

12-44a
AP-10/2/12
Info-11/6/12

Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours.)

Existing and Special Topics Course

Course: NURS 306 Problem Solving in Nursing

Instructor(s) of Record: Lora K. Ott PhD, RN

Phone: 724-331-5163 Email: l.k.ott@iup.edu

Step Two: Departmental/Dean Approval

Recommendation: Positive (The objectives of this course can be met via distance education)

Negative

Elizabeth Palmer 9/24/12
Signature of Department Designee Date

Endorsed: Mary E. Sude 9/25/12
Signature of College Dean Date

Forward form and supporting materials to Liberal Studies Office for consideration by the University-wide Undergraduate Curriculum Committee. Dual-level courses also require review by the University-wide Graduate Committee for graduate-level section.

Step Three: University-wide Undergraduate Curriculum Committee Approval

Recommendation: Positive (The objectives of this course can be met via distance education)

Negative

Gail Schmitt 10/3/12
Signature of Committee Co-Chair Date

Forward form and supporting materials to the Provost within 30 calendar days after received by committee.

Step Four: Provost Approval

Approved as distance education course

Rejected as distance education course

Gene W. Johnson 10/5/12
Signature of Provost Date

Forward form and supporting materials to Associate Provost.



Received

OCT 2 2012

Liberal Studies

Received

SEP 25 2012

Liberal Studies

Undergraduate Distance Education Review

NURS 306 – Problem Solving in Nursing

Step One: Proposer – Lora K. Ott PhD, RN

A.1 How is the instructor qualified in the distance education delivery method as well as the discipline?

Dr. Ott is a tenure-track, Assistant Professor in the Department of Nursing and Allied Health with teaching expertise in medical-surgical nursing, maternal-neonate nursing, evidence-based practice and patient safety. Dr. Ott currently teaches in the junior level nursing courses, Adult Health I clinical (NURS 337) and Research Utilization (NURS 316) therefore she has knowledge of the course materials in the junior level nursing curriculum. Additionally, Dr. Ott has completed the National League of Nursing, Teaching and Learning in Web-Based Courses Certificate Program. The certification program required the creation of an online syllabus and teaching modules that incorporated various online teaching methods. During the certificate course, Dr. Ott was required to participate in various online teaching methods from a student perspective. Dr. Ott has attended the D2L workshops offered by the IT Department : Content and Navigation of D2L, Discussions, Grades and Quizzes . Dr. Ott utilizes D2L extensively in NURS 337 and NURS 316 for teaching, resources and student assignments. Dr. Ott has attended a Turnitin workshop on campus and is registered with Turnitin.

A.2 How will each objective in the course be met using distance education technologies? At the conclusion of the course, NURS 306, the student will met the following objectives:

1. Identify strategies to promote effective problem solving in nursing.

The first objective will be met in Modules One, Two, Three, Six and Seven thru the module Power Points, assigned readings and the online resources examining root cause analysis and patient safety issues. The objective will be evaluated by the student involvement in the scheduled course discussions and reflective essay on self-assessment of critical thinking.

2. Demonstrate the ability to prioritize client care needs.

Prioritization of care is integral to all steps in the nursing process therefore the second objective will be met in Modules One, Two, Three, Four, Five and Seven thru the module Power Points, assigned readings, discussions and case studies. The objective will be evaluated by how the student prioritizes care in his/her responses during the synchronous discussions and case studies. Module quizzes and NCLEX review questions will contain prioritization questions.

3. Utilize problem solving in clinical nursing scenarios.

The utilization of problem solving will be integrated into all the modules after the initial introduction module. Problem solving will be introduced in the assigned readings, online resources and Power Points. The students will be expected to practice problem solving thru the course discussions and demonstrate problem solving thru the assignment on Pharmacology and Teamwork/Delegation. The module quizzes and NCLEX practice questions will be focused on problem solving in clinical settings.

4. Distinguish between facilitative and non-facilitative approaches to clinical practice problem solving.

The students will distinguish the problem solving techniques that best work for their style of learning, leadership and test taking in the Module Four and Module Seven Power Points, reading assignments, online resources and assignments. Students will explore problem solving in leadership and delegation as well as their style in approaching clinical problems with case study and NCLEX challenges.

5. Identify the rationales that support nursing decisions and nursing actions in the clinical setting.

Module Five focuses specifically on rationales for nursing decisions and nursing interventions. Students will have the opportunity to discuss and explore the rationales of care in an asynchronous discussion with their classmates prior to participating in a synchronous discussion with the faculty focused on rationales of care.

A.3 How will instructor-student and student-student, if applicable, interaction take place?

The instructor-student interaction will take place via the D2L course site with a discussion forum titled "Questions?" for students to post any questions for the instructor. The "Questions?" forum will be checked and answered daily. Asynchronous and synchronous discussions will occur with student-student interaction as well as instructor-student interaction. The instructor will also communicate with the class via email providing individual student feedback and evaluation as needed. Dr. Ott will establish office hours where she will be available for asynchronous discussion via the "Questions?" forum and via email when private communication with students is needed or preferred. Telephone conversations with students will be initiated when needed. All grades will be delivered via the D2L gradebook.

A.4 How will student achievement be evaluated?

Students will be evaluated on their participation in discussion by the quantity and quality of their posts. Students will be given a minimum expected level of participation for each discussion as well as an expectation for thoughtful response to their fellow student's posts. Additionally, the students will be evaluated on their assignments and module quizzes. Asynchronous discussions will precede synchronous chat sessions with the instructor to provide an opportunity for the students to practice posting their ideas in the discussion format prior to an online discussion with the instructor. The final assignment will require the students to create their own case study, creating a patient scenario that requires clinical problem solving that will be presented to their fellow students. The students will be evaluated on their created case study and one their participation in the student case studies presented via the discussion forum.

A.5 How will academic honesty for tests and assignments be addressed?

Academic integrity and plagiarism policies will be included in the syllabus and reviewed with the students and will be consistent with the university's policy. The module quizzes will be created in several versions with scrambled test questions and distractors. The students will be given a time limit to complete the quiz. Various case scenarios and discussion topics will be used to prevent copying answers from previous sessions. The secure website, Turnitin, will be utilized for the submission of written work.

