NURS 142 Drug and Dosage Calculations II

Credit Hours: 1 HRS

Scheduled hours per week
  Lecture: 1 HRS
  Lab:
  Other:

Catalog Course Description: This course expands the nursing student’s ability to read, interpret, and solve increasingly complex dosage calculation problems. Critical thinking skills are applied to age and acuity specific variations in select populations.

Pre-requisites: BIOL 107, NURS 132, NURS 133, NURS 134

Pre-Co-requisites: BIOL 108, NURS 143, NURS 144

Course Learning Outcomes:

Nursing Judgment: Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context. (Patient-centeredness, holism, ethics)
  1. Demonstrate competencies in applying complex mathematical principles for safe medication administration in select populations
  2. Articulate the role of the nurse in safe medication administration including electronic and written documentation

Professional Identity: Implement one’s role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context. (Ethics, Caring, Integrity, Patient-centeredness, excellence)
  3. Recognize the professional responsibility in the interpretation, calculation and administration of medications in select populations

Topics to be studied:
- Use of ratio and proportion and dimensional analysis to determine and calculate age and body weight specific variations for dosage accuracy.
- The ability to interpret medication labels and orders; identify and prevent common medication errors; and accurately document medication administration will be addressed.
- Identification and prevention of common medication errors
- Documentation of medication administration
- Review of content from Dosage and Calculation I
- Reconstitutions of Solutions
- Medication Calculation and Administration of Insulin
- Heparin Calculations
- Critical Care Calculations
- Pediatric and Adult Dosage Calculation Based on Weight

Relationship of Course to Program or Discipline Learning Outcomes:
The Course Learning Outcomes for NURS 142 are congruent with, and derived from, the four (4) core competencies designated by the Associate Degree Nursing Program: Human Flourishing, Nursing Judgment,
Professional Identity, and Spirit of Inquiry. These core competencies are directly reflected in the Nursing Program Educational Outcomes.

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<th>Relationship of Course to General Education Learning Outcomes:</th>
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<td><strong>Composition and Rhetoric</strong> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.</td>
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<td><strong>Science &amp; Technology</strong> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions. X</td>
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<td><strong>Mathematics &amp; Quantitative Skills</strong> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts. X</td>
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<td><strong>Society, Diversity, &amp; Connections</strong> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.</td>
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<td><strong>Human Inquiry &amp; the Past</strong> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.</td>
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<td><strong>The Arts &amp; Creativity</strong> Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.</td>
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**Special requirements of the course:**
- Discussion Board participation
- Written assignments
- Comprehensive Standardized Final Examination
- Special projects may be assigned at the discretion of the instructor to facilitate content comprehension and application.

**Additional information:**
- Computer and internet access is required

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**Date:** October 9, 2017