Course Outcome Guides

Course/Program Title: Nursing Care of Children  
Course/Program Team: Nur. 127: Fall 2019  Session A & B Combined  
Submitted by: Assistant Professor Teresa Weedon, R.N., MSN

STUDENT LEARNING COURSE OUTCOMES: (SLOA/ COGS with imbedded QSEN Competencies)

Upon completion of this course, the student will be able to:

1. Apply Erikson’s and Piaget’s Developmental Theory in conjunction with the nursing process to provide care to children and families in a variety of settings. (*1,3)

2. Demonstrate safe practice and correct application of acquired skills in the care of children of various ages. (*1,3,5)

3. Recognize the importance of collaboration and maintaining continuity of patient care. (*2)

4. Incorporate ethical, legal and professional standards when providing care to children and families. (*3,5)

5. Integrate knowledge of cultures, values, and belief systems when providing care to children and families. (*1, 2,3)

6. Implement therapeutic communication techniques with children. (*1, 5, 6)

7. Interact with the child, family, and members of the school/ healthcare team to ensure a comprehensive plan of care. (*1, 3)

8. Implement the use of physical and technological resources in a safe and proficient manner that enhances the care of children. (* 1,5)

QSEN Competencies

1. Patient Centered Care
2. Teamwork & Collaboration
3. Evidence-based Practice
4. Quality Improvements
5. Safety
6. Informatics

Assessment (How do or will students demonstrate achievement of each outcome?)

- Knowledge/ Learning Acquisition:
  - Course consists of four unit exams, ATI assessments, online quizzing, homework assignments, worksheets, simulation and case scenarios, clinical experiences, journaling and student initiated teaching projects. The ATI course competency exam provides a nationally normed knowledge assessment that provides the student and faculty with recommended remediation plan to enhance course focus.

- Application Analysis/ Evaluation:
Students perform a developmental assessment during the Head Start clinical rotation utilizing a modified Denver Developmental Screening tool. The student constructs a written analysis of the results along with recommendations to support the child’s developmental needs. Providing real-time application of learning regarding growth and development of children.

Practice interpreting lab reports, needs assessment and cultural awareness are provided during case analysis in simulation. Connections to life application in clinical situations are discussed during debriefing activities.

Incorporation of clinical exposure to children with cognitive and physical challenges enabled the student to become familiar and increased their comfort level in interacting with clients of various ages and developmental abilities. This evolving sense of comfort, personal growth and enhanced self-confidence in working with the disabled client is reflected in the positive comments made about the clinical opportunity in their journal notes and on the clinical evaluation comments.

Clinical activities incorporate prep cards, an evaluation tool and a writing component to help organize learning, thoughts and goals. A clinical assessment tool provides feedback by the clinical instructor on student performances. Students also evaluate their own clinical performance. Recommendations for future growth are noted by both instructor and student.

Application Nursing Process:

Incorporate the nursing process in creation and implementation of a child level health presentation and a parent/child health teaching for a procedure or medical condition. The goal is to enable students to become comfortable with the role of the nurse as client educator. The teaching activity requires research into current practice issues and is consistently rated by the students as beneficial and informative.

Case studies are utilized to apply nursing process and care planning/concept mapping. Focus on priority setting, lab reports and clinical judgment skills have been embellished to reflect the NCLEX exam test plan and increase student’s readiness for practice. The increased rigor has been reflected in a consistent high NCLEX pass rate by HCC students. HCC continues to be in the top three of first time NCLEX pass rate percentage among all Maryland schools of nursing.

Role Definition/Collaboration:

This is a community focused course with emphasis on the role of the nurse in preventive care which is consistent with current and emerging healthcare trends. The connections drawn between theory component and real life clinical application assist the student in elaborating on the emerging role of the nurse in health care and as part of the case management team.

