NURS 132 Drug and Dosage Calculation I

Credit Hours: 1 HRS

Scheduled hours per week
- Lecture: 1 HRS
- Lab: 0 HRS
- Other:

Catalog Course Description: This course is designed to enhance the nursing student’s ability to read, interpret, and solve dosage calculation problems. Critical thinking skills are applied to medication situations to emphasize the importance of accuracy and the avoidance of medication errors.

Pre-requisites: Admission to Nursing Program

Pre/Co-requisites: BIOL 107

Co-requisites: NURS 133, NURS 134

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. Discuss the principles of medication administration safety
2. Identify the elements of accurate documentation of medication administration
3. Identify and prevent common medication errors
4. Demonstrate competencies in applying mathematical principles for safe medication administration

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)
5. Recognize the professional responsibility in the interpretation, calculation and administration of medications

Topics to be studied:
- Thorough review of ratio and proportion and dimensional analysis, fractions, decimals and percent
- Conversion of measures within the same system of measurement and between different systems of measurement
- Calculating safe drug dosages and intravenous fluid administration.

Relationship of course to program outcomes:
The Course Learning Outcomes for NURS 132 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.

### Relationship of Course to General Education Learning Outcomes:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composition and Rhetoric</strong></td>
<td>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>
<td></td>
</tr>
<tr>
<td><strong>Science &amp; Technology</strong></td>
<td>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.</td>
<td>X</td>
</tr>
<tr>
<td><strong>Mathematics &amp; Quantitative Skills</strong></td>
<td>Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.</td>
<td>X</td>
</tr>
<tr>
<td><strong>Society, Diversity, &amp; Connections</strong></td>
<td>Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.</td>
<td></td>
</tr>
<tr>
<td><strong>Human Inquiry &amp; the Past</strong></td>
<td>Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.</td>
<td></td>
</tr>
<tr>
<td><strong>The Arts &amp; Creativity</strong></td>
<td>Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.</td>
<td></td>
</tr>
</tbody>
</table>

**5/3/2016**

**Special projects or requirements of the course:**
- Medication/math Proficiency Examination for progression.

**Additional information:**
- Physical examination with required immunizations or waiver as indicated
- Current Health Care Provider CPR Certification, the American Heart Association Health Care Provider (with use of AED)
- Background Check
- Randomized, mandatory drug screening without notice
- Computer and internet access is required

**Prepared by:** Rose Beebe, EdD, MS, RN

**Date:** October 9, 2017