

Concept-Based Assessments

Educator Implementation Guide

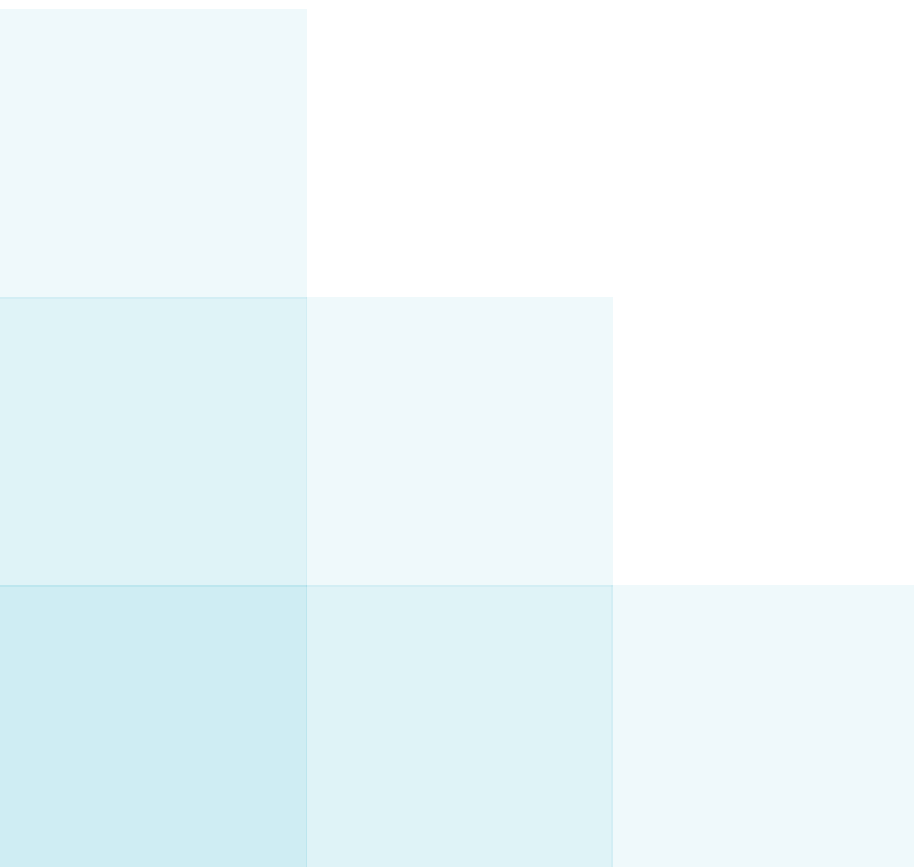


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Description

To address the current and evolving needs of nursing schools who host a concept-based curriculum (CBC), Assessment Technologies Institute (ATI) has developed a set of four standardized, nationally benchmarked concept-based assessments. The first of their kind in nursing education, these assessments feature 46 concepts and 245 exemplars commonly shared among concept-based curricula across the U.S. Because of their standardization, these assessments can be used to compare learning outcomes across cohorts and programs. The assessments are designed to be administered at four points or levels in a nursing program and provide robust reports for various outcomes, which are essential for state board approval and accreditation. Each set of level assessments includes online practice and proctored assessments supported by focused remediation for the concepts and exemplars that a student answers incorrectly.

Components

The assessment development process involved conducting a Practice Analysis study, the purpose of which was to discover nationwide perspectives on essential concepts and exemplars to include in an ideal concept-based program of study.

A Steering Committee of ATI nurse educators and researchers spearheaded the study, providing conceptual guidance and oversight throughout the process. A task force of subject matter experts (SMEs) who taught in concept-based programs across the country and had extensive experience in nursing education were invited to be key participants.

Members of the Steering Committee and the SME Task Force conducted an in-depth review of the literature, analyzed the conceptual structure of established programs, and interviewed thought leaders from other concept-based programs to develop a draft list of concepts and related exemplars.