NURS 306 Problem Solving in Nursing

Module One: Introduction of basic concepts for clinical problem solving in nursing: The nursing process

Assignments for Module One:

- 1. Introduction – The introduction assignment provides an opportunity for the students to meet the others in the course. Students who are not familiar with the asynchronous discussion format will have a non-threatening opportunity to practice and learn how to post in the forum and create threads for responding to other their peers. The students need to master this skill because the remainder of the course will be conducted using multiple discussion forums both synchronous and asynchronous.**
- 2. Discussion – What does it mean to “think like a nurse”? The student will join into this discussion forum posting their responses to the question after they have completed the readings and lessons. The purpose for this discussion is to provide an opportunity for the students to begin formulating their ideas regarding a commonly heard statement in nursing, “to think like a nurse” that is directly related to the concepts of critical thinking, patient knowing, nurse intuition and NCLEX success for licensure. These concepts are foundational for the remaining lessons in the course.**
- 3. Critical Thinking – Write a reflective essay evaluating what you learned about your personal critical thinking indicators. The Critical Thinking Indicators (CTI) self-evaluation is taking from the text and a copy is attached. The CTI will provide an opportunity for the student to consider their own strengths and weaknesses in the area of critical thinking. Reflecting on these strengths and weaknesses early in the course will provide a foundation from which they can build as the course adds complexity to the clinical reasoning needed for successfully nursing practice.**
- 4. Module Quiz – The module quiz will provide an evaluation of the student’s grasp of the material with questions taken from the text readings, online reading assignments and the lessons. The quiz will include case study questions, building on the module case study and concentrate on prioritization of care. Additionally the quiz will contain NCLEX practice questions specific to the module topic. The answer rationales will be posted after all students have completed the quiz. The students will have an opportunity to discuss the quiz and the rationales in the “Questions?” forum and during the faculty online office hours.**

situations. For now, study Boxes 1.8, 1.9, and 1.10 which list Critical Thinking Indicators (CTIs)—behaviors that evidence suggests promote critical thinking in nursing. Get a beginning idea of where you stand in relation to being a critical thinker—consider each indicator and rate your abilities using the following scale 0–10 scale:

0 = I'm not very good at demonstrating this indicator

10 = I almost always demonstrate this indicator.

Box 1.8 Personal Critical Thinking Indicators (CTIs) (Behaviors Demonstrating CT Characteristics/Attitudes)

Personal CTIs are brief descriptions of behaviors that demonstrate characteristics that promote critical thinking. Indicators are listed in context of *clinical practice*.

- ▣ Self-aware: Clarifies biases, inclinations, strengths, and limitations; acknowledges when thinking may be influenced by emotions or self-interest.
- ▣ Genuine: Shows authentic self; demonstrates behaviors that indicate stated values.
- ▣ Self-disciplined: Stays on task as needed; manages time to focus on priorities.
- ▣ Healthy: Promotes a healthy lifestyle; uses healthy behaviors to manage stress.
- ▣ Autonomous and responsible: Shows independent thinking and actions; begins and completes tasks without prodding; expresses ownership of accountability.
- ▣ Careful and prudent: Seeks help when needed; suspends or revises judgment as indicated by new or incomplete data.
- ▣ Confident and resilient: Expresses faith in ability to reason and learn; overcomes disappointments.
- ▣ Honest and upright: Seeks the truth, even if it sheds unwanted light; upholds standards; admits flaws in thinking.
- ▣ Curious and inquisitive: Looks for reasons, explanations, and meaning; seeks new information to broaden understanding.
- ▣ Alert to context: Looks for changes in circumstances that warrant a need to modify thinking or approaches.
- ▣ Analytical and insightful: Identifies relationships; expresses deep understanding.
- ▣ Logical and intuitive: Draws reasonable conclusions (if this is so, then it follows that . . . because . . .); uses intuition as a guide to search for evidence; acts on intuition only with knowledge of risks involved.
- ▣ Open and fair-minded: Shows tolerance for different viewpoints; questions how own viewpoints are influencing thinking.
- ▣ Sensitive to diversity: Expresses appreciation of human differences related to values, culture, personality, or learning style preferences; adapts to preferences when feasible.
- ▣ Creative: Offers alternative solutions and approaches; comes up with useful ideas.
- ▣ Realistic and practical: Admits when things aren't feasible; looks for user-friendly solutions.
- ▣ Reflective and self-corrective: Carefully considers meaning of data and interpersonal interactions, asks for feedback; corrects own thinking, alert to potential errors by self and others, finds ways to avoid future mistakes.
- ▣ Proactive: Anticipates consequences, plans ahead, acts on opportunities.
- ▣ Courageous: Stands up for beliefs, advocates for others, doesn't hide from challenges.
- ▣ Patient and persistent: Waits for right moment; perseveres to achieve best results.

(box continues on page 34)

Box 1.8 Personal Critical Thinking Indicators (CTIs) (Behaviors Demonstrating CT Characteristics/Attitudes) (continued)

- Flexible: Changes approaches as needed to get the best results.
- Empathetic: Listens well; shows ability to imagine others' feelings and difficulties.
- Improvement-oriented (self, patients, systems): *Self*—Identifies learning needs; finds ways to overcome limitations, seeks out new knowledge. *Patients*—Promotes health; maximizes function, comfort, and convenience. *Systems*—Identifies risks and problems with health care systems; promotes safety, quality, satisfaction, and cost containment.

Note: The preceding is the ideal—no one is perfect. Even the best thinkers' characteristics vary depending on circumstances such as comfort and familiarity with the people and situations at hand. What matters is patterns of behavior over time (is the behavior usually evident?). If you're a critical thinker, you can probably easily pick three or more of the above characteristics that you'd like to improve (critical thinkers are naturally focused on self-improvement).

Source: *Critical Thinking Indicators* © 2008 R. Alfaro-LeFevre. All rights reserved. No copying without written permission. Available: www.AlfaroTeachSmart.com

Box 1.9 Knowledge Critical Thinking Indicators (CTIs) (Requirements vary, depending on context [for example, specialty practice])

Clarifies:

- Nursing and medical terminology
- Nursing vs. medical and other models, roles, and responsibilities
- Signs and symptoms of common problems and complications
- Related anatomy, physiology, pathophysiology
- Normal and abnormal function (bio-psycho-social-cultural-spiritual)
- Factors that promote or inhibit normal function (bio-psycho-social-cultural-spiritual)
- Related pharmacology (actions, indications, side effects, nursing implications)
- Reasons behind interventions and diagnostic studies
- Normal and abnormal growth and development
- Nursing process, nursing theories, and research principles
- Applicable standards, laws, practice acts
- Policies and procedures and the reasons behind them
- Ethical and legal principles
- Spiritual, social, and cultural concepts
- Where information resources can be found
- How own thinking, personality, and learning style preferences may differ from others' preferences
- Personal values, beliefs, needs
- Organizational mission and values

Demonstrates:

- Ability to solve mathematical problems related to medication administration
- Focused nursing assessment skills (eg, breath sounds or IV site assessment)
- Related technical skills (eg, n/g tube or other equipment management)

Source: *Critical Thinking Indicators* © 2008 R. Alfaro-LeFevre. All rights reserved. No copying without written permission. Available: www.AlfaroTeachSmart.com

I. Course Description

NURS 306 Problem Solving in Nursing

**3 lecture hours
0 lab hours
3 credits
(3c-0l-3sh)**

Prerequisites: NURS 236

This course provides opportunities for students to recognize and develop intervention strategies for problem solving in clinical nursing situations. Emphasis is placed on developing application and analysis skills required for success in the nursing program.

