# Eastern West Virginia Community and Technical College COURSE ASSESSMENT REPORT

Course Title and Number: AH 241 Pharmacology for Allied Health	Academic Term and Year of Assessment Activity (Ex: Fall, 2014) Fall, 2015			
Report Submitted By: Eleanor Berg, MS	Number of Students Assessed: 16			
Date Report Submitted: 12/9/2015	Number of Sections Included: 1			
Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL, traditional section, hybrid course, etc.): traditional				

### **Course Role in the Curriculum**

Provide a description of the role the course serves in the curriculum (i.e. general education requirement, program technical core, restricted elective, etc.). Note all as appropriate.

Pharmacology for Allied Health is a sixteen (16) week course designed to aid the student or health care professional to develop an understanding of basic pharmacological concepts, drug actions and clinical application. The course was offered as an elective for the Associate of Applied Science Nursing Program and was offered only to 3<sup>rd</sup> semester nursing students. Although not part of the nursing curriculum other than being an elective, pharmacological knowledge is vital in the nursing profession. As drug therapy is an integral part of health care, allied health students/professionals have a vital role in drug therapy and observation of the physiological changes with administration. Critical thinking skills are utilized in relationship to the use of pharmacological agents in health and illness. Patient safety, nursing actions, drug use and contraindications of each drug classification were included. Also included are drugs and their actions, drug administration, calculating drug dosages, Intravenous drug use, drug therapy in the pediatric and geriatric populations. Drug classifications included are anti-microbials, antiparasitics, anti-septics, analgesics, anesthetics, anti-inflammatory agents, anti-gout, antihistamines, decongestants, expectorants, bronchodilators, cardiac agents, vasodilators, antiplatelet agents, anti-hypertensives, anti-lipemics, nutritional agents, and supplements, antacids, antiemetics, laxatives and antidiarrheals, central nervous system agents, psychiatric agents, substance abuse, thyroid agents, hormones and drugs used in obstetrical care, immunity, cancer, eyes, ears and skin. The focus was on utilization of pharmacologicals in health care with an emphasis on various drug categories. All chapters in the textbook were included in lecture and testing. Student learning outcomes were covered in the following ways: The uniqueness of each person and the differences in their response to medication. Dosing of medications is different depending on weight, age, renal and liver function. Medication compliance depends on the motivation, view of health, past experience with medications, cost and many other factors. Medications change and the nurse must keep abreast with the changes. Thinking critically, the nurse can help the patient obtain the maximum benefit with pharmacological agents, education and advocacy. A worksheet was developed by the instructor to include classifications, concept, use, side-effects and monitoring. The students received the worksheet and they were instructed to insert the names of medications the encountered in the clinical setting for NU 234.

### Assessment Methods

Provide a description of the assessment process used. Include description of instrument and performance standards in description. Note all methods.

The assessment included nine examinations for a total of 583 points with each exam question being worth one point each. 483 points were take home exams and the comprehensive final was given in the classroom without any aids such as textbooks or computer. The students were required to get 80% of the questions correct in order to make a "C" or above in the course.

### **Assessment Results**

Provide a summary of results including tables/charts. Incorporate information from previous assessments as appropriate. Append additional pages if necessary. If appending, include notation in box to "See attached".

16 of the 16 students successfully completed the course with a "B" or above. The lowest total average was 87.47%. The lowest score on the comprehensive final was 77%. The SLO, college core values and the course objectives were aligned to ensure all were successfully measured. 100% of the SLO, college core values and the course objectives were successfully measured. When the course was offered in the Spring, 2014, nineteen nursing students successfully completed the course with a "C" or above. In Spring, 2012, eighteen students successfully completed the course with a C" or above.

