End of Semester Course Report

Health Science Human Service Department

**Directions:** Complete and forward to the Dean of Health Science (cc to the administrative assistant).

1. **Course Number and Name**: NURS 155: Clinical Decision Making in Drug Therapy
2. **Semester/Year**: Spring 2021 Fall Summer

3. **Course Faculty (include any adjunct faculty utilized):** Michelle Husbands

4. **Theory Ratio:** 41:1 **Clinical Ratio**: N/A **Simulation Ratio;** N/A

\* (Faculty to student ratios: Please use the number of students at the beginning of the semester for these.)

5. **Clinical Facility Evaluation** (How well did the used clinical sites assist students in meeting the course objectives? Choose one.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Clinical Site Utilized | Strongly  Agree | Agree | Undecided | Disagree | Strongly  Disagree |
| No clinical sites utilized in this course |  |  |  |  |  |
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1. **Briefly describe any concern(s) regarding clinical site(s) used.**

N/A- No clinical component for this course

1. **Final Theory Outcomes:**
   1. Percent Passed: 100% (36 students)
   2. Percent Failed: 0%
   3. Range of Scores: 80.74% – 98.05%
2. **Final Clinical Outcomes:**
   1. Percent Satisfactory: N/A
   2. Percent Unsatisfactory: N/A
3. **Course Outcomes**:
   1. Beginning number of students: 41
   2. Withdrawals: 5 Dismissals: \_\_\_\_0\_\_\_\_\_\_\_
4. **Incompletes** (with expected date of completion): 0
5. **ATI Pharmacology Proficiency Levels – taken 3rd semester (NURS 257)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fall 2020** | **Fall 2019** | **Fall 2018** | **Fall 2017** |
| Level 3 = 23.7% (9) | Level 3 = 50% (13) | Level 3 = 39.4% (13) | Level 3= 23.1% (6) |
| Level 2 = 68.4% (26) | Level 2 = 42.3% (11) | Level 2 = 54.5% (18) | Level 2= 69.2% (18) |
| Level 1 = 7.9% (3) | Level 1 = 7.7% (2) | Level 1 = 6.0% (2) | Level 1= 7.7% (2) |
| < Level = 0% | < Level = 0% | < Level = 0% | < Level =11.5% |

\*The ATI proctored final proficiency exam was not administered spring 2021 in NURS 155 (2nd semester). It was decided collectively as a department by nursing faculty to have students take the proctored ATI proficiency exam in 3rd semester (NURS 257) scheduled in fall 2020, after students have gained additional clinical knowledge and experience in assessing/administering/evaluating medications in clinical practice. Please refer to fall 2020 NURS 257 course report for this data.

**12. Course Overview**

* 1. **ATI Testing** – Instructor (M. Husbands) developed midterm & final exam utilizing the questions from the ATI test bank, the NCLEX-RN Comprehensive Review textbook 6th edition (2014) & 7th edition (2017) and NurseThink 3rd edition (2019) and uploaded the exam into Web Campus platform.

|  |  |
| --- | --- |
| ATI Test bank / NCLEX-RN Comprehensive Review textbook 6th edition (20014) | When test used during semester |
| Instructor Developed Exam uploaded into Web Campus WebCapusWebCampusWeb Campus  6784822 | Midterm |
| Instructor Developed Exam uploaded into Web Campus | Final |
|  |  |

* 1. **Summary of how ATI is used in the course**:

ATI RN Pharmacology is divided over the Fall and Spring (2) semesters. For spring 2020 semester, the following ATI Modules medication categories were studied: Hematology Cardiovascular, Endocrine, GU/Reproductive and Nervous System medications.

The self-directed online ATI RN Pharmacology 4.0 program is the main method used in this course. The ATI online program is supplemented with weekly (75 minutes) traditional classroom lecture/discussion to provide the students the opportunity to clarify concepts and ask questions about the content. Prior to attending the live/video class, students are required to view and complete the online ATI module of the assigned medication classifications and review the corresponding drill questions, case study & quiz. Once completed, the students are required to upload an ATI transcript into Web Campus confirming completion and documentation of the time spent in completing the module. Using the Web Campus platform, an in-class module quiz was given covering the module content to evaluate the students’ comprehension.