With input from independent reviewers who have CBC experience, this list of concepts and exemplars was further refined, yielding a list that was then disseminated to CBC educators across the country via a large-scale validation survey. Respondents to the validation survey provided feedback on the list and made recommendations regarding the point within a curriculum when each concept and associated exemplars would most likely have been addressed.

Using the empirical data from this survey, the Steering Committee and SME Task Force established the final list of concepts (46), the number of assessment levels to include (4), and the specific level at which each exemplar should be assessed.

- At the 25% completion point in the program
- At the midpoint of the curriculum
- At the 75% completion point in the program
- At the end of the CBC program

These assessments were psychometrically developed to be used by any concept-based program regardless of their list of concepts and placement of exemplars in their curriculum.

LIST OF 46 CONCEPTS

- | | | |
|-------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------|
| 1. Acid-Base Balance | 18. Health Care Law | 31. Mobility |
| 2. Cellular Regulation | 19. Health Care Quality/
Quality Improvement | 32. Mood and Affect |
| 3. Clotting | 18. Health Policy | 33. Nutrition |
| 4. Cognition | 19. Health Promotion/Wellness/
Disease Prevention | 34. Pain |
| 5. Collaboration/Teamwork | 22. Human Growth and
Development | 35. Patient-Centered Care |
| 6. Comfort | 23. Immunity | 36. Perfusion |
| 7. Communication | 24. Infection | 37. Professional Identity/
Professionalism |
| 8. Critical Thinking/
Clinical Reasoning/
Clinical Judgment | 25. Inflammation | 38. Reproduction |
| 9. Diversity | 26. Informatics | 39. Safety |
| 10. Elimination | 27. Interpersonal Violence | 40. Sensory/Perception |
| 11. End of Life | 28. Intracranial Regulation/
Neural Regulation | 41. Sexuality |
| 12. Ethics | 29. Leadership and
Management | 42. Spirituality |
| 13. Evidence-Based Practice | 30. Metabolism | 43. Stress and Coping |
| 14. Fluid and Electrolyte Balance | | 44. Teaching and Learning/
Patient Education |
| 15. Gas Exchange/Oxygenation | | 45. Thermoregulation |
| 16. Grief | | 46. Tissue Integrity |
| 17. Health Care Delivery
Systems/Organizations | | |

Proctored Assessments

LEVEL	TOTAL ITEMS	SCORED ITEMS	PRETEST ITEMS*
RN Concept-Based Assessment Level 1	130 items	100 items	30 items
RN Concept-Based Assessment Level 2	140 items	110 items	30 items
RN Concept-Based Assessment Level 3	140 items	110 items	30 items
RN Concept-Based Assessment Level 4	140 items	110 items	30 items

*Pretest items do not contribute to student scores.

The Level 1 exam is comprised of 130 items developed to assess RN nursing students’ comprehension and understanding of the selected concepts. (See Concepts Grid on page 16.) These concepts are appropriate for assessing RN nursing students approximately one-quarter of the way through their concept-based curriculum. Please be sure to allow students 130 minutes (2 hours, 10 minutes) to complete the assessment.

The Level 2 exam is comprised of 140 items developed to assess RN nursing students' comprehension and understanding of the selected concepts. (See Concepts Grid on page 16.) These concepts are appropriate for assessing RN nursing students approximately halfway through their concept-based curriculum. Please be sure to allow students 140 minutes (2 hours, 20 minutes) to complete the assessment.

The Level 3 exam is comprised of 140 items developed to assess RN nursing students' comprehension and understanding of the selected concepts. (See Concepts Grid on page 16.) These concepts are appropriate for assessing RN nursing students approximately three-quarters of the way through their concept-based curriculum. Please be sure to allow students 140 minutes (2 hours, 20 minutes) to complete the assessment.

