Indiana State University
College of Health and Human Services
Baccalaureate Nursing Program
Testing, Test Writing, and Analysis Policy

Overall Planning

1. Each course is to have a test administered at least every 3 to 4 weeks, not including quizzes—which may be more frequent. The Transition courses for LPNs and RNs (NURS 208 and NURS 300), and Introductory course for Traditional students (NURS 104) are exempt from this testing guideline.

2. All tests will have a minimum of 30 questions. Students will be given 1 minute per test item for lower level questions (knowledge/comprehension) and 1.5 minutes per test item for higher level questions (application/analysis).

3. Each course will have a cumulative final exam. The Transition courses for LPNs and RNs (NURS 208 and NURS 300), and Introductory course for Traditional students (NURS 104) are exempt from having cumulative finals.

4. When writing tests, the percentages of items must meet and may exceed the following Cognitive Plan.

Cognitive Test Plan

Traditional, LPN to BSN, and RN to BSN Plans

<table>
<thead>
<tr>
<th>Cognitive Level of Items</th>
<th>Sophomore 2</th>
<th>Junior 1</th>
<th>Junior 2</th>
<th>Senior 1</th>
<th>Senior 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Comprehension</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Application or higher</td>
<td>55%</td>
<td>75%</td>
<td>80%</td>
<td>85%</td>
<td>100%</td>
</tr>
<tr>
<td>Pharmacology Items*</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Alternate Format Items</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>15%</td>
</tr>
</tbody>
</table>

*As applies to course content

Approved by BNC: December 3, 2013
Approved by BN: December 7, 2013
Edited and approved by BN and BNC: November 13, 2017
Edited and approved by BN and BNC: August 20, 2018
Accelerated Second Degree Plan

<table>
<thead>
<tr>
<th>Cognitive Level of Items</th>
<th>Summer 1</th>
<th>Fall 2</th>
<th>Spring 3</th>
<th>Summer 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Comprehension</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Application or higher</td>
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<td>80%</td>
<td>90%</td>
<td>100%</td>
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<tr>
<td>Pharmacology Items*</td>
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<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Alternate Format</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>15%</td>
</tr>
</tbody>
</table>

*As applies to course content

5. Test items must address the NCLEX categories that are evident in each course (this is to ensure that all categories are tested throughout the program).
   a. The NCLEX categories are:
      a. Safe and Effective Care Environment
      b. Health Promotion and Maintenance
      c. Psychosocial Integrity
      d. Physiologic Integrity
   b. Specific subcategories to be tested in each course include:
      a. infection control
      b. safety, patient
      c. privacy
      d. critical thinking.

6. Test results will be returned to students no later than one week from the date of the test.

7. Completed tests will be stored by faculty a minimum of 90 days after grades are submitted for the course. While the faculty member may review tests with students, no tests are to be given to students to keep.

8. Only students with documented disabilities who have been evaluated and approved by the Student Disability Support Services department will be provided with any special testing arrangements.

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Writing Test Items

1. A test blue print will be used for all theory tests* (see example at the end of this document). The blue print will be completed while developing the test. The columns referring to item analysis will be completed after administration of the test. (*For implementation of this policy, at least two tests per course must be blue printed in the first semester after implementation. Thereafter, all tests will be blue printed.)

2. All theory class tests will be comprised of NCLEX style questions.

3. All items are to be written and reviewed using item writing guidelines. Items will be written as questions as much as possible. Completion items will be kept to a minimum.

4. Names will not be used for the patient.

5. Important words in the stem may be bolded or highlighted in the first nursing course while students are learning to work through nursing exams.

6. Items will be written using universal language avoiding ethnic and sexual stereotypes.

Administering Test

1. The procedure for Distance Students (Department of Baccalaureate Nursing Completion) is as follows:

   - Final course exams and Kaplan exams must all be proctored (see Online Proctoring Guidelines for Assessment Exams for RN-BSN and LVN/LPN-BSN Distance Students)
   - All exams are timed electronically (see Overall Planning #2 above)
   - The use of a browser lockdown program is required.

2. The procedure for classroom tests should be as follows:

   - All student possessions (backpacks, cell-phones, blue-tooth devices, water bottles, hats, etc) must be left at the front or sides of the room. The student may have nothing but a pencil and a calculator without memory during the testing period. No cell phones or blue-tooth wireless devices of any type are permitted to be on or in the possession of the student.
   - Once class begins, students are not permitted to sit at their desk with notes prior to the test. Any last minute studying must be conducted outside the classroom.
   - Students complete the test and return the test and individual scoring sheets. No test forms are to be removed from the classroom by students.
• Collaborative or group testing may be used in any course at the discretion of the faculty member, but is not required. If collaborative testing is used, groups may be no more than 5 students, and no more than 3 points can be added to any one test score. Collaborative groups’ points will not be added to an initial exam score less than 75%. The faculty member may select the manner of calculating the final test score.

• When electronic testing methods are utilized, a lockdown browser is required.

3. Students who disagree with a keyed answer may complete a Student Test Item Query form to explain their rationale for their chosen answer. These forms will be submitted to the faculty.

4. If a student is absent from a test, the student will take a different test than the one administered to the rest of the class. This test may be of a different format as well (essay, short answer, etc.).

Analyzing Test Results

1. The faculty who wrote the test is responsible for analyzing the test results.

2. The following will be considered during test analysis:

   a. Item analysis

      i. Level of achievement on critical mastery items: attempt to have 100%

      ii. Difficulty level: attempt to have 50% answer correctly on nonmastery items.

      iii. If less than 50% of students answer an item correctly (difficulty level <50%), then the following discrimination (point biserial) guidelines are to be used.

      1. 0.30 and above: excellent item, no action

      2. 0.20-0.29: good item, no action

      3. 0.15-0.19: acceptable item, may need action

      4. 0.10-0.14: marginal item, may need action, should be reviewed and possibly edited if reused
5. 0.09 and below: unacceptable item, action necessary, should be reviewed and probably edited if reused

iv. Determine what action will be taken if stats are unacceptable

1. Give credit for more than one choice, or

2. Nullify the test item by giving credit for all choices, or

3. Delete the test item from the exam and recalculate with one less total items. (This is the least preferred action.)

b. If/when appropriate, attempt to have KR-20 of 0.65 or higher.

3. The statistics described above will be used to determine the validity and reliability of the exam. Items and exams without acceptable statistics will be reviewed and revised before using them in subsequent classes.