Course Level Assessment Summary of Outcomes, Indicators and Results Course Title and Number: NU 143 Number of students in assessment sample = 16 Number of Sections in Assessment = 1 Add additional rows to table if necessary						
Learning Outcomes (Insert learning outcomes assessed during this cycle)	Indicator (Insert indicators used for each outcome: exam question, scoring rubric, etc. Be specific)	Percent of Correct Responses	Percent of Incorrect Responses	Performance Standard Met (75%)* (yes or no)		
Outcome 1: Explain drug absorption, distribution, metabolism and excretion of medications including geriatric and pediatric patients.	The nurse is administering parenteral drugs Which statement is true regarding parenteral drugs? a. Parenteral drugs bypass the first- pass effect. b. Absorption of parenteral drugs is affected by reduced blood flow to the stomach. c. Absorption of parenteral drugs is faster when the stomach is empty. d. Parenteral drugs exert their therapeutic effects while circulating in the bloodstream instead of the cells and tissues. ANS: A	100	0	yes		
Outcome 2: Discuss drug development, significances of	A patient has been selected as a potential recipient of an experimental drug for heart failure. The nurse knows that when informed	100	0	yes		

scheduling of drugs and federal control.	consent has been obtained, it indicated that the patient a. has been informed of the possible benefits of the new therapy b. will be informed of the details of the study as the research continues c. will receive the actual drug during the experiment d. had had the study's purpose, procedures and the risks involved explained to him ANS: D			
Outcome 3: Antimicrobial agents in relationship to infections, fungi and viruses	A patient is admitted with a fever of 102.8 F, origin unknown. Assessment reveals cloudy, foul- smelling urine that is dark amber in color. Orders have just been written to obtain stat urine and blood cultures and to administer an antibiotic intravenously. The nurse will complete these orders in which sequence? a. blood culture, antibiotic dose, urine culture b. urine culture, antibiotic dose, blood culture c. antibiotic dose, blood and urine cultures d. blood and urine cultures, antibiotic dose ANS: D	93.7	6.3	yes
Outcome 4: Analgesics and antipyretics	A patient will be discharged with a 1 week supply of an opioid analgesic for pain management after abdominal surgery. The nurse will include which information in the teaching plan? a. How to prevent dehydration due to diarrhea b. importance of taking the drug only when the pain becomes severe c. how to prevent constipation d. importance of taking the drug on an empty stomach ANS: C	100	0	yes

\* Please note if using a different minimum performance standard.

### Conclusions

# Provide a brief summary of conclusions derived based on analysis of data. Append additional pages if necessary. If appending, include notation in box to "See attached".

100% of the SLO, course objectives and college core values were successfully assessed and met. 100% of the students successfully completed the course with an 87% or higher. Students stated the worksheet distributed at the beginning of the course was very helpful in learning drug classifications. Considering the students did very well on the comprehensive final, the take home exams were effective in preparing the students.

# **Previous Assessment Reports and Results**

Date of Previous Assessment: 5/10/14 List of Outcomes Not Met: N/A

Summary of Actions Taken to Address Unmet Learning Outcomes: Append additional pages if necessary. If appending, include notation in box to "See attached".

The course was previously assessed on 5/10/2014 and all outcomes were met.

Previously, several of the exams had been take home exams because there were several snow days and the college had been closed. The students in that cohort stated they felt the take home exams were challenging because the answers could not be taken directly from the book but involved judgment and application of the knowledge. The final exam was proctored and the students had been successful on the exam indicating retention of knowledge. An action plan included the development of a worksheet to help students understand drug classifications along with their use, common side effects and physiological monitoring required. Nursing graduates must take the NCLEX in order to practice as a Registered Nurse and up to 18% of the exam includes Pharmacology. Of the previous cohort, 94.73% of the graduates passed on the first attempt. Therefore, there is a high probability the pharmacology course aided those of the previous cohort to be successful in passing the NCLEX. In addition, a question in the graduate survey was about how prepared the graduates were in Pharmacology. Per the survey the graduates felt their preparation was "Good" and one student stated she needed a better understanding in recognizing medications by their generic and brand names.

# **Action Plan and Date for Reassessment**

Identify action plan for improvement or maintaining current performance levels including outcomes identified for re-assessment, curriculum revision, LOT proposal, new or revised course activities to reinforce learning outcomes, etc. Append additional pages if necessary. If appending, include notation in box to "See attached".

The course has been successful but may be improved by expanding the handout. Will consider changing the course and place under nursing instead of Allied Health since more geared toward nursing and has been limited to second year nursing students.

# Assessment Committee Recommendation/Approval (To be posted by Assessment Committee Chair)

 $\Xi$  Approved as presented

Date: 1/20/16

# LOT Recommendation/Approval (To be posted by Assessment Committee Chair)

 $\Xi$  Approved as presented

Date: 2/18/16