To supplement the online instruction, the instructor used the accessible ATI information resource tools to review disease pathophysiology, pharmacological treatment, mechanism of action, and culturally diverse nursing interventions and legal and ethical principles related to safe medication administration for each of medication classifications covered.

**c. Course Exams**:

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The ATI proctored final proficiency exam was not administered spring 2021 in NURS 155 (2nd semester). It was decided collectively as a department by nursing faculty to have students take the proctored ATI proficiency exam in NURS 257 (3rd semester- fall 2021), after students have gained additional clinical knowledge and experience in assessing/administering/evaluating medications in clinical practice. Instructor (M. Husbands) developed midterm & final exam utilizing the questions from the ATI test bank, the NCLEX-RN Comprehensive Review textbook 6th (2014) & 7th edition (2017) and NurseThink 3rd edition (2019) and uploaded the exam into Web Campus platform. The mid-term exam consisted of 50 questions with 1 additional question and the final exam consisted of 50 questions and 1 additional question.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NURS 155 | Spring 2021 | Spring 2020 | Spring 2019 | Spring 2018 |
| Mid-term exam | Low – 74%  Mean – 86%  High – 102%\* | Low – 72%  Mean – 89%  High - 98% | Low – 78%  Mean – 91%  High – 100% | Low – 77%  Mean – 92%  High – 104%\* |
| Final exam | Low – 70%  Mean – 89%  High – 98% | Low – 78%  Mean – 92%  High – 98% | Low – 82%  Mean – 98%  High – 104%\* | Low – 78%  Mean – 98%  High – 104%\* |

ATI final proficiency exam not completed. Plan is to have students take the proctored ATI proficiency exam in 3rd semester after students have gained clinical experience in administering medications

\* reflects on additional question

Please refer to test blueprints for NURS 155 mid-term & final exam: nursing process, NCLEX, and cognitive level.

**13. Any issues identified**

1. As previously voiced in past semesters, several of the students report that the 75 minutes allotted for the weekly live class to review the assigned module content did not allow for in-depth discussion due to numerous medications presented in each ATI module. Action: an additional 2 hours weekly was scheduled via Zoom/BBB to all four (4) sites offering a supplemental study session, aside from the regularly weekly schedule class. Students continue to express that the course required a substantial amount of study in relation to it being a one credit course. Action: to continue offering the weekly 2-hour study session allowing students to ask questions for better understanding of the information provided by ATI.

**14. Any adjustments that may need to be done in course tests related to percentage & distribution of categories of content**. (Please see test blueprints and allotted percentage of item categories)

1. For spring 2021, all module quizzes, mid-term and final exam were reviewed, and slight revisions were made. Each module quiz consisted of 20 questions with one (1) additional question and mid-term/final exam consisted of 50 question with one (1) additional question. 34 out of 36 students passed the mid-term exam (74% - 102%) with average score of 86%. Two (2) students receiving less than 76% and was issue a notification of unsatisfactory progress (per NURS 155 syllabus). 35 out of 36 students passed the final exam (70% - 98%) with the average score of 89%. One (1) student receiving less than 76% and was issue a notification of unsatisfactory progress (per NURS 155 syllabus).

**15. Evaluation of textbooks**:

1. ATI RN Pharmacology, edition 8.0 (2019) was the textbook used for most of this class along with Davis Drug Guide, 16th edition (2017). The advanced information in Davis Drug Guide conflicted with some of the ATI module content. Students were encouraged to use the Davis Drug Guide as a dosage reference in the clinical/simulation setting and to use the ATI textbook and resource tools as the main content to supplement the online ATI module courses.

