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: Spring 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?)

- o Knowledge/ Learning Acquisition:
 - O 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.

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.
- 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.

o Application Nursing Process:

- o 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.
- O 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:

O 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:

- O 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.
- 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).

o 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.

o Safe Practice & Standards:

- o 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.
- O 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.
- o 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.
- O 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?)

- O 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.
- O Community recognition: The HCC program has been recognized by <u>registerdnursing.org</u>, 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.
- o 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 39 students enrolled in the course of which 34 successfully completed the course. Grade distribution; A's 5.1 %, B 69.2 %, C 12.8 %, D 10.3 %, F 2.5%

ATI proficiency: Breakdown is as follows:

	2017	2016	2016	2015	2015	2014	2014
	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Group Mean National	62.4 %	62.4%	62.4 %	62.5%	62.4%	61.2 %	64.1 %
Group Mean program	61.9 %	61.9%	61.9 %	61.9 %	61.9%	61.6 %	64.4%
Adjusted Group score	58.9 %	58.6%	63.8 %	62.0%	64.1%	61 %	60.8 %
National Ranking	29 %	28%	57 %	47 %	58 %	51.3 %	28 %
Level goal> 2							
Level 3	2.7 %	3.7%	8,3%	0.0%	4.3 %	0.0%	11.1%
	(1)	(1)	(3)	(0)	(2)	(0)	(4)
Level 2	29.7 %	29.6%	41.7%	53.5%	63.8%	43.6%	27.8 %
	(11)	(8)	(15)	(23)	(30)	(17)	(10)
Level 1	43.2 %	37%	41.7 %	37.2%	29.8%	41 %	50 %
	(16)	(10)	(15)	(16)	(14)	(16)	(18)
Below level 1	24.3 %	29.6%	8.3 %	9.3 %	2.1%	15.4 %	11.1 %
	(9)	(8)	(3)	(4)	(1)	(6)	(4)

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

1. <u>Math/ Drug Calculation competency</u>. A significant number of students report lower comfort level / ability with drug calculations. Many procrastinate in completing mandated drug calculation quiz due to anxiety. To enhance student comfort and confidence faculty have created a drug calculation policy that is used consistently in all nursing courses. The students are provided a written copy of drug calculation policy in their Nursing Student Handbook. The policy is printed on the math competency quizzes and on top of first unit exam.

Extra worksheets, online tutorials, imbedded simulation and class calculations in lecture have been incorporated for practice. Remediation review with instructor is strongly encouraged and referral to LRC tutors have also been provided for students who have had difficulty with drug calculations on quiz or exams.

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 due date has been pushed forward to encourage students to take more proactive role in preparing with practicing and tutoring for success on first attempt. This is anticipated to help ease anxiety and material overload as the semester gets more involved in difficulty level of material covered and other projects due dates.

87.17 % passed on first attempt, 100% successful on second attempt. Increase number of students have achieved points for successful drug calculations on unit tests.

2. Piloting ATI Drug Proctored Drug Calculation Quiz: Fall 2016 ATI presented a new online proctored med calculation test that is course specific for each nursing specialty. As the quiz is not normed at this time, the quiz was piloted for two semester as an ungraded exit quiz and then comparison between the current faculty created quiz and ATI quiz was made to determine if feasible substitution. ATI calculation exam 51.2 % of students had a successful score on first attempt. (Fall 2016 semester 28 tested /12 passed: average score 80%, Spring 2017 14 tested / 8 passed with average score 86.2%). Due to rounding rules which were inconsistent with HCC drug calculation rules, faculty determined that the ATI math quiz was not conducive as a substitute method. It increased student confusion and anxiety. It also did not allow for faculty to pull up and review the exam with the student.

A positive learning lesson that came from the pilot test was student awareness to always "read the directions" on what was required prior to taking any calculation exam. If this had been done it is felt more students would have made the calculation adjustment. Nursing Faculty discussed the issues with procedure inconsistency between ATI and HCC policy in regards to rounding rules specifically for newborn /pediatric drug calculations. The consensus was that reminding students to read directions was more beneficial and appropriate then altering safety recommendations of current HCC drug calculation policy to comply with ATI system.

3. <u>Decline in overall ATI group score and ranking for course over pass year.</u> Student preparedness and taking initiative for learning; Imbalance work – life balance.

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 which tends to correlate positively with 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 and 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 two pop quizzes (ungraded) were administered this past semester and student's noted their lack of preparedness was reflected in score on quiz. An increase effort in coming prepared to next class was perceived after quiz as many were concerned that future quiz would be graded. But over a week the effect wore off and old patterns were reassumed. For the coming semester plan to increase number of pre-lecture quizzing with a small assigned grade value initiated to encourage buy in by students. These will incorporate date specific online and anticipated or announced class pop quizzes. Case study analysis and group work activities will be moved to the start versus end of lecture (where often run out of

time) to enhance group dynamics and peer responsibility for engagement. Also can be used to pique interest in topic, clarify confusing concept and review if concept appears to be understood.

Attempting to institute flipped classroom activities without student preparation in the past has felt awkward and ineffective from a faculty perspective yet research seems to indicate over time it enhances preparation and comprehension. Will reintroduce flipped activities and put emphasis on raising bar of expectation to engage and acknowledge brighter students and empower weaker students to strive for better preparedness for day's content. Pre lecture review of A & P connection to topics via Camtasia or youtube voice over will be investigated for several lectures this semester to allow less time on reviewing connections with prior content yet assisting those students who have need for review.

Lower proficiency in reading and math scores/ college readiness has been a trend noted in institutions of higher learning across the board over the past few years and is reflected in the current cohort of students. A cross discipline dialogue has begun between nursing and faculty in pre-rec classes of English and science in an attempt to strengthen student outcomes /readiness for learning. One co-curricular advancement being implemented in fall 2017 is a more healthcare specific focus in biology being offered to health science majors. Faculty will gather data on the impact this change has on future classes. It is anticipated that A&P connections will have increased in recall and assimilated as the biology course moves from a cellular focus to health care application focus in the coming semester.

- 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. A successful pilot was instituted in a med-surg nursing course this semester using a link to library support/ feedback on written projects along with introduction of an online instructional tutoring via CREDO. Topics address critical thinking and literacy skills. The benefit of incorporating the requirement of one or two support activities per course was felt to be a beneficial use of resources for student current and future success as they moved toward BSN completion. Beginning in the fall semester two CREDO assignments will be introduced to students in this course and future topics will roll out with each succeeding course they take. Nursing faculty will collaborate to assess which topics are most useful at each course level so as to avoid redundancy.
- 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. <u>Interference of electronic devices in class/ lab setting</u>: Inappropriate and excessive use of 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?)

Advocate for a mandatory pre-nursing class admission seminar to address work issues, study strategies, and drug calculation review. These are the most common areas for academic distress. While they are addressed in the fundamental course and verbally reminded during following course introduction they get loss in the business of the course. Need to create a separate 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. Would recommend a panel approach of prior year students and faculty. Believe live format would work best but if online format would strongly advocate to work with IT to make engaging presentation. This should be mandated not optional, would also provide opportunity for team building among students.