II. Course Objectives:

At the conclusion of the course the student will:

- 1. Identify strategies to promote effective problem solving in nursing.**
- 2. Demonstrate the ability to prioritize client care needs.**
- 3. Utilize problem solving in clinical nursing scenarios.**
- 4. Distinguish between facilitative and non-facilitative approaches to clinical practice problem solving.**
- 5. Identify the rationales that support nursing decisions and nursing actions in the clinical setting.**

III. Course Outline

Weeks 1-2	A. Introduction of basic concepts for clinical problem solving in nursing 6 hours ✓ <ol style="list-style-type: none">1. Development of personal and professional objectives2. Personal profile of the student nurse3. The Learning Process<ol style="list-style-type: none">a) Anatomy and Physiology review of the brainb) Right and Left Brain traits4. Learning Styles<ol style="list-style-type: none">a) Auditoryb) Visualc) Kinesthetic/Tactiled) Characteristics of each Learning Stylee) Application of each style to clinical practice5. Medical terminology<ol style="list-style-type: none">a) Components of termsb) Deciphering medical terminology.a) Application of medical terminology in clinical practice	
Week 3-4	B. Study strategies for Nursing practice 6 hours <ol style="list-style-type: none">1. How nurses should take class notes2. Study environment3. Study errors<ol style="list-style-type: none">a) Crammingb) Memorizingc) Rituals4. Memory skills<ol style="list-style-type: none">a) ST memoryb) LT memory	

	<ul style="list-style-type: none"> c) Transferring material 	
	5. Medical memory triggers	
	<ul style="list-style-type: none"> a) Mnemonics 	
	6. Practice questions/review	
	<ul style="list-style-type: none"> a) Introduction to National Council Licensure Exam style questions 	
Weeks 5 –7	C. Reading strategies	1 hour
	1. SQ4R technique	
	<ul style="list-style-type: none"> a) <u>S</u>urvey b) <u>Q</u>uestion c) <u>R</u>ead d) <u>w</u>Rite e) <u>R</u>emember f) <u>R</u>evue 	
	D. Stress management for nurses	2 hours
	1. Reasons for stress	
	<ul style="list-style-type: none"> a) Decreased concentration b) Competition among nurses c) Poor recall of information d) Information overload in the classroom 	
	2. Nursing test apprehension	
	<ul style="list-style-type: none"> a) Practice questions/review 	
	3. Thought distraction	
	4. Stress in the clinical environment	
	<ul style="list-style-type: none"> a) translating patient reports b) interpreting laboratory data c) organizing an assignment d) prioritizing patient care 	
	✓ E. Time management	3 hours
	1. Organizing via schedules	
	2. Procrastination prevention	
	3. Clinical preparation	
	<ul style="list-style-type: none"> a) the day before a clinical experience b) the day of clinical c) post clinical review 	
	✓ F. Test taking strategies	3 hours
	1. Interpreting a multiple choice question	
	2. Test taking hints	
	3. Medical math calculations	
	4. National Council Licensure Examination (NCLEX) preparation	
	<ul style="list-style-type: none"> a) Practice questions/review 	
Weeks 8-9	Mid- term exam	1 hour
	G. Practicing effective nursing problem solving	5 hours
	1. Personal situations	
	2. Clinical situations	
	3. NCLEX style questions/review	
Weeks 10- 14	H. Use of Case Studies and Questions	15 hours
	1. Student team presentations of case studies related to a body system	

- a) Gastrointestinal - Pancreatitis
 - b) Respiratory - Tuberculosis
 - c) Neurological – Multiple Sclerosis
 - d) Endocrine – Thyroid Disease
 - e) Musculoskeletal - Osteoporosis
2. Practice questions/review

Finals Week: Final Exam

IV. Evaluation Methods

10% Class participation, preparation, attendance

15% Written assignments

 Homework and journal entries

10% Computer assignment

25% Mid-term exam

25% Final Exam

 Each exam will have a total of 100 point and the majority of questions will be multiple choice.

15% Case study presentation

Grading scale

A=90-100%

B=80-89%

C=70-79%

D=60-69%

F= less than 60%

Description of Learning Assignments:

Journals

Students will keep a written journal throughout the semester. Various independent assignments, as well as notes/responses that students are asked to write as part of the class period will be included in the journal.

Computer assignment

The student will select one CAI from the Medical-Surgical series available in the Johnson Hall Learning Lab and complete the entire program selected, and the associated test. The student must submit the printout of the test results that indicate the student has attained a score of at least 80% in comprehension and 80% in critical thinking. Students are to do this assignment individually, not with a partner or as a group.

Case Study Presentation

A team of students will have the opportunity to introduce the class to a patient case study based on a selected clinical topic, approved by the instructor. This oral presentation should be 25-30 minutes in length, and should address the specific medical diagnosis by including a brief introduction of the patient situation, a definition of the disease process, (the pathophysiology involved), signs and symptoms, diagnostic tests, treatments and medications, and responsibilities of the nurse. An outline of the teaching project and an APA style bibliography are to be submitted to the instructor at the completion of the presentation. Members of the team will receive the same grade.

V. Required text(s)

Castillo, S. (2000). *Strategies, techniques and approaches to thinking*. Philadelphia: W.B. Saunders.

Additional readings will be made available on Reserve @ Stapleton Library.

VI. Special resource requirements

None

VII. Bibliography

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- Jensen, E. (1997). *Barron's B's & A's in 30 days: Strategies for better grades in college*. New York: Barrons.

- Katz, J. R. (2001). *Keys to nursing success*. New Jersey: Prentice Hall.
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- Rice, J. (1999). *Medical terminology with human anatomy*. Stamford, CT: Appleton & Lange.
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- Smith-Stoner, M. (1999). *Critical thinking activities for nursing*. Philadelphia: Lippincott.
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COURSE ANALYSIS QUESTIONNAIRE
NURS 306 Nursing Case Studies

Section A: Details of the Course

- A1 This course will fit into the junior year of the Bachelor of Science degree in the Nursing program. It is an elective course for students in the major.
- A2 This course is part of the elective courses in the Nursing program.
- A3 This course has been offered as a special topic course for three (3) semesters. A total of 29 students have taken this course. Students are directed toward this course by their advisors and/or sophomore faculty, based on weakness in their clinical performance and /or test taking weakness(s). As part of the department's recruitment and retention strategy, the department is offering this course as part of an effort to target students who may be at high risk for state board licensing exam failure, and offering a course that addresses their learning needs. Placing an elective course in their junior year gives them some time to implement the strategies for success they learn in this course and apply it to the rest of their program of study. The department recognizes that this may place the students total credit hours over the minimum required for a bachelor's degree, but the department believes that the benefit to the student outweighs the increased credit load. The department has been tracking the students that took this course over the past three years and found that taking this course in the first semester of their junior year has decreased many of the students' risk for board failure based on an assess test administered in their senior year.
- A4 This course is not intended to be taught as a dual level course.
- A5 This course is not intended to be taken for variable credit.
- A6 The content in this course supports the student in the practice of nursing. The information taught in the course is consistent with the test plan for the licensing exam for nursing (NCLEX-RN). Other nursing programs have implemented strategies for assisting nursing students at risk for board failure, but we are not aware of any other institutions that offer this course.
- A7 No professional society, accrediting authority, law or other external agency requires this content.