The Level 4 exam is comprised of 140 items developed to assess RN nursing students' comprehension and understanding of the selected concepts. (See Concepts Grid on page 16.) These concepts are appropriate for assessing RN nursing students who are at the end or nearly complete with their concept-based curriculum. Please be sure to allow students 140 minutes (2 hours, 20 minutes) to complete the assessment.

FEATURES

- Assessment data regarding a student's mastery of concepts related to specific outcomes.
- Formative indication of developing NCLEX readiness.
- Statistically developed proficiency levels reflective of the student's performance on the assessment.
- Generation of individualized Focused Review for remediation after completing an assessment.
- One minute per item allotted to complete assessment.
- Alternate item types on all assessments.
- Equated total individual scores for all assessment versions within a level.

Note: Nursing education institutions should recognize that the cut scores ATI sets are recommended rather than required for those institutions using the ATI Concept-Based Assessments. For more information on cut scores, see pages 10 and 11.

Online Practice Assessments

LEVEL	TOTAL ITEMS
RN Concept-Based Assessment Level 1 Online Practice	100 items
RN Concept-Based Assessment Level 2 Online Practice	110 items
RN Concept-Based Assessment Level 3 Online Practice	110 items
RN Concept-Based Assessment Level 4 Online Practice	110 items

FEATURES

- Assessment data regarding student readiness to take the corresponding proctored assessment in a specific level.
- Computer-based proctored assessments made up of NCLEX-style items.
- 500 minutes of testing time for each practice assessment.
- Rationales provided for each item.
 - Faculty can turn rationales on or off.
- **FLAG FOR REVIEW** feature allows students to return to test items they did not previously complete and answer them prior to finishing the test.
- **PAUSE** feature allows students to pause the assessment and return to it later.

Review Modules

- Review Modules provide comprehensive essential nursing knowledge in a condensed, concise format (2,565 total pages).
- Available online 24 hours a day on www.atitesting.com and in a hard-copy format.
- User-friendly collections of nursing knowledge are provided.
 - Helps students locate important information quickly.
 - Supports students' remediation efforts.
 - Facilitates entry into the nursing profession as a newly licensed RN by providing online access for 1 year after graduation.
- Application Exercises at the end of each chapter include NCLEX-style items.
 - Chapters on average provide six application exercises.
 - Answer Key is provided after each set of Application Exercises.
 - Rationales are provided for each answer.
 - Completion of an Active Learning Template (See Active Learning Templates under Resources>eBooks & Active Learning) is required by one application exercise in each chapter.
 - NCLEX Connections with each unit and in the Application Exercise Answer Keys.
 - Indicates areas of the detailed NCLEX test plan that relate to the content within that unit.
- Icons draw attention to significant content.



This icon is used for **NCLEX** connections.



This icon is used for content related to **SAFETY** and is a QSEN competency. When you see this icon, take note of safety concerns or steps that nurses can take to ensure client safety and a safe environment.



This icon is a QSEN competency that indicates the importance of a holistic approach to providing **PATIENT-CENTERED CARE**.



This icon, a QSEN competency, points out the integration of research into clinical **EVIDENCE-BASED PRACTICE**.



This icon is a QSEN competency and highlights the use of information technology, or **INFORMATICS**, to support nursing practice.



This icon is used to focus on the QSEN competency of integrating planning processes and **QUALITY IMPROVEMENT** to meet clients' needs.



This icon highlights the QSEN competency of care delivery using an interprofessional approach that includes **TEAMWORK AND COLLABORATION**.



This icon indicates that a **MEDIA** supplement, such as a graphic, animation, or video, which is active in the online version. Students with the hardcopy version of the review module can visit www.atitesting.com for details on how to access these features.

- Media supplements
 - Media clips embedded within the eBook pop up instantly to supplement student review of content.

