

## Course Outcome Guides

**Course/Program Title: Nursing Care of Children**

**Course/Program Team: Nur. 127: Fall 2018: Session A & B Combined**

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### **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, comprehensive ATI assessment, 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:
  - Utilizing a modified Denver Developmental Screening tool students perform a developmental assessment on a child during the Head Start clinical rotation. The student construct 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 at interpreting lab reports, needs assessment and cultural awareness are provided during case analysis in simulation. Connections to real life clinical situations become apparent to the students during debriefing discussions.
- Incorporation of clinical exposure to children with cognitive and physical challenges has 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, a self - evaluation tool and a journal writing component to help organize thoughts and goals. A clinical assessment tool for feedback by the clinical instructor on student performances is utilized. Students also evaluate and comment on their own assessment of 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. In addition an increase focus on priority setting and laboratory results has been initiated to reflect the NCLEX exam test plan. The increased rigor has been reflected in a steadily consistent NCLEX pass rate by HCC students. We continue to be in the top tier among Maryland schools of nursing in percentage of first time NCLEX pass rate.
- 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 immersion activities provide the student the opportunity to apply class room theory and practice critical thinking skills in 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). The addition of real time simulations and the simulated immersion on the care of the hospitalized child appears to be 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 improved. Students have demonstrated improvement in their

willingness and ability to discuss how the theory portion of the course is reflected in the clinical and lab situations.

- The simulation experience to address the opportunity for acute care of the hospitalized child titled “Just in Time” recreates life like clinical scenarios that required assigned students to assume total care of their evolving client. Utilizing technology, computer resources, fabricated client charts, and recreated 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 enable quality control over diagnosis and opportunity to discuss issues that may not have presented themselves during a live client clinical day.
  - Students rated the session positively, commenting how true to life it made them feel in their need to critical think and respond to the moment. Practice utilizing informatics such as EMR, charts, medical and nursing orders to attend to the care of a simulated client enable the students to role model future job expectations and duties.
  - The Student’s verbalize that the scenarios challenge them to think and rationalize care choices. Progress is under way to create two additional scenarios (Reye syndrome and pyloric stenosis) this year to compensate for larger group sizes and more diversity in topics based on student prior level of experience ( ie: LPN transition versus generic fundamental student).
- The ATI Real Life Computer simulations (4) assist the students with developing critical thinking skills on common pediatric scenarios and the incorporation/ practice with healthcare computer based technology (EHR).
- NIP-iT; (Nursing Initiative Promoting Immunization Training) an online self- tutorial regarding communicable diseases and vaccine administration was expanded for this semester to include four modules. The recognition of immunizations 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.

There is concern that the students are rushing thru or circumventing the video portion to get to the validation quiz in the modules in order to simply complete the assignment. Therefore a plan to incorporate increase awareness of infectious communicable disease and application of CDC recommended schedule vaccines in the class and simulation scenarios as well as creation of an online class quiz will be implemented in Spring 2019. Assessment of impact will be obtained over the course of the year.
- Video snippet with a series of questions that follows is slated to be one of the methods utilized to assess clinical judgment in the 2021 NCLEX test plan update. These formats are currently utilized by the Real Life Scenarios and Nip-it. Providing student familiarity with this learning style is key. The addition of short in class video vignettes with corresponding questions will be added to the theory component of class (lecture) with monitoring of effectiveness over the next semester.

- 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.
  - Introduction to Pediatric Drug Calculation and medication delivery has been used to enhance student comprehension and confidence in pediatric dose calculation using mg / kg. During the didactic session students are given various size syringes to manipulate and kinesthetically grasp the accuracy of volume that can be drawn and concerns with rounding causing calculation errors.
  - 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 enhanced as review for those who have completed pharm course the summer before this course.
  - QSEN (Quality and Safety Education for Nurses) concepts incorporating themes of Patient-Centered Care, Teamwork & Collaboration, Evidence Based Practice, Quality Improvement, Safety, and Informatics have been imbedded in class, clinical and simulation activities. These are concepts that will continue to be used in their clinical practice as a graduate nurse. Fall 2018 the QSEN concepts have been incorporated into all nursing course program student learning outcomes (PSLO) and will provide consistency across the program as well as a more formal way to measure/ track results. QSEN application data is also addressed on the ATI competency exams, thus providing an additional way to assess performance in a normed manner.

**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 [registerdnursing.org](http://registerdnursing.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 is second among ADN programs and fourth overall among combined BSN and ADN registered nurse programs in the state Maryland for 2018 NCLEX success pass rate.
- Professional organization recognition thru ACEN Re-Accreditation March 2018.

**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 46 students enrolled in the course of which 6 elected to drop early, 40 completed of which 34 successfully passed the course.

