

# NUS - NURSING

## NUS 102 Nursing Mathematics: Dosage Calculation and Drug Preparation

Nursing Mathematics covers adult drug preparation, dosage calculation, and intravenous fluids and medications administration. Measurement requirements, system conversions, oral and parenteral dosage calculations, and intravenous fluid flow rates are covered in detail. Nursing implications for drug administration are emphasized in every unit including a brief overview of drug label interpretation, and pediatric and geriatric dosage considerations.

*Upon successful completion of this course, students should be able to:*  
*Calculate mathematical problems working with fractions, decimals, and percents.*

*Solve drug dosage problems using ratio and proportion.*

*Use system conversions (metric and household) for volume and weight problems.*

*Calculate oral and parenteral dosage problems in the same system and in different systems.*

*Measure drugs administered in units.*

*Identify pediatric and geriatric considerations for drug administration.*

*Calculate intravenous fluid flow rates (drops per minute and milliliters per hour) and infusion times.*

*Identify abbreviations and symbols for drug preparation and administration.*

*Accurately read and interpret a drug label in relation to a medication order.*

Prerequisite: Successful Placement Test Scores or MAT 050.

**1 Credit1 Weekly Lecture Hour**

## NUS 110 Concepts and Practice I

NUS 110, Concepts and Practice I, is the first nursing course in the sequence of four semesters. The concept based model of nursing practice is presented within the context of professional role behaviors, patient attributes and the health and illness continuum. Knowledge and skills basic to the practice of nursing presented utilizing student-centered learning activities. Clinical and simulation laboratory experiences support the acquisition of knowledge and skills fundamentals to the practice of nursing. NOTE: Non-Academic Prerequisites: Complete physical examination, laboratory tests, urine drug screen, two-step PPD, current immunizations including Hepatitis B vaccine, current CPR certification (Healthcare Provider), criminal background check and child abuse clearance, and professional liability and health insurance.

*Upon successful completion of this course, students should be able to:*  
*Identify the professional roles of the nurse as member of the health care team.*

*Use the nursing process in the practice of safe, effective, patient-centered care to maintain optimal health.*

*Identify current best evidence for the provision of quality patient care.*

*Apply therapeutic communication principles to enhance the professional relationship between nurse and patient.*

*Identify health care infrastructures and community resources available to coordinate appropriate planning of care for all patients.*

*Describe concepts of nursing practice across the health and illness continuum.*

*College Academic Learning Goal Designation: Information Technology (TC)*

Prerequisite: BIO 150 (with grade of 'C' or better) and BIO 151\* and ENG 100 and MAT 121 and NUS 102 and PSY 140. (\*Courses may be taken concurrently.)

**8 Credits4 Weekly Lecture Hours**

**8 Weekly Lab Hours**

## NUS 111 Concepts and Practice II

NUS 111, Concepts and Practice II, is the second nursing course in a sequence of four semesters. In this course, concepts are explored within the context of health and illness experiences and build on the knowledge acquired in NUS 110. These experiences reflect diverse patient populations and family health nursing. Clinical and simulation laboratory experiences support the acquisition of knowledge and skills in adult and family health nursing. NOTE: Prerequisites: NUS 110 or NUS 214 with grade of "C" or better and BIO 151 with grade of "C" or better.

*Upon successful completion of this course, students should be able to:*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with alterations in stress, adaptation, cognition related to anxiety and dementia.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with alteration in the concept of oxygenation related to an infectious process.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with an alteration in the concept of perfusion as a result of altered hemostasis and peripheral vascular resistance.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with an alteration in the concept of nutrition, metabolism related to endocrine dysregulation.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with an alteration in the concept of elimination, digestion related to an inflammatory or erosive process.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with an alteration in concept of urinary elimination related to an obstructive or infectious process.*

*Use principles of safe effective, patient centered care, using best evidence, for an individual with an alteration in the concept of mobility related to bone or joint dysfunction.*

*Use principles of safe effective, patient centered care, using best evidence, related to the concept of family health and reproduction.*

Prerequisites: (NUS 110 or NUS 214) and BIO 151, with grades of 'C' or better.