Focused Review

- Unique program that automatically generates an individualized remediation plan following the completion of every ATI assessment
- To generate a Focused Review, students should visit www.atitesting.com, click on My ATI, then click on the Improve tab.
- Focused Review Tools allow students to (See graphic at right.)
 - Access their corresponding Assessment Report.
 - Choose topics to review.
 - Students can select all missed topics.
 - Students can filter by subtopics scoring at or below a certain percentage.
 - Export to PDF.
 - Students can select topics to review and save in PDF format.
- The program times out if it is inactive for more than 10 min.
- Faculty can determine which students are remediating and how long they spend remediating.
- Each student views a Focused Review that is
 - Created specifically for the individual student.
 - Completely unique to each attempt.
 - Matched to the student's precise areas of weakness
- Links to remediation resources are displayed by content area. (See graphic at right.)
 - Resources include
 - Videos
 - Review Modules
 - Active Learning Templates



Reports

The following outcomes will be reported on the RN Concept-Based Assessment Score Reports.

- Adjusted Total Scores (individual or group percent)
- Proficiency Level (individual)
- National Mean (individual and group)
- National Percentile Rank (individual and group)
- Concept subscale score (Individual or group percent)
- Topics to Review (concept – number of items; exemplars – number of items; topic descriptors)
- National means and percentile ranks
- Outcomes – Student’s skills are categorized according to each of the following types of outcomes.
 - Nursing Process
 - Assessment
 - Analysis/Diagnosis
 - Planning
 - Implementation/Therapeutic Nursing Intervention
 - Evaluation
 - Priority Setting
 - Thinking Skills
 - Foundational Thinking
 - Clinical Judgment/Critical Thinking
 - NCLEX Client Need Categories
 - QSEN
 - NLN competencies
 - BSN essentials
- Definitions
 - Adjusted Total Scores
 - ATI Proficiency Levels
 - National Mean
 - National Percentiles
 - Topics to Review

TYPES OF REPORTS

- Group Reports
 - Standard report based on the group of students that have taken a specific assessment
- Individual Reports
 - Provide a list of all students that took a specific assessment
 - Present a detailed individual report for any or all students under an assessment ID
- Combined Group/Individual Reports
 - Provides individual reports followed by a group report for an assessment
- Longitudinal Reports
 - Compare assessment results of two or more groups of students
- Individual Transcripts
 - Combined report of all the assessments (proctored and online practice) for one or more students

Note: Proctored exams include pretest items. The score reports do not include any information pertaining to these items. Practice assessments do not have pretest items.

Note: Institutions using the RN Concept-Based Assessments for high-stakes purposes—such as a portion of a course grade or progression—should be extremely cautious, regardless of whether they adopt the ATI-recommended cut scores. If an institution uses these assessments for a portion of a course grade beyond extra credit, they should ensure the content of the assessments is fully aligned with their program curriculum. ATI strongly discourages the use of the Concept-Based Assessments as a sole criterion for students' progression or graduation.

Proficiency Level Expectations

Expectations for students meeting the following Proficiency Levels at the recommended cut scores.

PROFICIENCY LEVEL	PROFICIENCY LEVEL DEFINITION
Below Level 1	Scores below the Proficiency Level 1 standard indicate that a student does not yet demonstrate proficiency in the knowledge and skills related to the assessed concepts and exemplars required to deliver safe, effective nursing care at the entry level for the profession . Students in this category need substantial academic support in the assessed concepts and exemplars to ensure successful performance in subsequent curricular material.
Level 1	Scores meeting the criterion for Proficiency Level 1 indicate that a student demonstrates a partial proficiency in the knowledge and skills related to the assessed concepts and exemplars required to deliver safe, effective nursing care at the entry level for the profession . Students in this category need additional academic support in the assessed concepts and exemplars to ensure successful performance in subsequent curricular material.
Level 2	Scores meeting the criterion for Proficiency Level 2 indicate that a student demonstrates proficiency in the knowledge and skills related to the assessed concepts and exemplars required to deliver safe, effective nursing care at the entry level for the profession . Students in this category are prepared for successful performance in subsequent curricular material.
Level 3	Scores meeting the criterion for Proficiency Level 3 indicate that a student demonstrates advanced proficiency in the knowledge and skills related to the assessed concepts and exemplars required to deliver safe, effective nursing care at the entry level for the profession . Students in this category are well prepared for successful performance in subsequent curricular material.