Critical Thinking/Use of Technology:

Simulation labs and case studies activities provide the student the opportunity to apply classroom theory and practice critical thinking skills while providing nursing care for recreated, true to life pediatric cases. Two “think on your feet” simulation activities were added in order to enrich comprehension of difficult concepts (Respiratory distress and Sickle Cell Anemia client care).
o “Just in Time Clinical Simulation” experience address acute care of the hospitalized child. Recreating life like clinical scenarios that required assigned students to assume total care of their evolving client. Utilizing technology, computer resources, fabricated client charts, and created EMR to research diagnosis, nursing care, client education needs and to provide hands on care for their assigned case as new labs, vital signs or info come to light. During post conference session students provided peer to peer teaching about their client. Modeling a realistic inpatient clinical experience enables quality control over diagnosis and opportunity to discuss issues that may not have presented themselves during a live client clinical day.

- Informatics such as EMR, charts, medical and nursing orders regarding care of a simulated client enable the students to role model future job expectations and duties.

- Immersion simulations are having a positive impact on student’s knowledge, skills and attitude in assessing/delivering care to the pediatric client. Exam and ATI competency scores have been stable. Students rated the session positively, commenting it made them need to critical think and respond to the moment. Plans to enhance the experience with new scenarios, increasing acuity level of assessment and care and incorporating EMR once program is available in fall 2020.

- ATI Real Life Computer simulations (4) assist the students with developing critical thinking skills on common pediatric scenarios, the incorporation/practice with healthcare computer based technology (EHR) as well as exposure to concept of branching logic reflected in the NCLEX format.

- NIP-iT; (Nursing Initiative Promoting Immunization Training) a self-pace online tutorial regarding communicable diseases, vaccine administration, proper administration technique and nurse’s role in vaccine efficacy and education. The immunization needs of child is addressed in the Real Life Well Child Scenario. The ATI results demonstrate this continues to be an area of weakness for students in both the Nursing Care of Children ATI competency and the Comp Predictor taken by the senior class.

- The students continue to struggle with application of basic information regarding communicable disease and vaccines despite completion of the modules. It has been especially obvious in last two semesters. Majority are unable to recall info from the modules despite interactive application. I have discovered that students can bypass the information activities and go right to quiz for certificate. Previously this quiz required a score of 80% to pass, that requirement has been eliminated and now certificates of completion can be printed even with a zero correct score. Which leads me to believe many students are not using the tutorial as designed or planned. Therefore because I still believe in the value of the tutorial I will be implementing stricter criteria to achieve points and validate learning process.

- Several changes will be implemented including a graded quiz on topic, questions added to final exam, and a written requirement to assess vaccine status will be incorporated in simulations in spring semester.

- A student peer to peer presentation focused on communicable diseases will be added as a course requirement.
Reference to the more common and current trends communicable disease/ vaccines will continue to be incorporated in content lectures and lab scenarios when possible.

Assessment of impact / comprehension data collection will be obtained over the course of the coming year.

Case reports and video snippets with a series of questions is slated to be one of the methods utilized to assess clinical judgment in the upcoming 2023 NCLEX test plan. These formats are currently utilized in the Real Life Scenarios and Nip-iT. Providing student familiarity with this learning style is key. A couple of video vignettes with corresponding questions were introduced in to the theory component of class, students appear to enjoy and engage well with content. Will embed more into the class in order to bring “clinical into the classroom” as recommended by NCSBN.

Safe Practice & Standards:

- **Math/ Drug Calc. competency:** All students must pass a drug calculation quiz with a 90% or greater in each nursing course. They are given two opportunities to pass the quiz with remediation offered in between attempts. Calculation of dosage based on weight (mg/kg) calculation is introduced in this course and then carried forward in Maternal Child Health and Med- Surgical courses.
  - A targeted lecture regarding Introduction to Pediatric Drug Calculation and safe medication delivery is presented to enhance student comprehension and confidence in pediatric dose calculation.
  - During the didactic session students manipulate various size syringes to kinesthetically grasp the accuracy of volume that can be drawn and concerns with rounding causing calculation errors.
  - Practice performing drug calculations are provided in each simulation activity. Emphasis on detecting error of dose/ rate and proper administration is employed in simulation activities.
  - A new Pixis machine has been acquired for the lab. In fall 2020 a EMR system is expected to be rolled out to students which will allow communication with the Pixis system and provide realism in drug access and delivery. Meanwhile will incorporate increased opportunity to draw up designed medication versus just calculation.
  - Pharmacology review of drugs common for use in children is incorporated into system related disease/ dysfunction topics. This introduces concept to those students who will be taking pharm in the following semester and is provides a review for those who have completed the pharm course the summer before this course.