Section B: Interdisciplinary Implications

- B1 This course will be taught by one faculty within the Department of Nursing and Allied Health Professions.
- B2 This course does not overlap with any other courses at this University.
- B3 No seats in the course will be reserved for students in Continuing Education.

Section C: Implementation

- C1 No new faculty are needed to teach this course.
- C2 Other resources
- a. Current space allocations are adequate to offer this course.
 - b. Currently Stapleton Library subscribes to a number of nursing journals that would be helpful for students in this course. These journals include: American Journal of Nursing, RN, and

Nursing. The library also has a satisfactory holding of references related to nursing. Periodic updates of these holdings are necessary. The department currently has a mechanism in place for identifying needs for updated texts in priority order and recommending future purchases for the library holdings.

- C3 No grant funds are associated with this course.**
- C4 This course will be offered at least once per Academic year.**
- C5 One section of this course will be offered at a time.**
- C6 The course could accommodate 40 students.**
- C7 No professional society limits enrollment in a course of this nature.**

Indiana University of Pennsylvania
Department of Nursing and Allied Health Professions
Winter 2012-2013
Lora K. Ott RN, PhD

Course Number and Title: NURS 306 Problem Solving in Nursing
Section 801
Online 3 week course

Credit Allotment: Three Semester Hours (3 credits)

Placement in Curriculum: Elective course, Prerequisite NURS 236

Faculty: Lora K. Ott RN, PhD
l.k.ott@iup.edu

I. Course Description:

Provides opportunities for students to recognize and develop intervention strategies for problem solving in clinical nursing situations. Emphasis is placed on developing application and analysis skills required for success in the nursing program.

II. Course Objectives:

At the conclusion of the course the student will:

1. Identify strategies to promote effective problem solving in nursing.
2. Demonstrate the ability to prioritize client care needs.
3. Utilize problem solving in clinical nursing scenarios.
4. Distinguish between facilitative and non-facilitative approaches to clinical practice problem solving.
5. Identify the rationales that support nursing decisions and nursing actions in the clinical setting.

III. Course Outline:

Topic/Lectures	Readings	Assignments	Course Objectives Met
Module One: Introduction of basic concepts for clinical problem solving in nursing; The nursing process.			
<u>Nursing Process Overview</u>	Alfaro-LeFevre Chapter One pgs 5-38	Introduction - Introduce yourself, tell us about yourself and why you are taking this course. Due date:	1, 2
<u>What is the Nursing Process and Why Learn about It?</u>	<i>To Err is Human</i>	Discussion - What does it mean to "think like a nurse"? Due date:	
<u>Problem Solving and Critical Thinking</u>	<i>Techniques of Root Cause Analysis</i>	Critical Thinking - Complete How to Become a Critical Thinker pg 32 write a reflective essay evaluating what you learned about your personal critical thinking indicators. Due date:	
<u>What is the difference Between Nursing Process and Critical Thinking</u>		Module Quiz Due date:	
Module Two: Practicing effective nurse problem solving; Use of case studies and questions.			
<u>Nursing Assessment and Critical Thinking</u>	Alfaro-LeFevre Chapter Two pgs 47-85	One Minute Paper - Nursing Assessment and the Josie King Story	1, 2, 3
<u>Medical Terminology - Know what it says</u>	http://www.josieking.org/page.cfm?pageID=23	Discussion - Pick one of the case studies and join the discussion group for that case by XX/XX. Post your assessments of the situation as the case evolves. You must post a minimum of 3 times to receive credit for the discussion.	
<u>Know your Anatomy & Physiology</u>	Case Study 2		
<u>Assess - What do you Hear, See, Smell, Feel</u>	Case Study 3	Module Quiz	
Module Three: Practicing effective nurse problem solving; Use of case studies and questions continued.			
<u>Nursing Diagnosis and Critical Thinking</u>	Alfaro-LeFevre Chapter Three pgs 93- 135	Synchronous Chat Session –Nursing Diagnosis for the Stroke Patient – NCLEx style questions and rationales	1, 2, 3, 5
<u>Looking beyond the obvious – in clinical and in testing</u>	Anatomy & Physiology of the Nervous System – Lewis text Chapter 56, pgs 1405 – 1424.	Pharmacology Assignment	
<u>Nursing vs Medical Diagnosis – Know the difference</u>	Care of the Stroke Patient – Lewis text Chapter 58, pgs 1459 – 1484.	Module Quiz	
<u>Physiology of the Brain – Nursing Diagnosis for loss of brain functioning</u>			

Module Four: Time management

Nurse Planning and Critical Thinking Alfaro-LeFevre Chapter Four pgs 143-168

Nurse-Advocates-Past-Present-and-Future

Leadership – You are a Leader

Patient Advocacy – You are an Advocate

NCLEX evaluates teamwork and delegation

Discussion – Leadership and Advocacy as they relate to Problem Solving 2, 3, 4

Teamwork and Delegation Assignment –

Module Quiz

Module Five: The right action for the right patient at the right time for the right reason.

Nursing Implementation and Critical Thinking Alfaro-LeFevre Chapter Five pgs 183-201

What do you do for your patients?

Why do you do what you do?

Get down to the Root Rationale

Module Six: Stress management for nurses; evaluating the effectiveness of nursing practice.

Nursing Evaluation and Critical Thinking Alfaro-LeFevre Chapter Six pgs 212-219

Are your interventions working?

Are your patients ready for discharge?

Are your critical thinking skills at work?

Module Seven: Study strategies for nursing practice; Test taking strategies

Putting it all together

Problem Solving approach to clinical practice

Problem Solving approach to NCLEX test questions - Test taking strategies.

Think like a Nurse

Discussion - Bring your interventions. Seek out your rationales together 2, 3, 5

Synchronous Chat Session - Rationales - Why we do what we do

Module Quiz

Discussion - How did you see your patients respond to care? 1, 3, 5

Create a Case Study to share with your course mates.

Module Quiz

Synchronous Chat Session - Case Study challenge 1, 2, 3, 4, 5

Mock 30 minute NCLEX-style exam with Synchronous Chat Session for Rationale debriefing

Final Exam – Case Study format with multiple choice, short answer and, NCLEX-style questions

IV. Evaluation Methods:

Class Participation (Introduction, Discussion, Chat)	30 %
Module Assignments	40 %
Module Quizzes	25 %
Final Exam	5 %
Total	100 %

Grading Scale

A=90-100%

B=80-89%

C=70-79%

D=60-69%

F=less than 60%

Academic Integrity Policy: This course adheres to the Academic Integrity Policy found in the University Catalog. It is expected that any written work you submit will be your own original work. Any non-original work should be properly cited.

V. Required text:

Alfaro-LeFevre, R. (2010). *Applying Nursing Process A Tool for Critical Thinking* (7th ed.) Philadelphia: Lippincott Williams & Wilkins.

Lewis, S. M., Heitkemper, M. M., Dirksen, S. R., O'Brien, P. G., Bucher, L. & Camera, I. M. (2011). *Medical surgical nursing: Assessment and management of clinical problems* (8th ed.). St. Louis: Mosby.