Implementation Strategies

To help faculty determine at what point the various assessments should be given, each exam has a test description that includes a list of concepts on the exam, along with definitions that describe the focus of each concept. The concepts have been ordered in the list relative to their focus on the exam. However, the exact proportions and precise exemplar coverage is considered proprietary at this time. The test description, along with topic descriptors for the online practice exams can be found at www.atitesting.com in the Resources section, under Assessments.

BEST PRACTICES

- Emphasize the importance, value, and use of ATI tutorials and Concept-Based Assessments to the students over the course/curriculum regarding student accountability for best outcomes.
- Reinforce the concepts of active learning in the ATI tutorials of Nurse Logic/Learning Systems. These tutorials introduce nursing students to core concepts relevant to nursing practice, arm students with study and test-taking skills, and introduce them to the NCLEX-style questions (ATI Guide for the Development of Best Practice Policy, 2016).
- Strategically incorporate tutorials into the course/curriculum to engage students for preparation of concept-based practice and proctored assessments.
- Evaluate the time students engaged with using the tutorials assigned in the course.
- Strategically schedule Concept-Based Practice Assessments within designated course/curriculum.
- Strategically schedule Concept-Based Proctored Assessments (approximately 90% of course content covered) within the course/curriculum.
- Evaluate if adequate time was allotted for successful remediation and use of the focused review.
 - Review the number of attempts and time intervals between the student's Practice/Proctored Assessments.
 - Identify if remediation was required or completed following each attempt.
- Evaluate the amount of time invested by the student taking the practice/proctored assessment to the total number of items.
 - Did the student spend the recommended time (approximately 1 minute per question item) or use more/less time?
 - Note the correlation between time spent in completing the assessment and the benchmark achieved.
 - Identify if the student's performance outcome was achieved. If not, explore potential reasons with the student.

- Design and implement a remediation plan related to the student's performance for Concept-Based Assessments.
 - Create a program policy related to ATI Remediation best practices.
 - Focused Review
 - Assign and verify student completion of Focused Review.
 - Student Engagement
 - Verify engagement of time completed by the student according to ATI policy.
 - Student Documentation
 - Did student submit required documentation?
 - Faculty Verification
 - Was the completion of all required components for remediation verified by faculty?
 - Post-assignment Debriefing
 - Implement post-assessment debriefing strategies.
 - ▲ Engage students in post-assessment dialogue related to Concept-Based Assessments.
 - ▲ Identify application to practice opportunities for reinforcement in class/clinical.

*Resources***FACULTY SUPPORT**

- Integration training guided by Master's prepared (or higher) ATI Nurse Educators
- Curriculum Alignment with ATI resources
- Educatingnurses.com by Dr. Patricia Benner
- Consulting services: <http://atinursingconsulting.com>
 - Facilitate development of CBC mapping concepts and exemplars across a program of study.
 - House and manage CBC using Curriculum Management and Articulation Program (C-MAP).
 - Facilitate the development of a repertoire of learner-centered active learning strategies specifically for the classroom of a concept-based curriculum.
 - Enhance item-writing and test blue printing skills through both on-site and web-based activities.
- ATI Academy, a faculty development website with courses including, but not limited to:
 - Concept-Based Curriculum & Integrating ATI into Your Program
 - Concept-Based Curriculum: Concept-Based Curriculum 101 and ATI Integration
 - Concept-Based Curriculum: Planning Remediation for Student Success
 - Concept-Based Curriculum: How ATI Supports Meeting Student Learning and Program Outcomes
 - Concept-Based Curriculum: 5 Part Series
 - Concept-Based Curriculum Part 1: Paving the Path to Thinking Conceptually
 - Concept-Based Curriculum Part 2: Embracing Nursing Concepts
 - Concept-Based Curriculum Part 3: Basing Exemplars Selection on Evidence
 - Concept-Based Curriculum Part 4: Instructional Strategies
 - Concept-Based Curriculum Part 5: Evaluation Methods
- Resources available via the faculty website: Resources/Assessments & Focused Review/Concept-Based Curriculum Assessment Information
 - Concept Definitions
 - Proctored Test Descriptions
 - Mean and Percentile Rank Lookup Tables
 - Online Practice Test Descriptions