Grade distribution; A's: 10 %, B: 75 %, C: 0 %, D: 12.5 %, F 2.5%

ATI proficiency: Breakdown is as follows:

	2018 Fall	2018 Spring	2017 Fall	2017 Spring	2016 Fall	2016 Spring	2015 Fall
Group Mean National	63.1%	62.4 %	62.4%	62.4 %	62.4%	62.4 %	62.5%
Group Mean Program	62.4%	61.9 %	61.9 %	61.9 %	61.9%	61.9 %	61.9 %
Adjusted Group score	61.3%	65.8 %	59.0 %	58.9 %	58.6%	63.8 %	62.0%
National Ranking	37 %	68 %	30 %	29 %	28%	57 %	47 %
Program Ranking	41 %	71%					
Level goal > 2							
Level 3	2.6 % (1)	12.2 % (6)	0 %	2.7 % (1)	3.7% (1)	8.3% (3)	0.0% (0)
Level 2	43.6% (17)	51% (25)	39.5 % (15)	29.7 % (11)	29.6% (8)	41.7% ( 15)	53.5% ( 23)
Level 1	33.3% (13)	34.7% (17)	36.8 % (14)	43.2 % (16)	37% (10)	41.7 % ( 15)	37.2% ( 16)
Below level 1	20.5% (8)	2 % (1)	23.7 % (9)	24.3 % (9)	29.6% (8)	8.3 % (3)	9.3 % ( 4)

**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.

Simulated 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.

**Results Math Comp Quiz:** 82.5 % passed on first attempt, 100% of those were successful on second attempt. All students have demonstrated successful drug calculations on unit tests.

2. **Trends: decline in ATI scores / ranking after prior improvement.** Improved ATI scores had been achieved during past year but a significant dip noted in scores for session B this session resulting in lowered adjusted group score and program ranking average. All below level 1 scores were in the B session. This is significant in that this section had overall higher exam score averages and demonstrated advanced ability to connect theory to the clinical application and use of clinical judgment. Concern with holiday “itis” versus true reflection of ability (incongruent with other measured variables). Therefore starting spring 2019 two nonproctored practice ATI competencies will be required. One at start of course where it is anticipated a lower score will be obtained. Then near the end of course exam as a practice/ familiarity preparation for the proctored ATI competency exam. Scores will be assessed for trending. A decision not to raise point value for ATI score at this time so as not to negatively impact student overall course grade.

However the decision will be reassessed after completion of semester if concern for lack of serious engagement with the assessment is found to be factor.

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

Students with lower exam / ATI / course scores acknowledge work hours have significantly impacted preparation for class/ lab activities. The lower performing students were less likely to take advantage of tutoring services, peer study groups or participate in post exam review sessions. Declined offer of outreach to work on study and test taking strategies offered 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. Continue to discuss learning priorities and assistance available during general class meeting. Continue to demonstrate/ model various study strategies during lecture.

Tightening the date completion for online quizzes appears to have helped students be more engaged in topics during class/ lab discussions. Case study analysis and group work activities were moved earlier versus end of lecture to enhance group dynamics and peer responsibility for engagement.

4. **Alternative Learning, Incorporation of flipped activities** in the class. A class resource manual with imbedded case studies, game challenges and quick activities plans to be launched in Spring 2019 semester. Previous launch goal of fall semester was pushed back due to course/ professor time conflicts. This resource book will enable improved ability to bring clinical activities to the classroom.

Six student enrichment audio- visual resources to enhance lecture were posted, increased from three last session. The modification for biology course 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 in the coming semester. Faculty anticipate data on the impact this change has on future classes will be available with fall 2018 cohort. Subjectively there appeared to be better recall of A & P by some students, will continue to encourage and monitor connections.

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 directly in 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 verbalized 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 tended to score higher on Comp Predictor with less requiring remedial ATI course work and exam retake.

2. An indepth 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 Children Comprehension Exam. The material covered is appropriate, the emphasis will 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.
3. **Interference of electronic devices in class/ lab setting:** Inappropriate texting during class/ lab was observed in both 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?)

Higher enrollment numbers during the spring and fall cohort demonstrated a clear strain on environmental resources for many nursing classes. The classroom had maxed out seating with resulting difficulty to wander around room and engage students on a personal level. There was a safety hazard in regards to tripping over backpacks / purse straps and other personal items. Tight space also hindered student's ability to get out of seat or mix up groupings for activities. Many flipped activities had to be discarded or significantly decreased in activity due to space/ safety constraints.

In the lab the number of students per session also compromised space and resources. The overflow of students demonstrates why class cap size is so important. If increase number of students is desired then the course will need to be further sub divided to offer more class/ lab sessions rather than over ride "caps". There is also an increase in the number of students requiring testing accommodations which has put strain on test center resources. A committee has been formed to look into test center resources and needs. Look forward to their findings and suggestions in the future.