**Testing Procedures**

Testing students is a method of documenting student progression and/or attainment of course objectives. The purpose of testing is to provide information about an individual’s achievement of a course objective or mastery of nursing content.

Proctoring Exams, by an individual other than the legal instructor of record,may be initiated by the nursing faculty. Faculty members are responsible for proctoring their own tests or any tests agreed to prior for other faculty. In special circumstances when scheduled faculty member is unavailable to proctor a test, arrangements must be made 72 hours in advance to identify a different proctor. Faculty are required to implement all Testing policies as outlined in the *Nursing Student Handbook*.

Test Construction Guidelines for Faculty

* Use a testing system supported by the College of Nursing to develop, administer, and review exams.
* Review test questions greater than two (2) years old for adherence to current content and format. Identify the year of development and/or year of review.
* Initiate and complete peer review for all new test questions prior to administration.
* Develop test blueprint for test construction.

Test Construction – Types of Questions

As appropriate to course, all exams should comply with current NCLEX-style format as noted at [www.ncsbn.org](http://www.ncsbn.org/) (i.e. multiple-choice, alternative format, multiple-select, chart exhibit, hot spots, etc.).

Test Construction – Cognitive Code

A Cognitive Code for Examinations has been adopted to ensure progression of critical thinking skills on examinations.

**Cognitive Code**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Level 1** | **Level 2** | **Level 3** |
| **Semester** | **Knowledge/Comprehension** | **Application** | **Analysis, Synthesis, and Evaluation** |
| Semester I  | 40% | **50%** | 10% |
| Semester II | 25% | **60%** | 15% |
| Semester III | 20% | **65%** | 15% |
| Semester IV | 10% | **70%** | 20% |
| Semester V | 5% | **75%** | 20% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Semester I** | **Semester II** | **Semester III** | **Semester IV** | **Semester V** |
| **“Select all that apply”****“Alternate Format”** | 5% | 5% | 10% | 10% | 15% |

Test Construction – Avoiding “test wise” flaws

Test wise flaws are errors that make it easier for the “test-wise” student to answer the questions correctly. Some examples of “test wise” flaws that need to be avoided include the following:

* Irrelevant Difficulty – Flaws in either the stem or options that make items difficult to understand for reasons unrelated to the content or focus of the assessment.
* Linguistic/Structural bias – Unnecessary linguistic complexity in the stem or options, grammatical error, and lack of consistency in the wording
* Cultural bias – Use of culturally specific information that is not equally available to all cultural groups.

Test Construction – Writing the Best Stem

Faculty shall include the following procedures when constructing stems for a question:

* The stem and options shall be complete sentences with a subject and verb.
* The stem shall contain the words “patient” and “nurse” (i.e. The nurse caring for a patient with….)
* The last sentence of the stem must be the question posed to the student (i.e. Which of the following is the MOST appropriate nursing intervention?)
* The word “except” shall be avoided as part of the stem question.
* Mathematical questions shall contain rounding rule.
* All test questions must stand alone.
* When writing multiple choice test items, end the item in a question.
* Use “select all that apply” type questions instead of “all of the following except” type questions.
* Use of names in the test scenarios is discouraged.
* Do not mention gender or age unless this information is pertinent to the test questions.
* Use “the nurse” rather than “you,” “he,” or “she.”
* Use as few words as possible.
* Test questions should reflect appropriate level for placement in the curriculum

Test Construction – Writing the Best Options

* Faculty shall include the following procedures when constructing options for a question:
	+ Faculty are not to release any portion of “test banks” to students.
	+ Taking questions directly from **test banks**, without editing meaning of question or altering the question in some form, is prohibited.
	+ Each option shall contain rationale for each question’s options.
	+ Each option shall be validated with a page number and paragraph number for student reference, when applicable.
	+ All options shall be realistic, plausible.
	+ All options shall contain only important words – avoid unnecessary words.
	+ One option choice is not included in another option choice.
	+ Options shall be the same length.
	+ When using a Select All that Apply, avoid making all options correct.
	+ Do not use an option of “all of the above”.
	+ Words such as **most, best, first**, etc. shall be bolded.
	+ Words **“Select all that apply”** shall be bolded.
	+ Pharmacology questions shall contain only generic formulations after semester two. Semester two will use both generic and trade names.
	+ Do not use multiple multiples.
	+ Do not use “all of the above” or “none of the above” options.
	+ Make answer options consistent in length, wherever possible.
	+ Use plausible answer options.
	+ Present choices in a logical order, if possible.
	+ Vary placement of the correct answer among answer options, whenever possible.