CUSTOM ASSESSMENT BUILDER (CAB) FOR CONCEPT-BASED CURRICULA

CAB offers faculty the ability to gauge students' course-specific knowledge and remediation needs through a classroom test-authoring tool designed specifically for concept-based curricula. ATI's Custom Assessment Builder allows you to build custom concept-based assessments such as formative quizzes, course finals, etc.

- User's Manual: How to Use the Custom Assessment Builder for Concept-Based Curriculum

Proctor Certification

The ATI Proctor Certification Course, located within the ATI Academy, has been created to provide those who administer ATI Concept-Based Assessments step-by-step training on the proctoring process. We advise all faculty that might proctor an ATI Concept-Based Assessment to complete the Proctor Certification Course before their first administration of an ATI exam. The Proctor Certification Course is constantly being updated with new and pertinent information, and ATI recommends retaking the course at least every year to stay up to date with any new processes. Once the Proctor Certification Course has been completed, faculty will be equipped with the most current tools and techniques to ensure a secure assessment administration.

Test Security

ATI relies heavily on our nursing education partners to help us maintain the security of our Concept-Based Assessments and to ensure that all examinees have the same testing experience. We ask that any faculty members who might proctor an ATI Concept-Based Assessment familiarize themselves with the procedures described in the Proctor Process Guide and the Proctor Certification Course to ensure a standardized testing experience for all students.

ATI Proctors should actively monitor the students taking ATI Concept-Based Assessments at all times. Examinees should not engage in other activities, such as reading a newspaper or using a cell phone, during the testing process. Proper monitoring will help decrease the amount of test misconduct. ATI screens data from assessments for anomalous student responses. You may inform your students that their responses will be statistically analyzed for possible test misconduct.

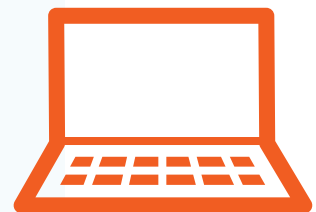
The responsibility of a proctor is to ensure the security of the assessment and the testing environment. All assessment questions are the copyrighted property of Assessment Technologies Institute®, LLC. The removal or attempt to remove questions or other assessment material from the test site is prohibited. It is forbidden under federal copyright law to copy, reproduce, record, distribute, or disclose these assessment questions by any means, in whole or in part. A violation of this type can result in civil and criminal penalties.

ATI sincerely appreciates your help with maintaining the security of our assessments.

Product Support

At ATI Nursing, we pride ourselves on timely, effective support to meet your needs. Please contact us at 800-667-7531 if you need assistance with this product.

Please be sure to verify the technical requirements on the ATI website to ensure you have the optimal product experience.



