Course Outcome Guides

Directions: Please complete this form to document your progress toward improving student learning. For each item, indicate your progress and your anticipated next steps. Thank you!

Course/Program Title: Nursing Care of Children
Course/Program Team: Nur. 127: Fall 2017: 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?)

- **Knowledge/ Learning Acquisition:**
  - 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.

- **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.

- 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.

- 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.

- 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.

- 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.

- Critical Thinking/ Use of Technology:

  - Simulation and case studies activities enable the student to apply class room theory and critical thinking skills to attend to nursing care of true to life cases. This semester two additional small group simulation activities were added to enrich comprehension of difficult concepts.

  - 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 came 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 and commented 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.

- 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.

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 registerd nursing.org, a national program established by nurses to support nursing education and development. HCC has been recognized for consistency in program success, and rated third overall among all BSN and ADN registered nurse programs in the state Maryland.
Professional organization recognition thru ACEN Accreditation.

**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 36 successfully completed the course. Five students withdrew from course.

Grade distribution: A’s: 16.6 %, B: 63.8 %, C: 16.6 %, D: 11.1 %, F: 2.7 %

ATI proficiency: Breakdown is as follows:

<table>
<thead>
<tr>
<th></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>
<th>2014 Fall</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>62.5 %</td>
<td>62.4 %</td>
<td>61.2 %</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>61.6 %</td>
</tr>
<tr>
<td>Adjusted Group score</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>
<td>61 %</td>
</tr>
<tr>
<td>National Ranking</td>
<td>30 %</td>
<td>29 %</td>
<td>28%</td>
<td>57 %</td>
<td>47 %</td>
<td>58 %</td>
<td>51.3 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</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>
<th>2014 Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3</td>
<td>0 %</td>
<td>2.7%</td>
<td>3.7%</td>
<td>8.3%</td>
<td>0.0%</td>
<td>4.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Level 2</td>
<td>39.5%</td>
<td>29.7%</td>
<td>29.6%</td>
<td>41.7%</td>
<td>53.5%</td>
<td>63.8%</td>
<td>43.6%</td>
</tr>
<tr>
<td>Level 1</td>
<td>36.8%</td>
<td>43.2%</td>
<td>37%</td>
<td>41.7%</td>
<td>37.2%</td>
<td>29.8%</td>
<td>41 %</td>
</tr>
<tr>
<td>Below 1</td>
<td>23.7%</td>
<td>24.3%</td>
<td>29.6%</td>
<td>8.3%</td>
<td>9.3%</td>
<td>2.1%</td>
<td>15.4%</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 drug 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.

   Hands on manipulation of simulated medications and delivery systems have been embedded in simulation and case scenarios 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.

   Math Quiz: 88.8 % passed on first attempt, 100% successful on second attempt. The required completion date has been moved forward to encourage students to prepare and utilize tutoring resources for success and to lessen procrastination. All students have demonstrated successful drug calculations on unit tests.
2. **Decline in overall ATI group score and ranking for course over pass couple of years.**
   
   Student preparedness and taking initiative for learning: Imbalance work – life balance.

   Modest progress noted. Slight increase in level 2 achievement. Need to continue effort to raise those students scoring below level one. The ATI achievement is significantly correlated with student grades on exams and clinical aptitude.

   Many students (especially weaker grade wise) verbalized preferring to hear lecture as opposed to reading text. Many verbalize not being strong readers from grade school or reading without comprehension. Not being prepared for class has resulted in taking longer to complete material, topics not being covered due to time constraints, less in class interaction and poorer outcomes on exam grades and a decrease in ATI scores. A majority of student’s with lower exam / course averages and ATI scores, acknowledge work hours has significantly impacted preparation. Many are working night shifts and verbalized disturbed sleep -wake cycles, yet were not receptive to discussion of adjusted work schedules/ hours and study time. The lower performing students did not take advantage of tutoring services or peer study groups. Several did not participate in opportunities for post exam review nor offer of outreach by instructor or nursing counselors to work on study and test taking strategies. Listening to lecture without pre or post reading review has not had the impact on learning comprehension that students anticipated it would.

   To help 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.

   To encourage increase pre-class preparedness pop quizzes were administered this past semester. An increase effort in coming prepared to class was perceived after quizzes as many were concerned that future quiz would be administered. Tightening the date specific completion for online quizzes also appears to have helped students be more engaged in topics during class/ lab discussions. Case study analysis and group work activities were moved to the start or middle versus end of lecture (where often run out of time) to enhance group dynamics and peer responsibility for engagement.

3. **Incorporation of flipped activities in the class.** A class resource manual with imbedded case studies, board game challenges and quick snippet activities will be launched in spring 2018 semester, thus having ready immediate access to incorporate more application activities at a moment’s notice. Three audio- visual resources to enhance lecture were posted to moodle site for student enrichment. Feedback mixed. Plan to work on Camtasia for A & P and general concepts review to enhance class time will be focus for Fall 2018 rollout.

   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 have increased 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.

4. **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 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.

5. **Embedded librarian.** Idea was tabled for this year due to roll out of two other new simulation initiative. Idea will be revisited in fall 2018.

6. 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.

7. **Interference of electronic devices in class/lab setting:** Inappropriate texting during class/lab was observed in fall semester but much less of an issue this semester. Some students were able to properly utilize devices to add knowledge to discussions, or obtain lab resources. Continue to advise and role model proper work etiquette and expectations.

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

HCC’s nursing reputation and success rate on NCLEX has attracted an increase enrollment of students including many ESOL students this semester. Most have transferred to HCC from other colleges and struggle to get acclimated to HCC policies, clinical partners required competencies and other proficiencies in the 7 1/2 week format. Without the benefit of exposure and expectations addressed in the fundamental course there is a need for creation of a familiarization workshop to be offered prior to enrollment/class start also a need for greater access to language and nursing tutors. As HCC seeks to increase student diversity these needs will require research and planning as how to best address this need.

Advocate for a mandatory pre-nursing seminar to address work issues, study strategies, and drug calculation review for all nursing students. These are the most common areas for academic distress. Need to create a focus session to discuss these issues and emphasis their importance in helping students be proactive rather than reactive. Similar to mandatory hospital competency or an on-course strategy for student success this would help address student retention without sacrificing quality. This should be mandated not optional, would also provide opportunity for team building among students.