Recommended text:

Deglin, J. H., Sanoski, C. A., Vallerand, A. H. (2011). *Davis's drug guide for nurses* (12th ed.). S.A. Davis: Philadelphia.

Doenges (2012). *Nurse's pocket guide* (12th ed.). Philadelphia: F. A. Davis.

Fishbach, F. (2008). *A manual of laboratory & diagnostic tests* (8th ed.). Philadelphia:Lippincott Williams & Wilkins.

Karch, A.M. (2010). *Focus on nursing pharmacology* (5th ed). Philadelphia: Lippincott Williams & Wilkins.

Silvestri, L. (2011). *Saunders Comprehensive Review for the NCLEX-RN Examination* (5th. Edition): Saunders Elsevier

Taylor, C., Lillis, C., LeMone, P., & Lynn, P. (2008) *Fundamentals of nursing* (6th ed.). Philadelphia: Lippincott, Williams, & Wilkins.

VI. References:

Benner, P., Hughes, R. & Sutphen, M. (2008) *Clinical Reasoning, Decisionmaking, and Action: Thinking Critically and Clinically*. Chapter 6. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. www.ahrq.gov/qual/nurseshdbk/

Benner, P., Hooper-Kyriakidis, P. & Stannard, D. (2011) *Clinical Wisdom and Interventions in Acute and Critical Care: A Thinking-In-Action Approach*. Springer Publishing Company, New York.

Ozkahraman, S. & Yildirim, B. (2011) An Overview of Critical Thinking in Nursing and Education. *American International Journal of Contemporary Research*. 1(2):190-196

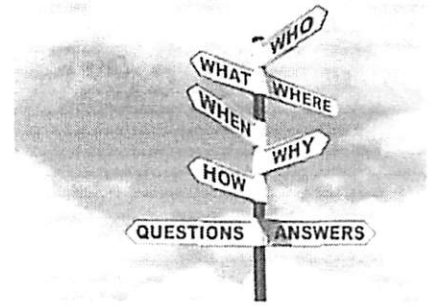
Sanford, K. (2012) Overview and summary: Nurse Advocates: Past, Present and Future. *The Online Journal of Issues in Nursing*. 17(1) accessed September 11, 2012.
<http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-17-2012/No1-Jan-2012/Nurse-Advocates-Past-Present-and-Future.html>

The Josie King Story <http://www.josicking.org/page.cfm?pageID=23>

Williams, P. (2001) Techniques for root cause analysis. *Baylor University Medical Center Proceedings*. 14(2): 154-157.

Welcome to NURS 306!

You have taken a step toward a successful nursing career. Problem solving, asking questions and critically think thru complex situation is what nurses do every day. So let's get started.



First, you will want to read the course syllabus and be sure you understand the objectives, assignments and how you will be evaluated. Our time together is short and we will be moving quickly so please post any questions in the Questions??? Forum so all can benefit from the clarification.

Our course will be structured into 7 modules with lessons, readings, discussion points, assignments and quizzes due at the completion of each module. Feel free to work ahead, however pay close attention to the module assignments and quizzes due dates in the syllabus.

We will have three required chat sessions together; so be sure to look at the chat session schedule and plan ahead.

I am excited to work with you over the coming weeks.

Dr. Ott

Lessons for Module One

Lessons One:

What is the Nursing Process and Why Learn About It?

Nurses speak a similar language that comes from a similar way of thinking. That thinking is dependent on the steps of the nursing process. When nurses use a systematic approach to care it makes continuity of care and communication between caregivers more successful. This is so important that you will see the steps of the nursing process and the process as a whole in the NCLEX exam questions and in future certification exams you may choose to take.

Power Point Lesson:

[Introduction of basic concepts for clinical problem solving in nursing: the nursing process Module One: Lesson One](#)

Lesson Two:

Problem Solving and Critical Thinking

Problem Solving and Critical Thinking have often been used interchangeably. We, however, will think of these two concepts as related but not the same. For example, you can solve a problem without critically thinking thru the data presented to you. Likewise, you can critically think thru the data however, fail to solve the problem. Thus, one is more a process of thought and analysis - critical thinking and the other is more a process of action - problem solving.



Power Point Lesson:

[Introduction of basic concepts for clinical problem solving in nursing: the nursing process Module One: Lesson Two](#)

Lesson Three:

What is the difference between Nursing Process and Critical Thinking?

The Nursing Process is the tool we use to structure our Critical Thinking (Clinical Reasoning).

For the duration of this course we will use the terms *critical thinking* and *clinical reasoning* interchangeably.

Power Point Lesson: [Introduction of basic concepts for clinical problem solving in nursing: the nursing process Module One: Lesson Three](#)

Module One Reflective Essay (25 points)

Critical Thinking - Complete How to Become a Critical Thinker page 32 on your Alfaro-LeFevre text and write a reflective essay evaluating what you learned about your personal critical thinking indicators

Criteria	Exceeds Expectations	Meets Expectations	Improving	Does Not Meet Expectations
	5 points	4 points	2 points	0 points
Critical Thinking Indicator (CTI) Evaluation	Comprehensive discussion of the results of the CTI evaluation. Identifies strengths and weaknesses.	Superficial discussion of the CTI results. Includes strengths and weaknesses.	Identifies only strengths or only weaknesses.	No discussion of the CTI results.
Personal reflection on CTI results	Personal reflection on both strengths and weaknesses revealed in the CTI results. Includes examples from clinical or non-clinical experiences.	Personal reflection on both strengths and weaknesses revealed in the CTI. No examples given.	Personal reflection of only strengths or only weaknesses. No examples given.	No personal reflection of the CTI results.
Areas of Improvement	Identifies at least 3 areas for potential areas to improve clinical reasoning related to CTI results.	Identifies only 2 potential areas to improve clinical reasoning.	Identifies only 1 potential area for improving clinical reasoning.	No areas of improvement identified.
Summary Statement	Includes a summary statement indicating an understanding of the importance of clinical reasoning and a personal goal for nursing practice.	Includes a summary statement indicating either an understanding of the importance of clinical reasoning and/or a personal goal for nursing practice.	Includes a summary statement with limited understanding of the importance of clinical reasoning or nursing practice goals.	No summary statement.
Professional Writing	Well organized thoughts, correct grammar and spelling. Used paragraph structure with transition statements to guide the reader.	Intermittently organized thoughts, no more than 2 grammar or spelling errors. Uses paragraph structure with transition statements to guide the reader.	Disorganized expression of thoughts with more than 2 grammar or spelling errors. Uses paragraph structure with poor transitions.	Greater than 4 grammar or spelling errors. Poor use of paragraph structure.
Overall Score	Level 4 19 or more	Level 3 14 or more	Level 2 9 or more	Level 1 0 or more

Module One quiz is to be taken after completing all the Module One readings, the three mini lectures, discussion participation and submission of the reflective essay. Complete Module One before moving on to Module Two.

You will have 30 minutes to complete the 25 multiple choice questions Module One quiz. There may be more than one correct response. So select the best answer or answers.