**10 Credits**

**4 Weekly Lecture Hours**

**12 Weekly Lab Hours**

**NUS 205 Perioperative Nursing**

The knowledge and technique necessary to assume responsibilities of the perioperative nurse are emphasized in this broad-based yet comprehensive orientation to the operating room and the perioperative role. Standards of patient care in the operating room are explored and identified. Assessment of patient needs and implementation of nursing interventions are emphasized. Collaborative decision making is reviewed relative to total intraoperative care. Subject material guides the learner to provide for and contribute to patient safety through control of internal and external environment, biological testing and product evaluation, as well as to assist the patient with the management of anxiety through the principles of biological, physical and social sciences. The College recognizes the standards of perioperative nursing practice of the AORN as the conceptual basis of specialty practice in the OR.

*Upon successful completion of this course, students should be able to:*

*Describe the psychosocial influences affecting the patient's response to surgical intervention.*

*Demonstrate knowledge necessary to implement the perioperative role.*

*Discuss principles of asepsis used in providing patient care during the intraoperative period.*

*Analyze the conceptual basis of role function as an interdisciplinary team member in delivery of care to the operative patient.*

*Plan nursing activities that reflect the nursing process in providing care to the patient undergoing surgical intervention.*

*Relate nursing, legal and ethical boundaries in the practice of professional nursing in the operating room.*

Prerequisite: NONE New students should complete Placement Testing prior to registration. Visiting students may submit college transcript.

**3 Credits3 Weekly Lecture Hours**

**NUS 206 Perioperative Preceptorship**

The skills needed by the nurse to practice professional nursing in the operating room are emphasized. Under the tutelage of an operating-room nurse preceptor, with the guidance of the College faculty facilitator, the learner is introduced to the activities performed by the nurse in the operating room throughout the patient's surgical experience. Learners will function within the scope and multiple dimensions of the perioperative role as defined in the preceptor institution. Working with guidelines developed by the College in collaboration with a local AORN advisory board, the preceptorship is a 15-day clinical practicum. Preceptors are selected by the OR nurse manager in the preceptor hospital.

Preceptorship sites may be arranged by the learner or selected from the College's preceptor affiliate sites. Schedules for clinical activities are mutually arranged by students and preceptor. 6 weekly clinical hours

*Upon successful completion of this course, students should be able to:*

*Assess the pathophysiological and psychosocial influences affecting the patient's response to surgical intervention.*

*Demonstrate the knowledge and skills needed to implement the perioperative role.*

*Apply principles of asepsis in providing patient care during the intraoperative period.*

*Function as a member of the interdisciplinary team in providing patient care during the intraoperative period.*

*Demonstrate application of the nursing process in providing nursing care to the patient receiving surgical intervention.*

Prerequisite: NONE New students should complete Placement Testing prior to registration. Visiting students may submit college transcript.

**3 Credits3 Weekly Lecture Hours**

**NUS 207 RN First Assistant**

The knowledge and technique necessary to assuming responsibilities of the RN First Assistant are emphasized. The role diversity of the first assistant is explored in its interdependent relationship, as the nurse works both with the physician and for the benefit of the patient. The nursing diagnosis is used as the defining guide in planning and implementing patient care. Expanded functions are stressed and elaborated as the nurse is prepared to assume responsibility in scrubbing, draping, retracting, exposing, clamping, ligating and suturing. Intellectual and manual dexterity are combined to prepare the nurse with the essential skills necessary to this expanded professional role. The College recognizes AORN's position statement on the role of the RN First Assistant. The program meets AORN Education Standards and is accepted by the Competency and Credentialing Institute for Perioperative Nursing.

*Upon successful completion of this course, students should be able to:*

*Trace the historical role of the nurse in the operating room.*

*Apply principles of asepsis, infection control, physical assessment and the nursing process.*

*Review surgical anatomy, physiology and operative techniques related to first assisting.*

*Recognize surgical hazards and initiate appropriate corrective and preventive action.*

*Validate intraoperative nursing behaviors of handling tissue, providing exposure, using surgical instruments, suturing and providing hemostasis.*

Prerequisite: NONE New students should complete Placement Testing prior to registration. Visiting students may submit college transcript.