Concepts Grid

CONCEPTS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Acid-Base Balance		X		
Cellular Regulation			X	
Clotting				X
Cognition			X	
Collaboration/Teamwork				X
Comfort	X			
Communication	X			
Critical Thinking/Clinical Reasoning/Clinical Judgment		X		X
Diversity	X			
Elimination	X	X		
End of Life			X	
Ethics				X
Evidence-Based Practice				X
Fluid & Electrolyte Balance		X		X
Gas Exchange/Oxygenation		X		X
Grief		X		
Health Care Delivery Systems/Organizations				X
Health Care Law	X			X
Health Care Policy				X
Health Care Quality/Quality Improvement				X
Health Promotion/Wellness/Disease Prevention	X		X	
Human Growth and Development			X	
Immunity			X	X
Infection	X	X		X
Inflammation		X	X	
Informatics	X			
Interpersonal Violence			X	
Intracranial Regulation/Neural Regulation			X	X
Leadership and Management				X
Metabolism		X		X
Mobility		X		X
Mood and Affect			X	
Nutrition	X	X		
Pain	X			
Patient-Centered Care	X			
Perfusion		X	X	X
Professional Identity/Professionalism				X
Reproduction			X	
Safety	X			
Sensory/Perception		X		
Sexuality			X	
Spirituality	X			
Stress and Coping		X	X	
Teaching and Learning/Patient Education		X		
Thermoregulation		X		
Tissue Integrity	X			X



ATI Concept Definitions

Acid–base balance Regulation of acidity and alkalinity in body fluids (adapted from Giddens, 2017)

Cellular regulation Processes within a cell that maintain a stable internal environment, including growth and replication (adapted from Giddens, 2017)

Clotting Physiologic cascade of events in which blood is converted from a liquid to a semi–solid gel (adapted from Giddens, 2017; Ignatavicius & Workman, 2013)

Cognition Ability to accurately perceive the internal and external environments, recall past events, and perform higher thinking processes (adapted from Giddens, 2017)

Collaboration/teamwork Delivery of client care involving collaboration among members of the interprofessional health care team to achieve continuity of care and positive client outcomes (adapted from QSEN, 2007, Giddens, 2017)

Comfort State of physical and psychological ease (Merriam–Webster, 2016)

Communication Active exchange of information between individuals in the form of verbal language and nonverbal cues that are processed and interpreted with the goal of creating a shared meaning (Wood, 2010; Potter & Perry, 2016)

Critical thinking/clinical reasoning/clinical judgment Use of the cognitive skills of interpretation, analysis, evaluation, inference, and explanation during clinical decision making in response to an actual or potential clinical problem (adapted from American Association of Colleges of Nursing, 2008; Benner, Sutphen, Leonard, & Day, 2010; Tanner, 2006)

Diversity Recognition of differences among persons, ideas, values, and ethnicities while affirming the uniqueness of each (adapted from NLN, 2010)

Elimination Release of fluids and wastes from the kidneys and intestinal tract (adapted from Giddens, 2017)

End of life Issues that relate to death and dying, care that is palliative in nature, and organ donation (adapted from NIH National Cancer Institute, 2012)

Ethics Application of theories and principles that govern moral behavior (Whitehead, 2014; Potter & Perry, 2016; Giddens, 2017)

Evidence–based practice Use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based (adapted from Massachusetts Nurse of the Future, 2010, Giddens, 2017)

Fluid and electrolyte balance The process of regulating the extracellular fluid volume, body fluid osmolality, and plasma concentration of electrolytes (adapted from Giddens, 2017)

Gas exchange/oxygenation Body functions that support adequate oxygenation of tissues and removal of carbon dioxide (adapted from Giddens, 2017)

Grief Emotional experience to loss characterized by distress and/or sorrow (Berman & Snyder, 2015)

Health care delivery systems/organizations Structured system within which health care is delivered by a specialized workforce and is affected by the financial boundaries of prospective payment systems, allocation of resources, and access to health care (American Association of Colleges of Nursing, 2008; Giddens, 2017)

Health care law Execution of nursing practices that reflect a respect for laws related to the delivery of health care and standards of practice (Potter & Perry, 2016; Giddens, 2017)

Health care quality/quality improvement Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients (adapted from Massachusetts Nurse of the Future, 2016, NLN, 2010)

Health policy Financial and regulatory decisions, made by authorized entities, that will influence health care reimbursement, nursing practice, and the provision of care within the health care system (American Association of Colleges of Nursing, 2008; Giddens, 2017)

Health promotion/wellness/disease prevention

Health promotion – The process of enabling people to increase control over and improve their health (World Health Organization, 2005)

