equivalent to the 100-level UI courses listed below.

REQUIRED COURSE	COMPARABLE* COURSE AT THE UNIVERSITY OF IOWA IN IOWA CITY, IA		
	NUMBER	TITLE	OVERVIEW
RESEARCH METHODS	096:143	Research for Nursing Practice	Focuses on the research process and its application to nursing.
UPPER-LEVEL STATISTICS	22S:101	Biostatistics	Statistical methods primarily for research in health sciences and related fields; descriptive statistics, estimation, tests of hypothesis.
	or 171:161	Introduction to Biostatistics	Application of statistical techniques to biological data: descriptive statistics, probability, binomial, Poisson, normal distributions, sampling distributions, tests of significance, confidence intervals, analysis of frequency data, and simple linear regression.
(WITHIN 5 YEARS)	or 07P:143 or 22S:102	Introduction to Statistical Methods	Analysis, interpretation of research data; descriptive statistics; introduction to probability, sampling theory, statistical inference (binomial, normal distribution, t-distribution models); linear correlation, regression.
PUBLIC HEALTH	096:153	Public Health Nursing	Nursing's role in the relationship between community conditions and public health.
HUMAN DEVELOPMENT AND BEHAVIOR	096:030 or 153:030	Human Development and Behavior	Focuses on normal developmental transitions experienced by individuals and family systems throughout the lifespan. These transitions include physical, cognitive and social-emotional development.
COMPUTER COMPETENCY SKILLS	NOTATION IN PREPARATION OF MSN PROGRAM: An applicant is expected to have mastered a level of computer competency in preparation for successful navigation of the MSN program.		

*** COURSES LISTED ARE ACCEPTABLE COMPARABLE COURSES AT THE UNIVERSITY OF IOWA. SIMILAR OR HIGHER LEVEL COURSES AT THE UI OR OTHER INSTITUTIONS ARE OFTEN ACCEPTABLE. IF YOU HAVE QUESTIONS, ASK THE ANESTHESIA NURSING PROGRAM OFFICE OR CONSULT THE UI TRANSFER EQUIVALENCY DATABASE.**

ATTENTION CURRENT BSN STUDENTS AT THE UNIVERSITY OF IOWA — NOTATION IN PREPARATION OF UI ANESTHESIA NURSING PROGRAM:

The undergraduate curriculum does not meet the entire anesthesia nursing course prerequisites. If this applies to you and your future plans are to apply to the UI Anesthesia Nursing Program you will need to build these prerequisites into your curriculum pattern as electives.

BASIC SCIENCE COURSES

Applicants are required to demonstrate satisfactory course completion with a letter grade of a C or better for the below courses.
All courses need to be completed at the junior college or university level.

REQUIRED COURSE	COMPARABLE* COURSE AT THE UNIVERSITY OF IOWA IN IOWA CITY, IA		
	NUMBER	TITLE	OVERVIEW
ANATOMY	060:110 (3 s.h.)	Principles of Human Anatomy	Gross and microscopic human anatomy; systemic approach to all body areas, with emphasis on clinical relevance.
PHYSIOLOGY	027:130 (3 s.h.)	Human Physiology	Principles and application of human physiology. Systems of body-circulatory, respiratory, digestive, hormonal, and immune, as well as cellular metabolism.
PATHO-PHYSIOLOGY	096:114 (3 s.h.) *096:115 (3 s.h.)	Human Pathophysiology: Organ Systems Human Pathophysiology: Cellular/Neuro/Immune	Normal and abnormal functioning of human cells, tissues, and organ systems over the lifespan, focusing on cardiovascular, respiratory, renal, gastrointestinal endocrine and reproductive systems and on processes of metabolism and homeostasis of the internal milieu. * If both 114 and 115 are completed, additional Physiology course for pre-requisite is not needed.
PHYSICAL ASSESSMENT	096:127 (4 s.h.)	Health Assessment Across The Lifespan	Focuses on the knowledge and skills needed by the health professional to perform holistic health assessments of individuals across the life span. Emphasizes history taking, physical assessment skills, and laboratory practices.
PHARMACOLOGY	096:124 (3 s.h.)	Pharmacotherapeutics in Nursing	Introduces the basic principles of pharmacotherapeutics and pharmacologic interventions. Students focus on the mechanism of drug actions in treating patients.
GENERAL BIOLOGY (ANIMAL) or (HUMAN)	002:002 (4 s.h.)	Introductory Animal Biology	Fundamental principles of animal biology: cell chemical composition and metabolism; how cells and organs interact; how organisms interact with each other and the environment.
	or 002:021 (4 s.h.)	Human Biology	Focuses on basic understanding of four aspects of human biology: cellular, genetic, physiological, and evolutionary.
MICROBIOLOGY	061:164 (4 s.h.)	Health Sciences Microbiology	Overview of bacteria, viruses, and eukaryotic microorganisms that cause human disease. Microbial structure, growth control, and reproduction. Immunology & host defenses.
INORGANIC CHEMISTRY	004:007 (3 s.h.)	General Chemistry I	Atomic structure, chemical bonds, mole relations, stoichiometry, states of matter, acids and bases, reaction rates, electrochemistry, nuclear chemistry.
ORGANIC CHEMISTRY	004:008 (3 s.h.)	General Chemistry II	Organic chemistry and biochemistry.
BIO-CHEMISTRY	004:008	General Chemistry II	Organic chemistry and biochemistry.
COLLEGE MATHEMATICS	22M:015 (4 s.h.)	Mathematics for the Biological Sciences	Relations, functions, coordinate systems, graphing, polynomials, trigonometric functions, logarithmic and exponential functions; discrete mathematics, probability; examples and applications from biological sciences.
COLLEGE PHYSICS	029:008 (3 s.h.)	Basic Physics	Quantitative treatment of mechanics, electricity, heat, liquids, gases, and atomic, nuclear, and elementary particle physics.

*** COURSES LISTED ARE ACCEPTABLE COMPARABLE COURSES AT THE UNIVERSITY OF IOWA. SIMILAR OR HIGHER LEVEL COURSES AT THE UI OR OTHER INSTITUTIONS ARE OFTEN ACCEPTABLE. IF YOU HAVE QUESTIONS, ASK THE ANESTHESIA NURSING PROGRAM OFFICE. COURSES INTENDED FOR NON-SCIENCE MAJORS ARE NOT ACCEPTABLE. PRE-PROFESSIONAL SCIENCE COURSES ARE PREFERRED.**