**3 Credits3 Weekly Lecture Hours**

**NUS 208 RN First Assistant Internship**

The RN First-Assistant Directed Internship offers clinical preparation for perioperative nurses in first assisting. This internship is based on certain assumptions about the rights of patients and needs of the learner. The College attaches significance to the patient's right to have a qualified assistant during surgical intervention. The perioperative nurse who is prepared as a first assistant is capable of acting collaboratively in assisting both surgeon and patient. The College also believes that the perioperative nurse entering this internship will be a highly motivated individual and bring to the internship personal and professional experience of high quality. Flexibility and respect for individual student goals are essential in planning the internship. Therefore, each student has an active part in determining objectives, identifying learning resources and evaluating attainment of goals. Students work with a College faculty facilitator and surgical preceptor during the internship. The College recognizes AORN's position statement on the role of the RN First Assistant. The program meets AORN Education Standards and is accepted by the Certification Board for Perioperative Nursing. NOTE: The following must be submitted prior to registering for the Internship: A letter from the department manager validating the nurse's experience (in years), proficiency in scrub and circulator roles, ability to perform in stressful and emergency situations, and ability to perform effectively and harmoniously as a team member. A copy of the display portion of the professional license to practice nursing in the state in which the internship is to be done. Evidence of current professional malpractice insurance (policy and cancelled check) Completed health examination (form supplied by the College) Evidence of current health insurance policy. Evidence of current CPR certification (ACLS) Copy of certification card (CNOR) 6 weekly clinical hours

*Upon successful completion of this course, students should be able to:*

*Demonstrate application of principles of asepsis and infection control, physical assessment and nursing process.*

*Recognize surgical anatomy and physiology and operative technique related to first assisting.*

*Demonstrate skill in recognizing surgical hazards and initiate appropriate corrective and preventive action.*

*Carry out intraoperative nursing behaviors of handling tissue, providing exposure, using surgical instruments, suturing and providing hemostasis.*

Prerequisite: NUS 207.

**3 Credits3 Weekly Lecture Hours**

**NUS 210 Concepts and Practice III**

NUS 210, Concepts and Practice II, is the third nursing course in a sequence of four semesters. In this course, curricular concepts are explained within the context of increasingly complex acute and chronic health needs. The inter-professional model is used to discuss care of diverse patient populations. Clinical and simulation laboratory experiences support the acquisition of knowledge and skills in the care of children and adults with acute, complex needs. NOTE: Prerequisites: NUS 111 and NUS 221 with grades of "C" or better.

*Upon successful completion of this course, students should be able to:*

*Apply knowledge of the concept of stress, adaptation, cognition to provide safe, effective, patient centered care incorporating best evidence for an individual experiencing thought process, mood, developmental, or addictive disorders.*

*Apply knowledge of the concept of oxygenation to provide safe, effective, patient centered care incorporating best evidence for an individual experiencing an obstructive pulmonary process.*

*Apply knowledge of the concept of perfusion to provide safe, effective, patient centered care incorporating best evidence for an individual affected by an atherosclerotic process.*

*Apply knowledge of the concept of metabolism to provide safe, effective, patient centered care incorporating best evidence for an individual experiencing an inflammatory process.*

*Apply knowledge of the concept of fluid and electrolytes to provide safe, effective, patient centered care incorporating best evidence for an individual experiencing a renal dysfunction.*

*Apply knowledge of the concept of cellular regulation, immunity to provide safe, effective patient centered care incorporating best evidence.*

Prerequisite: NUS 111 and NUS 221, with 'C' or better.