- **QSEN (Quality and Safety Education for Nurses) is the guiding framework for the nursing curriculum and an important part of our ongoing accreditation outcome measures thru ACEN,**
QSEN concepts of Patient-Centered Care, Teamwork & Collaboration, Evidence Based Practice, Quality Improvement, Safety, and Informatics have been incorporated thru all nursing courses and student learning outcomes (PSLO), providing consistency across the program. QSEN has been imbedded in this course theoretical, clinical and simulation activities. These concepts will continue to be used in clinical practice as a graduate nurse.

QSEN focus for the PSLO provide a formal way to measure/track results. QSEN data is addressed on the ATI competency exams providing an additional way to assess performance in a normed manner. In late spring/summer I plan to assess this data retrospectively in more detail. Using opportunity to apply continuous quality improvement to course.

**Validation** (What methods have you used or will you use to validate your assessment?)

- ATI testing along with QSEN data, Moodle and Real Life quiz results, math proficiency quizzes, exam average of 75% or greater, feedback from the senior semester Comp Predictor test and consistent high NCLEX pass rate. The student evaluation responses, Comp Predictor and NCLEX reports results are also scrutinized to determine areas needing refinement.

- Community recognition: The HCC program has been recognized by registerednursing.org, a national program established by nurses to support nursing education and development. HCC has been recognized for consistency in program success. This year HCC remains in the top 4 among ADN programs and higher than all BSN programs in the state Maryland for 2019 NCLEX success with a 97.67 % pass rate

- Professional organization recognition thru ACEN Re-Accreditation March 2018.

- School’s acceptance September 2019 to start a charter chapter of Alpha Delta Nu, honor society for ADN nursing schools. Recognizes quality and consistency of program achievement in promoting quality education and preparation for entry level nursing student.

**Results** (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

Total of 42 students enrolled in the course, which 38 successfully passed the course. (90.47 %.)

Comparison: Spring semester 47 students enrolled in the course, 1 withdraw, 34 successfully passed the course. (73.91%)

**Grade distribution:** A’s: 14.28 %  B’s: 69.04 %  C’s: 7.1 %  D: 7.14 %  F: 2.3 %

Prior semester:  A’s: 15.21 %,  B: 56.52 %,  C: 17.39 %,  D: 10.86 %,  F: 0 %

ATI proficiency: Breakdown is as follows:

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<th>2019 Spring**</th>
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* Spring 2018 had higher than average number of LPN’s in class, reflecting prior experience.
** Spring 2019 LPN’s moved to new bridge course, none enrolled in NUR 127 from this date forward.

ATI Non-proctored Practice Tests Results:
Fall 2019 Scores Initial 53.6 %, End of course results 70.7 %.
Spring 2019 Scores Initial 58.1%, End of course results 71.7%.

Analysis: Composition of the course enrollees has change over past two years making a direct comparison a little tricky without taking into account variability in prior pediatric learning/ work experiences of the LPN student. In addition, the fall cohort tends to perform at lower grade and ATI scores due to weaker students having to retake pharm in fall session, causing competition for study. That being said the ATI competency scores have been relatively stable, with more generic students achieving level 3 on ATI then in previous semesters. Slight decline in below level 1, which is also a nice trend. Will monitor the level 1 and 2 for trends in a positive direction hopeful, expected in coming year as interventions roll out.