**16. Weekly content**: See attached syllabus (listed in spring 2021 NURS 155 course file in the faculty G drive)

**17. Dosage Calculation Test:** Not administered in this course.

1. First attempt pass #
2. Second attempt pass #
3. Third attempt pass #
4. A & P committee recommendation:

**18. Special Experiences**:

1. None

**19. Teaching Methods**:

1. Self-directed ATI Pharmacology online course content, lecture with ATI Drug Information Tables, diagrams, PPP, embedded Nurse Mike & Level Up RN videos, class discussion, and case studies.

**20. What worked well and reason (s):**

1. Class discussions were guided by utilizing the ATI Drug Information Tables. This approach seemed to work the best in presenting knowledge and for facilitating the students’ critical thinking skills.
2. Requiring the students to review, complete, and submit an ATI transcript of each modules prior to class helped with more engaging discussion during class. Awarding points (1 thru 4) based on the number of hours a student dedicated to reviewing and completing the assigned modules motivated the students to be prepare for in-class involvement/discussion.
3. The development of pre-work module activities that include worksheets, case studies, journaling of questions from the NCLEX-RN Comprehensive Review textbook 6th (2014) and/or the students develop/write NCLEX-style item questions.
4. The developed of a client education video and informational handout assisted the students to better understand the medication they selected and to education clients in clinical practice. The development of the informational handout helped to provide client with pertinent information at an appropriate health literacy level using an online automatic text readability calculator.
5. Adding one (1) additional question to each module quiz, the mid-term and final exam was well received by the students boosting the moral of the class.
6. Coordinating aligning the weekly module topics with the NURS 158 and NURS 159 course modules topics helped students better understand, associate, and apply the therapeutic uses of medications with the disease process.
7. Due to the vast amount of information provided by ATI, providing a study guide for each module quiz and exam helped the students to focus on important concepts & content.
8. Offering an optional study session, 2 hours every other week, provided additional time for students to ask pertinent questions to clarify their understanding.
9. The following changes were made to the course at the beginning of the semester based on Mountain Measurements Two-dimensional analysis to assist students in analyzing pertinent clinical findings, formulate appropriate clinical reasoning/judgements and applicable nursing interventions.

**Physiological Adaptation**

Alterations in Body Systems:Educate client about managing health problems (e.g., chronic illnesses) – During in-class discussion, will emphasize the importance on nursing interventions and client education to ensure compliance to pharmacological, alternative/complementary, and non-pharmacological treatment/recommendations. Added to medication template – pertinent client education to be given

Evaluate achievement of client treatment goals – Added to medication templates ‘Pertinent data to collect and document after administration to evaluate effectiveness’

Fluid & Electrolyte Imbalance:Evaluate the client’s response to interventions to correct fluid or electrolyte imbalance - Added to medication templates ‘Pertinent data to collect and document after administration to evaluate effectiveness’

Hemodynamics:Intervene to improve client cardiovascular status (e.g., initiate protocol to manage cardiac arrythmias, chest pain etc.) Provide opportunities in class for students to make clinical judgement in an unfolding case study. Discuss medication classification to manage/improve specific cardiac disease processes/alterations (e.g., ACEI, Nitrates, CCB, BB, diuretics)

Illness Management:Identify client data that needs to be reported immediately – incorporated in the medication templates ‘Adverse effects to consider’ and ‘Pertinent nursing assessments to perform before administration: Parameters to consider (i.e. labs, V.S., H&P, etc.), and ‘Pertinent client education to be given (i.e. symptoms to report).

Apply knowledge of client pathophysiology to illness management – included in medication templates ‘How does this medication work in the body (mechanism of action)?’ and ‘Expected therapeutic effects?

Educate client about managing illness (e.g., chronic illnesses) – Added to medication templates ‘Pertinent data to collect and document after administration to evaluate effectiveness’

Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis - ‘Pertinent data to collect and document after administration to evaluate effectiveness’

Medical Emergencies:Apply knowledge of pathophysiology when caring for a client experiencing a medical emergency – discuss ‘How does this medication work in the body (mechanism of action), Expected therapeutic effects and ‘Why the medication is prescribed and how it relates to disease process’.