1. One of *To Err Is Human's* main conclusions is

Question options:

- that the majority of medical errors do not result from individual recklessness.
- this is a "bad apple" problem.
- errors are caused by faulty systems and processes.
- mistakes can be prevented by making it harder for people to do something wrong.

2. Applying principles from each of the five steps helps you:

Question options:

- A) form thinking habits you need to think critically in clinical, theoretical, and testing situations.
- B) organize and prioritize your patient care.
- C) move from one principle of the nursing process to the next in a linear fashion.
- D) keep the focus on what's important - the patient's health and quality of life.

3. The foundation of all the steps of the nursing process is

Question options:

- communication.
- assessment.
- patient safety.
- quality care.

4. In the Assessment step of the nursing process, you will need to collect and record all the information you need to

Question options:

- clarify expected outcomes.
- predict, detect, prevent, and manage actual and potential health problems.
- promote optimum health, independence and well-being.
- achieve the expected outcomes safely and efficiently.

5. The nursing process is

Question options:

- a linear process of thinking to guide patient care.
- an interrelated set of steps to guide patient care.
- a cyclic process guiding patient care.
- the same as the medical problem solving method.

6. Being willing to care means

Question options:

- being willing to pursue a deeper understanding of ourselves.
- "walking a mile in another's shoes."
- making the choice to do what it takes to help others.
- putting the patient's concerns above those of the family and other professionals.

7. The steps of the nursing process are

Question options:

- A) assess, re-assess, revise and record.
- B) assessment, diagnosis, planning, implementation and reassessment.
- C) assessment, planning, diagnosis, implementation and evaluation.
- D) assessment, diagnosis, planning, implementation and evaluation.

8. The nursing process is the first tool you need to learn to "think like a nurse" and is

Question options:

- purposeful, humanistic, systematic, organized, dynamic and outcome-focused.
- required by national practice standards.
- essential to thinking critically in the clinical setting.
- a cyclic, rather than a linear process.

9. Root cause analysis is one strategy where all parties involved in an adverse event are gathered

Question options:

- to determine who caused the adverse event.
- to decide the best response to the adverse event.
- to employ critical thinking strategies.
- to get to the root of the problem.

10. An 82 yo client, AE, is complaining of thirst and is restless and disoriented. The nurse evaluates AE's Glasgow Coma Scale, checks it to prior documentation and checks AE's morning lab results. The nurse notes that AE is hyponatremic. The nurse makes a mental note to bring this to the attention of the physician, who is rounding on the unit. What are the steps of the nursing process utilized in this situation?

Question options:

- a) Assessment, Intervention
- b) Assessment, Diagnosis, Planning
- c) Assessment, Planning, Intervention
- d) Assessment, Diagnosis, Planning, Evaluation

11. The nurse is caring for a chemotherapy patient on the oncology unit. Looking over her assignment, the nurse organizes her care for this patient knowing that she is at risk for a nosocomial infection. What are the steps of the nursing process utilized in this situation?

Question options:

- a) Assessment
- b) Diagnosis
- c) Planning
- d) Evaluation

12. Jake S. is a 50 yr old patient with a recent open reduction and internal fixation (ORIF) of the left tibia and fibula fracture. You have just finished morning report and have not done your initial assessment yet but Jake asks for pain medication, pain score of 10/10. You note that it is within the correct time to medicate Jake and that the previous RN charted the pain medication was effective decreasing Jake's pain to a 5/10. You complete your initial head-to-toe assessment and medicate Jake for pain. On pain re-assessment, Jake still reports a pain score of 10/10. Your critical thinking within the nursing process looks is

- a) The patient is drug seeking and reporting high pain scores to get more medication.
- b) The patient still reports pain score of 10/10. Medication is no longer giving the pain relief as reported by the prior RN. You re-assess Jake S. for alternative reasons for increased pain.
- c) The patient will need to wait until the next pain medication is due.
- d) You call the surgeon for additional pain medications.

13. You now realize that in addition to increased pain, he is running a low grade fever, his left foot appears to be more swollen than described by the prior RN and he is not the pleasant, cooperative patient your heard about in report. You now call the surgeon to report your findings. All along you chart your assessments and actions. This represents critical thinking within the nursing process because

- a) as the nurse, you are responsible to manage pain.
- b) as the nurse, you are responsible for documenting clinical information and reporting to the surgeon clinical findings.
- c) as the nurse, you are coordinating his pain management and you are also responsible for nursing surveillance to identify possible complications early.
- d) as the nurse, you are coordinating the patient's pain medication and documenting the patient response to the medication.

14. One root cause analysis is to ask "why". How many time do we ask "why" to get to the root cause?

- a) 3
- b) 4
- c) 5
- d) 6

15. According to the *To Err is Human* report, how many people die of medical mistakes each year in the United States?

- a) 23,000 – 45,000
- b) 44,000 – 98,000
- c) 50,000 – 120,000
- d) 65,000 – 120,000

16. Identify the approach The Institute of Medicine suggested to improve patient safety. Choose all that apply

- a) Establishing a national focus to create leadership, research, tools and protocols to enhance the knowledge base about safety.
- b) Implementing safety systems in health care organizations to ensure safe practices at the delivery of care level.
- c) Identifying and learning from errors by developing a nationwide public mandatory reporting system.
- d) Raising performance standards and expectations for improvement in safety.

17. Critically thinking is important to your nursing practice because

- a) it improves patient safety.
- b) addresses the patient's needs holistically.
- c) draws conclusions based on facts.
- d) it creates cyclic thinking of assessment, re-assessment, assessment, re-assessment.

18. How is nursing different from medicine?

- a) Physicians focus on diagnosis and treatment of disease; nurses focus on giving care during the cure.
- b) Physicians are responsible to the patients; nurses are responsible to the physicians.
- c) Physicians critically think when making a diagnosis; nurses follow the physicians' plan of care without critically thinking.
- d) Physicians treat disease; nurses treat human responses.

19. Using a systematic, logical process such as the nursing process

- a) interferes with the nurse's ability to focus on caring.
- b) decreases a nurse's sensitivity to the patient's needs.
- c) becomes second nature over time and facilitates caring.
- d) interferes with clinical reasoning.

20. At the beginning of her shift the nurse prioritizes her patients according to who is at greatest risk for an adverse event. Choose the order from highest priority to lowest priority.

- a) exploratory laparoscopy post op day three, new admission possible ruptured appendix, COPD admitted two days ago with an urinary tract infection, new admission with a fracture of the tibia and fibula.
- b) COPD admitted two days ago with an urinary tract infection, new admission with a fracture of the tibia and fibula, exploratory laparoscopy post op day three, new admission possible ruptured appendix.
- c) new admission with a fracture of the tibia and fibula, COPD admitted two days ago with an urinary tract infection, exploratory laparoscopy post op day three, new admission possible ruptured appendix.
- d) new admission possible ruptured appendix, new admission with a fracture of the tibia and fibula, COPD admitted two days ago with an urinary tract infection, exploratory laparoscopy post op day three

The nurse is assisting with the sedation for an 86-year-old woman undergoing a bone marrow biopsy. Upon taking the vital signs the nurse notices the respiratory rate has decreased from 16 breaths per minute to 10 breaths per minute. The nurse applies oxygen via nasal cannula, asks the patient to speak to her and take a deep breath, notifies the physician of the respiratory rate change and records the vitals every 5 minutes until the respiratory rate improves.