Providing Peer Review of Exam Prior to Finalizing the Exam

1. After exam/test has been created, print hard copy of exam with answer key.
2. On hard copy of exam/test, identify the percentage of knowledge/comprehension, application, analysis, synthesis, and evaluation questions.
3. On the hard copy of the exam/test, identify the cognitive code for each question.
4. On the hard copy of the exam/test, identify the number/percentage of “Select all that Apply” and “Alternative Format” questions.
5. Provide the above mentioned hard copy to your faculty review partner within five (5) days of the scheduled exam/test to allow review and feedback.

Test Guidelines for Students

* Students are to be informed in writing at the beginning of the semester of all testing dates and times and notified in writing and/or D2L of any subsequent changes to testing schedule.
* Students should be given clear criteria in the syllabus for the grading and the weight of each test on the final grade at the beginning of the course.
* Students may not use texts or references during exams unless otherwise specified by the faculty.
* Only one un-proctored exam may be administered per course. The maximum window of time for un-proctored or take-home exams to be completed is 36 hours.
* Only one (1) make-up exam will be allowed per course.
* Make-up exams must be completed within 48 hours (excluding weekends and holidays) of the original exam date and time. Extensions past 48 hours may be granted at the discretion of the faculty. Exams not made up within the 48 hours or designated time approved by faculty will result in a zero.
* Students must notify the exam/quiz proctor of testing issues prior to completion of the exam/quiz

Exam/Test/Quiz Characteristics

* Unit Exams should include a maximum of 50 questions
* Comprehensive final exams should include a maximum of 100 questions.
* It is highly recommended that all **full semester courses** (15 week courses) should have a minimum of three (3) unit exams and one (1) final comprehensive exam. Courses formatted differently should consider an equivalent of exam rigor.
* Quiz format is at faculty discretion.
* Final course grades will be calculated by rounding two decimal places.
	+ Totals ending with a 5 or higher will round up
		- Example: 74.45 = 75
		- Example: 74.43 = 74

Final Exams

* Final exams must be scheduled during the university final exam week as stated in the academic calendar.
* Each course listed below will have a final comprehensive exam.

|  |
| --- |
| NRSE 2016 |
| NRSE 2350 |
| NRSE 3010 |
| NRSE 3500 |
| NRSE 3540 |
| NRSE 3090 |
| NRSE 4550 |
| NRSE 4570\* |
| NRSE 4580\* |
| NRSE 4610\* |
| NRSE 4620\* |

\*These exams may be given outside university final exam schedule.

Testing - Test time limits

Testing time limits are pre-established by the team teaching the course. Generally, the student should be able to answer one question in 1.5 minutes in a multiple choice test.

#### Classroom Management During Tests

#### Faculty will direct students to place all personal belongings, notes, and electronic devices away from the testing area. Cell phones must be turned off during the exam. College of Nursing personnel will not be responsible for student belongings. Only calculators provided by the College of Nursing may be used or calculators enabled on testing computers.

#### No hats, hoodies, ear phones, headsets, or ear buds may be worn during the exam. Ear plugs may be allowed at the discretion and inspection of the exam proctor. Other personal belongings may be prohibited at the proctor’s discretion.

#### Assure that students are seated as far as possible from one other. If deemed necessary to prevent cheating, faculty may reserve a second classroom, ask for additional proctors, and divide students between two classrooms during tests. If two classrooms are not available during regularly scheduled class times, faculty may reserve two classrooms at an alternate time specifically for testing.

#### Clearly specify a time limit for the exam.

#### Always have at least one proctor in the room, actively engaged in proctoring the exam.

#### Students are not allowed to ask questions during the exam

#### Use discretion in allowing a student to leave the room during a test.

#### Students must show a government issued photo ID when submitting completed test to exam proctor for examinations.

#### Faculty will take appropriate action upon suspicion of academic misconduct.

#### Academic integrity policy remains in effect during emergency interruptions. If an exam interruption occurs, students will power down the device and faculty will provide a code when the exam is to be resumed.