Wellness – A positive state of health (Giddens, 2017)

Disease Prevention – Measures not only taken to prevent the occurrence of disease, such as risk factor reduction, but also to arrest its progress and reduce its consequences once established (World Health Organization, 1998)

Human growth and development Physical, psychosocial, and behavioral aspects of growth and functional capacity that occur over an individual's lifespan (Berman & Snyder, 2015; Giddens, 2017)

Immunity Physiological process providing an individual with protection or defense from disease (adapted from Giddens, 2017)

Infection Invasion of body tissue by micro–organisms with the potential to cause illness or disease (adapted from Giddens, 2017)

Inflammation Defensive response of tissues to an injury or infection characterized by pain, swelling, redness, and warmth (Berman & Snyder, 2015)

Informatics Use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice (adapted from QSEN, 2007, NLN, 2010)

Interpersonal violence Intentional use of physical force or power, threatened or actual, toward another person or against a group or community (adapted from World Health Organization, 2002)

Intracranial regulation/neural regulation Regulation of mechanisms or conditions that affect intracranial processing and function and cerebrospinal fluid balance (Porth, 2013; Giddens, 2017)

Leadership and management

Leadership – An interactive process in which an individual influences and guides others to act in a desired manner (Whitehead, 2014; Giddens, 2017)

Management – The process of planning, organizing, directing, and coordinating the work within an organization (adapted from Massachusetts Nurse of the Future, 2016, ANA, 2015)

Metabolism Physical and chemical processes that regulate the body’s internal environment (adapted from Giddens, 2017)

Mobility Structures and functions that support the body and provide movement (adapted from Giddens, 2017)

Mood and affect The state of feeling experienced by an individual and the observable behavior that reflects that feeling (adapted from Giddens, 2017)

Nutrition Physical and chemical processes that support ingestion, digestion, and absorption of food (adapted from Giddens, 2017)

Pain Unpleasant sensory and emotional experience associated with actual or potential tissue damage supported by the client’s expression of the experience (International Association for the Study of Pain, 1979)

Patient-centered care Provision of caring and compassionate, culturally sensitive care that is based on a client’s physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values (adapted from Massachusetts Nurses of the Future, 2016, NLN, 2010)

Perfusion Functions that support adequate cardiac output and perfusion of body tissues (adapted from Giddens, 2017)

Professional identity/professionalism The demonstration of accountable and responsible behaviors by the nurse that reflect core values integral to the profession of nursing while incorporating legal and ethical principles and regulatory guidelines that comply with standards of nursing practice (adapted from Massachusetts Nurse of the Future, 2016, NLN, 2010)

Reproduction Functions that support reproductive processes (adapted from Giddens, 2017)

Safety Minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others (adapted from QSEN, 2007; NLN, 2010; Giddens, 2017)

Sensory/perception Functions that support perception, interpretation, and response to internal and external stimuli (adapted from Giddens, 2017)

Sexuality Physiological, psychosexual, and behavioral factors that influence an individual’s sense of sexual identity, gender identity, sexual orientation, and sexual behavior (Shives, 2011)

Spirituality Awareness of one’s inner self and a sense of connection to a higher being, nature, or some purpose greater than oneself (Mauk & Schmidt, 2004 as cited in Potter and Perry, 2016)

Stress and coping Internal and external forces/events that disrupt an individual’s state of balance in relation to the perceived availability of resources to manage those forces/events (Berman & Snyder, 2015; Giddens, 2017)

Teaching and learning/patient education Provision of health-related education to clients to facilitate their acquisition of new knowledge and skills, adoption of new behaviors, and modification of attitudes (adapted from Giddens, 2017)

Thermoregulation Balance between heat produced and lost from the body in an effort to maintain an average core body temperature of 37° C or 98.6° F (Berman & Snyder, 2015; Giddens, 2017)

Tissue integrity Body functions related to protecting the inner organs from the external environment and injury (adapted from Giddens, 2017)