Math Comp: 95.23 % passed on first attempt, 100% of those were successful on second attempt. All students have demonstrated successful drug calculations on unit tests. This success rate has been consistent over last three semesters.

Follow-up (How have you used or how will you use the data to improve student learning?)

1. **Math/ Drug Calculation competency.** A calculation policy is used consistently in all nursing courses. The students are provided a written copy of the policy in their Nursing Student Handbook. The policy is printed on the math competency quiz and on first unit exam.

Worksheets, online tutorials, imbedded simulation and lecture calculations have been incorporated for practice. Remediation with instructor is strongly encouraged and referral to LRC tutors have been provided for students who have had difficulty with drug calculations.

Medications, calculations and delivery systems have been embedded in simulation to provide opportunity for tactile manipulation and repetition of skill. This realism brought to medication calculation and delivery practice was reported by students to be helpful. Going full circle with...
med calculation to draw up, documentation and delivery will be implemented in Fall 2020 as Pixis and EMR tools become available to students.

2. **Trends: ATI scores / ranking.**

ATI practice tests during first week and at end of course demonstrated a 17.1% increase and helped to highlight common areas of weakness. While the overall ATI competency results had little change in scores (stable) I believe this will improve over the coming semesters as students become comfortable with format of test questions. This will also help to prepare for Senior Comp Predictor and NCLEX computerized testing. The summary of practice test will be assessed in more detail during the summer break.

The grade point value for the ATI comp was increased to 3% this semester to encourage students to take test more seriously. Will await to collaborate the Spring 2020 results to assess impact of risk investment to student motivation. Many nursing schools use ATI results as necessary for progression (we elected not) however concern for lack of serious engagement by our students with the assessment can have repercussions in test percentages and value to those programs. Goal is to be community stewards in supporting validity of this normed assessment.

3. **Student preparedness and initiative for learning: Imbalance work – life balance.**

Students were noted to participate in class discussions and activities, had improved sim lab engagement, less variability in exam grades and notable decrease in use of texting during class. Increase number of students took advantage of using offered resources (instructor, tutor, LSC) to assist with study skills and test taking strategies. Approximately 75% took advantage of post exam review opportunities and receptive to test taking strategy discussions.

Condensing due dates on quizzes/activities definitely had an impact on motivating students not to procrastinate. Encouraged increase preparation and connection to learning activity versus just a project to get thru. Also eliminated the last minute rush to catch up and thus overwhelm the students who had fallen behind. Three students had a negative grade impact and verbalized “lesson learned” in missing deadline. This should enhance role responsibility as they move forward into more strenuous nursing course activities.

Students with lower exam / ATI / course scores acknowledge work hours have impacted preparation for class/ lab activities. The lower performing students were less likely to use tutoring services, peer study groups participate in post exam review sessions and offers to work on study and test taking strategies by remediation specialist or course professor. Continue to advise and encourage students to take initiative in re-evaluating work / course work balance (short term vs long term planning/ goal achievement). Apprise students of alternative scholarship/ grant opportunities as they arise. Discuss learning priorities and assistance available during general class meeting and continue to demonstrate/ model various study strategies.

The initiation of a mandatory pre- nursing presentation on course rigor / time commitment has been required this year as condition of application to the nursing/ health science programs. This collaborative activity between student advisement, nursing and science division is geared to help students anticipate, plan for reality of work/ study balance prior to enrollment. This is anticipated to help decrease withdraws, decrease course attrition, and encourage a better prepared student to successfully handle rigor of program. The first cohort entered the program this fall so it will be
interesting to assess data on their progression. It appears it may be trending in a positive direction.

4. **Alternative Learning, Incorporation of flipped activities.**

A classroom resource manual with case studies, game challenges and quick activities plans has been introduced this semester. The goal for the resource book is to enable connection of the classroom to clinical application per recommendation of NCSBN research, to help clarify concepts or re-energize students during lecture. The goal is to better bridge the gap between didactic and applied learning with a class that is prepared to participate. While this is the goal of active learning, the reality is students have not risen to level of preparation and have a great dependence on didactic during this first year of nursing immersion, they dawdle or get off task very easy. This is a project under continuing development and will be expanded during current year.