**10 Credits4 Weekly Lecture Hours**

**12 Weekly Lab Hours**

**NUS 211 Concepts and Practice IV**

NUS 211, Concepts and Practice IV is the fourth nursing course in a sequence of four semesters. In this course, curricular concepts are explored and integrated with knowledge gained throughout the nursing program. Community concerns among diverse populations are addressed. Professional role behaviors of management and leadership are presented, building upon previously learned professional roles and responsibilities. Clinical and simulation laboratory experiences support the acquisition of knowledge and leadership skills in the care of adults with complex care needs in acute, sub-acute, and community settings. *Upon successful completion of this course, students should be able to: Integrate skills for leadership and professional growth within the role of the professional nurse.*

*Integrate knowledge of the concept of cognition with principles of safe, effective, patient-centered care, using current best evidence in a patient experiencing alterations in intracranial regulations.*

*Integrate knowledge of the concept of oxygenation with principles of safe, effective, patient-centered care, using current best evidence in a patient experiencing overwhelming respiratory failure.*

*Integrate knowledge of the concept of perfusion with principles of safe, effective, patient-centered care, using current best evidence in a patient experiencing electrical instability and inadequate tissue perfusion to vital signs.*

*Integrate knowledge of the concept of mobility with principles of safe, effective, patient-centered care using current best evidence in a patient experiencing alterations in neurologic function.*

*Integrate knowledge of the concept of safety and security with principles of safe, effective, patient-centered care, using current best evidence for community concerns.*

Prerequisite: NUS 210, with grade of 'C' or better.

**10 Credits4 Weekly Lecture Hours**

**12 Weekly Lab Hours**

**NUS 214 LPN to RN Education Bridge**

This course is intended to facilitate the transition of the Licensed Practical Nurse to the Associate Degree Nursing Program and then to the role of the Registered Nurse. This course will compare and contrast the roles of the LPN and RN, assist the students in identifying evidence based practices, develop critical thinking skills, test taking skills and applying these skills to patient assessment both in the community and other care settings along the health/wellness continuum. NOTE: Prerequisites: BIO 150 and BIO 151\* with grades of "C" or better, ENG 100, MAT 121, NUS 102, PSY 140. \*Courses marked with a star may be taken concurrently. TEAS scores that are consistent with those for entrance to the nursing program.

*Upon successful completion of this course, students should be able to: Identify the professional roles of the registered nurse as member of the health care team, comparing and contrasting the role of the LPN to the role of the RN.*

*Identify current best evidence for the provision of quality patient care.*

*Develop critical thinking and test taking skills related to patient assessment.*

*Identify health care infrastructures and community resources available to coordinate appropriate planning of care for all patients.*

Prerequisite: BIO 150 (with grade of 'C' or better) and BIO 151 \* and ENG 100 and MAT 121 and NUS 102 and PSY 140. (\*Courses may be taken concurrently.)

**2 Credits2 Weekly Lecture Hours**

**NUS 221 Pharmacology for Health Care**

This course focuses on pharmacology the nurse needs to know to provide safe and effective care for patients taking medications. Basic principles of pharmacology are reviewed. Medications are grouped for study according to body system and drug action. Emphasis is on application of the nursing process, including patient education, to enhance effectiveness of medication therapy. Upon successful completion of this course, students should be able to: Explain the relationship of pharmacokinetics and pharmacodynamics to drug therapy. Describe the mechanisms of action, therapeutic effects, adverse effects, interactions, dosages and administration of commonly used groups of drugs. Relate the pharmacodynamics of common groups of drugs to the conditions for which they are prescribed. Use the nursing process to develop an age-appropriate plan of care for the patient receiving drug therapy. Identify nursing responsibilities for accurate administration of medications. NOTE: Prerequisites: NUS 110 and BIO 151 with grades of "C" or better.

*Upon successful completion of this course, students should be able to: Explain the relationship of pharmacokinetics and pharmacodynamics to drug therapy.*

*Describe the mechanisms of action, therapeutic effects, adverse effects, interactions, dosages and administration of commonly used groups of drugs. Relate the pharmacodynamics of common groups of drugs to the conditions for which they are prescribed.*

*Use the nursing process to develop an age-appropriate plan of care for the patient receiving drug therapy.*

*Identify nursing responsibilities for accurate administration of medications.*

Prerequisite: NUS 110 and BIO 150, with 'C' or better.

**3 Credits3 Weekly Lecture Hours**