21. Recording the vital signs and comparing the results to the patient's prior vital signs represents which step or steps of the nursing process.

- a) assessment
- b) diagnosis
- c) planning
- d) intervention

22. Applying oxygen and asking the patient to take deep breaths represents which step or steps of the nursing process.

- a) assessment
- b) diagnosis
- c) intervention
- d) evaluation

23. Recording the vitals every 5 minutes until the respiratory rate improves represents which step or steps of the nursing process.

- a) assessment
- b) diagnosis
- c) intervention
- d) evaluation

24. A well cultivated critical thinker

- a) raises well thought out questions.
- b) draws conclusions independently without the input of others.
- c) gathers and assesses information prior to drawing conclusions.
- d) assesses and thinks within their discipline without exploring alternative ways of approaching problems.

25. The nurse instructs a primigravid client about the importance of sufficient vitamin A in her diet. The nurse knows that the instructions have been effective when the client indicates that she should include eggs into her diet. This demonstrates which step or steps in the nursing process:

- a) assessment
- b) planning
- c) intervention
- d) evaluation

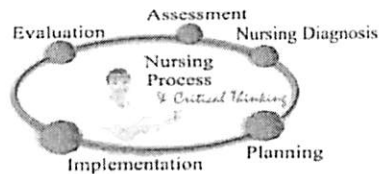
Introduction of basic concepts for clinical problem solving in nursing: the nursing process

Module One: Lesson One

5 main reasons to study the nursing process

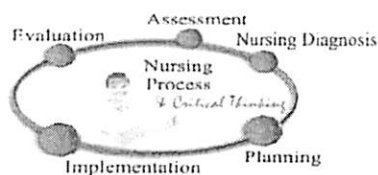
- It is the basis for "thinking like a nurse"
- The American Nurses Association Standards mandates the use of the nursing process.
- The nursing process is the basis for all the patient care models used by nurses, providing a tool for critical thinking and problem solving
- Advanced certifications and the NCLEX exams are based on the nursing process
- Adhering to the nursing process as a basis of practice improves patient safety within the complex health care system

Nursing Process & Critical Thinking



The Nursing process is often thought of as a step wise process. However, for critical thinkers the "steps" are a cyclic process or way of thinking that moves between the "steps" with one affecting the other.

Nursing Process & Assessing



Assessment, although being one "step" in the nursing process, occurs throughout the process for those who think critically. Critical thinking in the clinical setting requires a reasoning process that includes –

Assessing, Re-assessing, Revising, Recording...Repeat

Case Study – Jake S.

Let's see how this works in action.

Jake S. is a 50 yr old patient with a recent open reduction and internal fixation (ORIF) of the left tibia and fibula fracture. You have just finished morning report and have not done your initial assessment yet but Jake asks for pain medication, pain score of 10/10.



You note that it is within the correct time to medicate Jake and that the previous RN charted the pain medication was effective decreasing Jake's pain to a 5/10. You complete your initial head-to-toe assessment and medicate Jake for pain. On pain re-assessment, Jake still reports a pain score of 10/10. The medication is no longer giving the desired relief so you re-assess Jake's leg, vitals and ask him to describe what he is experiencing related to his pain. You now realize that in addition to increased pain, he is running a low grade fever, his left foot appears to be more swollen than described by the prior RN and he is not the pleasant, cooperative patient you heard about in report. You now call the surgeon to report your findings. All along you chart your assessments and actions.

Nursing Process looks like this:

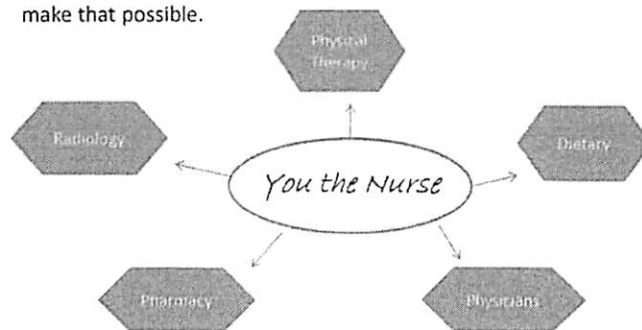
Assessment	Pt. reports pain 10/10. Pain meds due per order.
Diagnosis	Pain related to ORIF as evidence by pain score 10/10
Planning	To medicate patient as ordered
Implementation	Administer pain medication and reassess pain score in 45 minutes
Evaluation	Pain score remains 10/10

Critical Thinking (within the nursing process) looks like this:

Assessment	Pt. asks for pain meds, pain score 10/10. It is the correct time to medicate & the previous RN charted the pain med was effective decreasing pt's pain to 5/10. Initial head to toe assessment completed.
Re-assess	Pt still reports a pain score of 10/10. Meds no longer giving relief so you re-assess Jake's leg, VS & ask him to describe what he is experiencing related to his pain. You realize that in addition to pain, he has a low grade fever, left foot appears more swollen than described in report & the pt isn't the pleasant, cooperative patient described in report.
Revise	You now call the surgeon to report your findings
Record	You chart your assessments & actions
Repeat	Frequent re-assessment of the left leg, pain, pt's behavior change, vitals and initiate new orders received from surgeon

Coordination of Care

The nursing process is what we use to compliment the health care team and to coordinate the care. We are the caregiver that stands between the patient and all other health care team members as their advocate and care coordinator. Comprehensive patient care requires a holistic approach and the nursing process helps us to make that possible.



Coordinating Care for Jake S.

Take a look at our patient, Jake S.

- We are coordinating his pain management, as ordered by the surgeon.
- We are also responsible for nursing surveillance to identify possible complications early.
- The surgeon is concerned about the surgical repair of his leg and now managing the possibility of a complication (infection, blood clot, excessive swelling).
- Jake may be seen by physical therapy that as his nurse you need to communicate the onset of complications that will alter the physical therapy plan of care.
- In addition to the coordination of Jake's care, you are also responsible for addressing Jake's personal needs: pain, fever, sweating, swelling in leg, skin integrity, hydration, dietary needs, anxiety, patient teaching, family, etc.

Some Benefits of Using the Nursing Process:

- Speeds recognition of complications (actual and risks)
- Nurse's identifying patient outcomes which focuses care
- Improves cost effectiveness of care
- Improves documentation of care
- Focuses care on the patient and the patient's unique needs
- Encourages nurses to be independent thinking
- Encourages patient and family input in care
- Nurses see results of the care they provide

Introduction of basic concepts for clinical problem solving in nursing: the nursing process

Module One : Lesson Two

Definition of Problem Solving

Mosby's Medical Dictionary, defines problem solving in nursing as follows:

...problem-solving approach to patient-centered care, (in nursing) a conceptual framework that incorporates the overt physical needs of a patient with covert psychologic, emotional, and social needs. It provides a model for caring for the whole person as an individual, not as an example of a disease or a medical diagnosis. Nursing is defined within this model as a problem-solving process. The patient is viewed as a person who is in an impaired state, less than usually able to perform self-care activities. Nursing problems are conditions experienced by the patient or the patient's family for which the nurse may provide professional service. The nurse makes a nursing diagnosis that identifies the impaired state and determines the care needed to augment the patient's ability to perform self-care.