Student enrichment audio- visual resources to enhance lecture were posted. Biology course modification from a cellular level to health care application focus for healthcare majors was implemented in fall 2017. It is anticipated that A&P connections will increase in recall and assimilation starting this semester. Subjectively there appeared to be better recall of A & P by some students, will continue to encourage and monitor comprehension and assimilation.. Several students have sent written comments stating how they felt connecting A & P to system dysfunction was very useful in helping them see the bigger picture and extrapolate to client needs. Drawing connection to prior learning is important.

5. **Incorporate enhanced study skills strategies:**

Strategies to enhance and encourage reading comprehension / study techniques continue to be merged into class lecture activities. Continue some flipped classroom strategies to encourage students to pre-read the material and prepare for greater discussion of information in class and lab setting. Incorporate homework worksheets in the class activities to encourage greater preparation ahead of class. Some progress noted but still needs work to have all students prepared ahead of time for class discussions. The higher achieving students came to class with worksheets completed, asked for validation of answers and verbalized more in class discussions. Weaker performing students frequently were witnessed to be frantically writing answers in worksheet as questions reviewed. Preparation clearly reflected in grade performance on exams and several students acknowledged personal need to “read before class” so to keep up with topics discussed.

Directed note taking skills, chapter reading skills, chunking learning, use of mnemonics and good study strategies as well as peer teaching activities have been added into the course in attempt to make learning more manageable and enjoyable. Continue emphasis on NCLEX practice, lab interpretation skills, case studies and priority setting practice in the class and lab setting. These activities appear to be having an impact as the graduating seniors score higher on Comp Predictor with less requiring remedial ATI course work and exam retake. The spring 2019 graduation class all scored above the set score for predicted NCLEX success, no one required remediation on ATI. Hopefully this will be a continued trend going forward.

An in-depth review of content mastery for this course is consistent with content expectation in other Pediatric Nursing Courses and coincides with detail analysis of ATI Nursing Care of

IS3 at VSADMIN\VLADMIN\SLOA\Templates
Children Comprehension Exam. The material covered is appropriate, the emphasis will continue to be on alteration in delivery. Several topics were re-arranged in the schedule to provide better grouping of material by difficulty level and lab availability. This appears to have had a positive impact on improved course flow and student feelings of being overwhelmed with content. Will continue to work on this process.

6. **Interference of electronic devices in class/ lab setting:**

Inappropriate texting during class/ lab was observed but less than previous semesters. Some students were able to properly utilize devices to add knowledge to discussions, or obtain lab resources others clearly interfere with learning as noted by exam scores and ability to discuss issues in class/ lab setting. Continue to advise and role model proper work etiquette and expectations. Enhance reminder connection between Student Nurse Handbook Policies and class expectations. Statement of college policy regarding cell phone use in class was added to the syllabus for emphasis.

**Budget Justification**
(What resources are necessary to improve student learning?)

The layout of the classroom, maxed out seating with cumbersome heavy plastic chairs creates difficulty to wander easily around room and engage students on a personal level. There remains a safety hazard in regards to tripping over backpacks / purse straps and other personal items. Tight space, hard to move chairs hindered student’s ability to get out of seat or mix up groupings for activities. Many flipped activities had to be significantly decreased in activity due to space/ safety constraints. Students complain about seat comfort especially with longer lecture hour courses in nursing program. We are hoping to **obtain update in class room furniture to mobile (rolling) more ergo- dynamic chairs.**

There is a trend for increase in the number of students requiring testing accommodations which has put strain on test center resources and faculty. Having student self- reserve testing center resources to meet accommodation over past two semesters has helped, but fierce competition for peak time remains an issue. Occasional fall back of student testing in nursing office suite has still been required. The testing center is trying to expand special needs access. I look forward to their findings and suggestions in the future.