

## Course Outcome Guides

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

**Course/Program Team: Nur. 127: Spring 2019: 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, 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 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 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 class room 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).
  - "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 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. The Student's verbalize that the scenarios challenge them to think and rationalize/prioritize care choices. 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. Plans are in place to enhance the experience this coming year with new scenarios and increasing acuity level of assessment and care.
- 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 and vaccine administration has been expanded to require four modules which now include proper administration technique and nurse's role in vaccine efficacy. The issues regarding 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 has been inclusion of some of the more common and current trends communicable disease/ vaccines incorporated in specific content lectures and one lab scenario. The initial plan to improve awareness of infectious communicable diseases and the CDC vaccine schedule in class discussions, more simulation scenarios and thru an online class quiz to validate comprehension was planned for this semester however due to a variety of challenges implementation has been moved to Fall 2019. Assessment of impact / comprehension data collection will be obtained over the course of the coming year.
- 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 look at embedding several more into the Fall class.
- 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.
- 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) 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 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 third 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 47 students enrolled in the course, 1 withdraw, 46 completed of which 41 successfully passed the course. (87.23 % progression)

Comparison: Fall semester 46 students enrolled in the course, 6 withdraw, 40 completed of which 34 successfully passed the course. (73.91% progression)

Grade distribution: A's: 15.21 %, B: 56.52 %, C: 17.39 %, D: 10.86 %, F: 0 %  
 Prior semester: A's: 10 %, B: 75 %, C: 0 %, D: 12.5 %, F: 2.5%

ATI proficiency: Breakdown is as follows:

	2019 Spring	2018 Fall	2018 Spring	2017 Fall	2017 Spring	2016 Fall	2016 Spring
Group Mean National	63.1 %	63.1%	62.4 %	62.4%	62.4 %	62.4%	62.4 %
Group Mean Program	62.4 %	62.4%	61.9 %	61.9 %	61.9 %	61.9%	61.9 %
Adjusted Group score	60.6 %	61.3%	65.8 %	59.0 %	58.9 %	58.6%	63.8 %
National Ranking	34	37	68	30	29	28	57
Program Ranking	37	41	71				
Level goal > 2							
Level 3	2.3 % (1)	2.6 % (1)	12.2 % (6) *	0 %	2.7 % (1)	3.7% (1)	8.3% (3)
Level 2	44.2 % (19)	43.6% (17)	51% (25)	39.5 % (15)	29.7 % (11)	29.6% (8)	41.7% ( 15)
Level 1	34.9 % (15)	33.3% (13)	34.7% (17)	36.8 % (14)	43.2 % (16)	37% (10)	41.7 % ( 15)
Below level 1	18.6 % (8)	20.5% (8)	2 % (1)	23.7 % (9)	24.3 % (9)	29.6% (8)	8.3 % (3)

\* Spring 2018 had higher than average number of LPN's in class, reflecting prior experience.

ATI Non-proctored Practice Tests Results: Scores Initial 58.1%, End of course results 71.7%.

Math Comp: 82.60 % 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.

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.

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

The addition of two ATI practice tests during first week and at end of course demonstrated a 13.6 % increase in comprehension and helped to highlight some 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.

ATI Course Competency Proctored Exam. Some higher academic performers test results did not correlate as well as expected (incongruent with other measured variables) which I believe was due to time crunch of completing competency and end of course work simultaneously. Several failing students had significantly very low scores which may be more related to giving up versus true ability. My goal is to data mine the pre/ posttest and course competency for more info as well as move the ATI comp further away from the final exam so as not to compete for energy and time resources.

The grade point value for the ATI comp will remain the same at this time so as not to negatively impact student course grade and to control for number of variances that may impact results. However this decision will be reassessed after looking at trends in the coming year if they indicate incongruence in anticipated versus actual scores. 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 performed better academically this semester and it was reflected in the student's being prepared for class discussions and greater sense of class / lab engagement as a whole. Increase number of students also took advantage of using offered resources (instructor, tutor, LSC) to assist with study skills and test taking strategies. Partaking of offered resources was notably greater in the B session group where the higher grades were also noted.

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. Will reassess / modify timing of due dates in coming session to achieve best alignment.

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 use tutoring services, peer study groups participate in post exam review sessions and offers of outreach 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 of this cohort will be entering the program this fall so it will be interesting to assess data on their progression.

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

A classroom resource manual with imbedded case studies, game challenges and quick activities plans was introduced during this semester. This resource book will enable ability to bring clinical focus activities into the classroom in an more expedient manner, on demand 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 majority have a great dependence on didactic during this first year of nursing immersion. When presented alternative learning activities they dawdle or get off task very easy. They are overwhelmed with volume of learning and often caught off guard for the need to read, process information and how to tackle it themselves. There is no time to get off topic in the abbreviated 7 ½ week session that they are first presented with in this course. This is a project under continuing development and will be expanded during current year.

Several student enrichment audio- visual resources to enhance lecture were posted. 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.

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 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 in both semesters but less than previous semester. 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.***

The number of students per session having to be placed in the lab also compromised space and resources. There is also a continued trend for increase in the number of students requiring testing accommodations which has put strain on test center resources and faculty. An attempt at having student self- reserve testing center resources to meet accommodation over past two semesters has helped somewhat but on three separate occasions faculty had to arrange for out of test center space due to late and inconvenient of open time slot ( after 7 pm) when student not at peak performance. The testing center is trying to expand special needs access. I look forward to their findings and suggestions in the future.