Course Outcome Guides

Course/Program Title: Nursing Care of Children
Course/Program Team: Nur. 127: Spring 2018: Session A & B Combined
Submitted by: Assistant Professor Teresa Weedon, R.N., MSN

Expected Learning Outcomes: Upon completion of this course, the student will be able to:
1. Apply Erikson’s and Piaget’s Developmental Theories in conjunction with the nursing process to implement care for children and families in a variety of settings.
2. Demonstrate safe practice and correct application of acquired skills in providing care to children of various ages.
3. Recognize the importance of collaboration and maintaining continuity of patient care.
4. Incorporate ethical, legal and professional standards when providing care to children and families.
5. Integrate knowledge of cultures, values, and belief systems when providing care to children and families.
6. Implement therapeutic communication techniques with children.
7. Interact with the child, family, and members of the school/ healthcare team to ensure a comprehensive plan of care.
8. Implement the use of physical and technological resources in a safe and proficient manner that enhances the care of children.
9. Recognize the role of the nurse and utilize the nursing process in anticipating / evaluating community disaster readiness.
10. Participate in the Red Cross Student Nurse Disaster Preparation and Sheltering training program.
11. Assess opportunities for professional growth that promote lifelong learning.
12. Demonstrates accountability and responsibility for own actions.

Assessment (How do or will students demonstrate achievement of each outcome?)
  o Knowledge/ Learning Acquisition:
    o Course consists of five 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.

  o Application Analysis/ Evaluation:
    o 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.

    o Practice at interpreting lab reports, needs assessment and cultural awareness are provided during case analysis in simulation.
o Incorporation of clinical exposure to children with cognitive and physical challenges has enabled the student to become familiar and increased comfort level in interacting with clients of various ages and developmental abilities.

o Clinical activities incorporate anticipatory 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 own assessment of their clinical performance. Recommendations for future growth are noted.

o 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 a focus on priority setting has been initiated to reflect increased emphasis on the NCLEX exam. The increased rigor on priority setting has been reflected in a steady consistent NCLEX pass rate.

o 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 connection between theory component and clinical assist in elaborating on the emerging role of the nurse in health care, case management and community disaster readiness.

o Critical Thinking/ Use of Technology:
  - Simulation labs and case studies activities enable the student to apply class room theory and critical thinking skills to nursing care of true to life pediatric cases. Two smaller group real time simulation activities were added to the general lab simulation time to enrich comprehension of difficult concepts (Respiratory distress and Sickle Cell Anemia client care). The addition of this “think on your feet” simulations and the restructure of the sim hours to include six hour alternative clinical assignment by group versus independent activity ( described below) 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 over past two semesters. Will continue to monitor for trending in the coming year.

  - A newly created day long simulation immersion experience to address acute care of the ill child was also incorporated into the clinical application for the course. Titled “Just in Time” the simulation 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. Plans are to create two additional scenarios this year to compensate for larger group size 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).

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 designated lecture on 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 nurse.

- Starting in fall 2018 the QSEN concepts will be incorporated into the nursing program student learning outcomes (PSLO) and will provide consistency across the program and a more formal way to measure/track results.

Validation (What methods have you used or will you use to validate your assessment?)
- ATI testing, 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 enhancement.

- Community recognition: The HCC program has been recognized by registernursing.org, a national program established by nurses to support nursing education and development. HCC has
been recognized for consistency in program success, and rated second overall among all BSN and ADN registered nurse programs in the state Maryland for 2017 NCLEX success.


**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 51 students enrolled in the course of which 46 successfully completed the course.

Grade distribution:  A’s: 9.8 %,  B: 72.5 %,  C: 7.8%,  D: 9.8 %,

ATI proficiency: Breakdown is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2018 Spring</th>
<th>2017 Fall</th>
<th>2017 Spring</th>
<th>2016 Fall</th>
<th>2016 Spring</th>
<th>2015 Fall</th>
<th>2015 Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Mean National</td>
<td>62.4 %</td>
<td>62.4 %</td>
<td>62.4 %</td>
<td>62.4 %</td>
<td>62.4 %</td>
<td>62.5 %</td>
<td>62.4 %</td>
</tr>
<tr>
<td>Group Mean program</td>
<td>61.9 %</td>
<td>61.9 %</td>
<td>61.9 %</td>
<td>61.9 %</td>
<td>61.9 %</td>
<td>61.9 %</td>
<td>61.9 %</td>
</tr>
<tr>
<td>Adjusted Group score</td>
<td>65.8 %</td>
<td>59.0 %</td>
<td>58.9 %</td>
<td>58.6 %</td>
<td>63.8 %</td>
<td>62.0 %</td>
<td>64.1 %</td>
</tr>
<tr>
<td>National Ranking</td>
<td>68 %</td>
<td>30 %</td>
<td>29 %</td>
<td>28 %</td>
<td>57 %</td>
<td>47 %</td>
<td>58 %</td>
</tr>
<tr>
<td>Program Ranking</td>
<td>71%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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: 90.2 % passed on first attempt, 100% of those were successful on second attempt. All students have demonstrated successful drug calculations on unit tests.
2. Trend: reversal decline in overall ATI group score and ranking over pass couple of years. Improved progress and ATI scores noted this semester. Attributed to increase lab simulation, increase use of ATI as practice resource, student personal motivation and tightening of deadlines for quizzes to ensure application taking place in close proximity to material presentation.

3. Student preparedness and taking 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. Many are working night shifts and verbalized disturbed sleep - wake cycles. The lower performing students did not take advantage of tutoring services, peer study groups nor participate in post exam review sessions. Most did not take offer of outreach to work on study and test taking strategies or sought help the last week of class.

To address these issues plans include to 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 (where often run out of time) to enhance group dynamics and peer responsibility for engagement.

4. Incorporation of flipped activities in the class. A class resource manual with imbedded case studies, board game challenges and quick activities will be launched in fall 2018 semester. Previous launch goal of this semester was delayed due to preparation for ACEN visit in Oct 2017. This resource book will enable greater application of bringing clinical activities to the classroom at a moment’s notice.

Six student enrichment audio- visual resources to enhance lecture were posted, increased from three last session. Incorporate Soft Chalk learning enhancement activities for Fall 2018. 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.

2. 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.

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 being have an impact as the graduating seniors tended to score higher on Comp Predictor with less requiring remedial ATI course work and exam retake.
3. An indepth review of content mastery for this course is consistent with content expectation in other colleges Pediatric Nursing Course 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. Continue to work on this process.

4. **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.

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

Over enrollment during the spring class demonstrated a clear strain on environmental resources. 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 up out of seat for activities or to 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. Fortunately the community clinical partners allowed us to exceed normal group size but this often meant doubling student’s up in assigned placement and not having the flexibility to provide alternative experiences. Clinical conferences had to be moved to the open access media center where FERPA issues of confidentiality were more difficult to safe guard and thus stifled some conversations. 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”.