Mosby's Medical Dictionary, 8th edition. © 2009, Elsevier

Definition of Critical Thinking

Definitions of critical thinking are much more diverse. The following link provides an overview defining critical thinking. As you read this one page explanation of critical thinking, I want you to take note of the importance of the personal responsibility assumed by the *thinker*, in our case the nurse, to improve and utilize their abilities to critically think.

<http://www.criticalthinking.org/pages/defining-critical-thinking/766>

Critical Thinking & Patient Safety

The sentinel report that drew attention to the issue of patient safety in our nation's hospitals was the Institute of Medicine (IOM), *To Err is Human*.

One key result was the realization that to continue to blame individuals for medical errors was not fixing the problem. Instead we needed to discover the breakdowns in the system that allowed the error to occur.

This was seen as moving from a hospital culture of blame to a hospital *culture of safety*.

Root Cause Analysis

Root cause analysis is one strategy to achieve this hospital culture of safety. Root cause analysis can be done using various **critical thinking strategies** where all parties involved in the event are gathered to get to the root of the problem. One of the simplest of



these strategies is to repeatedly ask the question "Why?" to look beyond the obvious. The question -

"Why?"

is typically asked 5 times to work down to the root of the problem

Root Cause Analysis : Example

Problem: A nurse administered the wrong dose of heparin to a patient. So we begin to ask why did this happen.



(1) Why? : The nurse worked a double shift because of short staffing and it was the end of her second shift. She was tired and chose the wrong vial from the medication drawer resulting in the patient getting a dose 10x higher than ordered. This could take two directions, one to explore the staffing issue and one to explore the pharmacy issue. Lets go down the pharmacy path...

(2) Why? : She was tired and did not see the subtle differences in the vials of heparin.

Root Cause Analysis : Example cont.

(3) **Why?** : Both vials have similar looking labels and where in side by side boxes in the medication drawer.

(4) **Why?** : All the heparin is ordered from the same company and placed in the floor stock medication drawers side by side for easier product count and control.

(5) **Why?** : The pharmacy has been mandated to adhere to strict budget guidelines



Root Cause Analysis : Example cont.

Multiple Step Conclusion:

- The pharmacy needs to negotiate with the drug supplier to change the heparin labeling to avoid a look-a-like drug situation.
- The pharmacy needs to place the different strength heparin vials in different drawers in the floor stock medication drawers to create a further differentiation of heparin strength.
- An educational initiative needs to occur to warn nurses of the potential for a medication error when administering heparin.
- Nurse staffing issues needs to be explored as an additional factor in prevention of medication errors.

More [Techniques of Root Cause Analysis](#) can be found here.

Root Cause Analysis directs Thinking

Root Cause Analysis techniques direct:

- Organizational change when errors occur
- Practice change to improve patient care
- Decision making by the RN for problem solving
 - Bedside Assessment – What is going on here?
 - Past Medical History Analysis – What has lead up to this patient's problem?
 - Conflict resolution with co-workers, patients & families

The Root Cause of Jake's Pain

Let's see how root cause analysis can work at the bedside:

You, "Something is not right with my patient, Jake!"

Ask yourself the 5 Why?:

- (1) Why? - The pain medication is no longer relieving Jake's pain.
- (2) Why? – The foot distal to his fractures is swollen.
- (3) Why? – The blood supply to the foot may be compromised; or could it be something else?
- (4) Why? – Jake is now running a fever and having a personality change.
- (5) Why? – Jake could possible have an infection at the fracture and fixation site. He needs immediate intervention to prevent further complications such as thrombosis and sepsis



Introduction of basic concepts for clinical problem solving in nursing: the nursing process

Module One: Lesson Three

Clinical Reasoning

- Critical thinking occurs in all aspects of our experience both professional and personal.
- Clinical reasoning is critical thinking applied in the patient care setting.
- Your text speaks to critical thinking but realize that the author is relating that to clinical application - clinical reasoning.

Critical Thinking - a Skill

- Critical thinking is not the mindless thinking that occurs when we perform routine tasks.
 - Things that don't take much thought, easy multitasking activities.
- *Critical thinking is deliberate, purposeful and informed.*
- Critical thinking is a skill that takes practice, re-evaluation and practice some more.

Critical Thinking - a Tool

Think about a carpenter and how he uses (and learns to use) his most valuable tool, his hammer.

It takes repeated practice, trial & error. In the beginning, he will miss this nail more frequently and need to swing his hammer more often. With practice and experience, he will be better at judging how to best use his hammer and become confident that he can *hit the nail on the head* with few misses.



This too will be you as you practice and evaluate your clinical reasoning.

Critical Thinking –Outcome Focused

- Guided by standards, policies and procedures, ethics codes
- Based on principles of nursing process & evidence based practice
- Carefully consideration of the key problem & the risks for harm
- Logical, intuitive and creative
- Patient, family and community driven
- Creates innovative strategies utilizing the human potential
- Constantly re-evaluating, self-correcting & striving to improve

I hear, I forget...I see, I remember... I do, I understand...

- Develop Critical Thinking Attitudes and behaviors
Review your Personal Critical Thinking Indicators from
How to Become a Critical Thinker
- Acquire intellectual and experiential knowledge –
All your experiences come together to create a patient “knowing”
- Gain interpersonal skills – (see table 1.3 in your text)
Problem solving is usually a group effort. If you can’t work well with
others you will be on your own
- Practice technical skills – practice, practice, practice until your technical
skills become second nature – increases your confidence and frees
your thinking for the really hard stuff

Thinking Critically about Patient Care

Apply the Nursing Process to your nursing practice and considerations for approaching NCLEX questions:

- Communicate effectively (listen, speak and write carefully)
- Guard patient privacy
- Collaborate with patients when setting outcomes
- Assess systematically – draw conclusions based on facts
- Address the patient's needs holistically
- Apply your knowledge and evidence based practice
- Follow policies and standards of practice
- Keep patients safe
- Assess, re-assess, revise, record
- Evaluate patient outcomes
- Think ahead, think in action and think back (reflect on your thinking)
- Be accountable and responsible for your nursing practice

Become a Critical Thinker



So stop now, turn to page 32 in your text

Take your time to work through the section :
How to Become a Critical Thinker

Read the instructions, they will guide you thru the exercise to determine some of your own strengths and weaknesses as a critical thinker.

Follow the instructions and complete only box 1.8 - Personal Critical Thinking Indicators (CTIs). Use results of this exercise to complete your reflective essay assignment.

I look forward to reading your insights and reflections. I will post feedback to your essays.