Pathophysiology:Identify pathophysiology related to an acute or chronic condition – In class discuss and review of pathophysiology of pertinent disease process related to medication classifications.

Notify primary health care provider about unexpected response/emergency situations – Review adverse effects for medication’ and ‘Pertinent data to collect and document after administration to evaluate effectiveness’

Unexpected Response to Therapies:Assess the client for unexpected adverse response to therapy – medication templates ‘adverse effects to consider’ and ‘Pertinent data to collect and document after administration to evaluate effectiveness’.

**Nursing Process**

Analysis – will incorporate new terminology ‘analysis’ instead of ‘diagnosis’ when assessing the H&P findings using unfolding case study to help students formulate/understand the rationale of why certain medication classifications are prescribe to help manage/treat acute or chronic illnesses

**Health Promotion and Maintenance (Human Functioning)**

Aging Process (Growth and development):Provide care and education for children, adolescent, adult and geriatric populations – class discussion, unfolding family case study and medication templates, recommending dosing for varying populations, pregnancy risk categories, client education to be given.

Wellness/Illness Continuum:Health Restoration, Acute Complex – class discussion with unfolding case study with clients that have coexisting acute and chronic illness. Medication templates ‘list chronic illnesses/conditions, list other prescribed medications, note any medication/dietary incompatibilities/ interactions and how the prescribed medication relates to client’s H&P.

**21. EBP, NPSG, and ANA standards were successfully/unsuccessfully addressed during this course**. Be specific.

1. EBP, NPSG & ANA standards were successfully met in that ATI provides students with the latest EBP research on all medications presented in their online program. NPSG and ANA standards are discussed when reviewing regarding medication administration within the ATI modules by providing safety alerts resources, if applicable. QSEN are measured standards on the test (see test blueprint).

**22. Anticipated Changes**

a. Changes to weekly content and reason (s):

* + 1. Will continue to use teaching methods listed under # 20 - 21 “What Worked Well.”

b. Changes to point allocation and reason (s):

1. No changes to point allocation and/or percentages of the learning activities (20%) (i.e., client educational video/handout, module pre-work) or quizzes/exams (80%) to assess the students’ comprehension of topics were made for spring 2021.
   1. Other changes and reason (s):
2. Will attempt to locate and incorporate more hands-on creative class activities to engage students in the application of learned information.
3. Obtain up-to-date formularies from clinical sites and review the most used medications in current practice and possibly review/revise the current list of medications presented in the modules. The rationale for this is that several of the medications studied in ATI are not commonly or currently used in clinical practice.
4. Revisit, review, and possibly revise existing medication templates and scoring rubrics using a range for various assignments.
5. Continue to align the ATI module medications classifications with NURS 158 & NURS 159 to reinforce students’ learning
6. Will continue to implement the modular pre-work assignments prior to class discussion to help students apply knowledge.
7. Revisit, review, analyze, and possibly revise questions on module quizzes and exams. Integrate a percentage of NGN style questions.
8. Consider inviting an expert guest speaker – i.e., pharmacist.
9. NURS 155 - Clinical Decision Making in Drug Therapy Student Learning Outcomes Survey (SLOs) Spring 2021. At the completion of this report, results of SLO survey was not available. Plan: to provide results and documentation at next Faculty/curriculum meeting schedule for August 2021

* # of students completed the SLOs survey -
* SLO #1
* SLO #2
* SLO #3
* SLO #4
* SLO #5

**23. Administrative**:

* The course was backed up on Web Campus.
* Grades have been entered.
* Grade book has been printed and filed.

N/A Student work samples have been filed. – uploaded into eValue

N/A Student clinical care packets have been filed.

**Faculty Signature: Michelle Husbands**

**Date: 05/23/2021**