1. To ensure that the correct grade is being given to the correct student, all exam/quiz/assignment grades will be placed in D2L or given in person; no grades will be given to students by email or by telephone.

Faculty Review of Exam Results

Test analysis and item discrimination must be performed following each exam and the data used to determine adjustments prior to calculating grades. Use test analysis data in subsequent test development.

 Reviewing the Exam with Students

# Post-Exam Review of Exams promotes and documents student learning. Most students need clear short-term incentives to compel them to spend the time and effort necessary to learn the immense body of knowledge and skills required to become an effective nurse. They also need periodic feedback telling them to what degree their study efforts are successful and where they need to devote more attention. Finally, instructors and nursing schools must make certain that learning is taking place so that their graduates will be adequately prepared for their clinical experiences and nursing careers.

* Post-Exam Review **shall** be conducted on all exams and quizzes within one week after the exam was administered.
* The review may be scheduled outside of class time. If this is the situation, date, time, and location of exam review will be posted to D2L. A sign in sheet will be maintained in these situations.
* Students shall be provided their printed exam during the exam review. It is the instructor’s responsibility to ensure each student returns the printed student exam.
* Faculty will provide answers for test items in a secure fashion for students to review.
* Students’ personal belongings and electronic devices should be away from the exam review area as designated by instructor.
* Students must use professional, respectful communication during exam reviews.
* To maintain test security, test items will not be discussed during post- test reviews; however, individual students will be encouraged to schedule time with faculty to further discuss and review test information.

#### Management of Testing in the Testing Center

1. Students with Official Documentation from Disability Services:
	1. The electronic link to the University policy regarding students with documentation from Disability Services will be posted in the course syllabus.
	2. Faculty will arrange testing accommodations through the Testing Center as early as possible; at least a 48-hour notice is needed for testing.
	3. Students with forms from Disability Services may be given the opportunity to take class quizzes in the Testing Center. Alternate approaches will be used for unannounced quizzes.
	4. Faculty will provide the Testing Center with the course exam/quiz schedules by the first week of each semester.
	5. Faculty will complete a Test Administration Form indicating instructions for the test or quiz, including time allowed (students with forms from Disability Services are given double time from regular nursing students unless indicated otherwise on their disability form), any resources they may have (calculators, reference books, etc.) and a contact number in case students have questions.
	6. For final exams, faculty will indicate on the Test Administration form how to handle extended time for final exams that may require a student break. Faculty may choose to give the test in two sections with a break in between or give the student the entire test, with a required, supervised break after 2 hours.
	7. Faculty should refer to the ETSU Disability Services Accommodation Descriptions handout for reference, as needed.
	8. The Testing Center prioritizes scheduling testing accommodations for students with disabilities forms from Disability Services before any other testing needs.
2. Students with Special Needs: (i.e. make-up exams)
	1. Faculty will arrange testing needs for students in advance by contacting the Testing Center as soon as possible; at least 48-hour notice is needed for testing.
	2. Faculty will complete a form indicating instructions for the test, including time, any resources students may have (i.e. calculators, reference books, etc.) and a contact number in case students have questions.

*Sources:*

*Morrison, S., Nilbert, A., & Flick, J. Critical Thinking and Test Item Writing (2nd edition).*

*Health Education Systems, Inc., 2006.*

*Didactic Curriculum Work Group, 2000.*

*Effective Teaching Practices document, April 1997.*

*Testing Task Force Report, Spring1997.*

*Oermann, M. & Gaberson, K. Evaluation and Testing in Nursing Education (2014).*

*Approved by Faculty Council 09/11/00*

*Revised 08/16/04*

*Updated 08/09*

*Updated 2010*

*Revised 2012*

*Approved by Undergraduate Programs Curriculum Committee 03/20/13*

*Passed by Undergraduate Programs Faculty 05/13/13*

*Revisions Approved by Undergraduate Programs Curriculum Committee 04/14/14*

*Revisions Approved by Undergraduate Programs Curriculum Committee 08/08/14*

*Approved by Undergraduate Programs Faculty 08/15/14*

*Revised by Undergraduate Curriculum Committee 11/16/16*

*Revised by UP Faculty 11/28/16*

*Approved AC 01/23/17*

*Revised and Approved by UP Faculty 11/13/17, 12/04/17*