## UNIVERSITY OF VIRGINIA SCHOOL OF NURSING

### **Definition of Scientific and Quantitative Reasoning Competency:**

The University of Virginia's School of Nursing assesses its students' knowledge and skills in the areas of scientific and quantitative reasoning together because both are very closely related in the curriculum of the School. The School of Nursing expects its graduates to have mastered essential fundamental knowledge in scientific and quantitative reasoning in preparatory coursework and in clinical application of professional nursing practice. The School of Nursing has assessed student competency in scientific and quantitative reasoning by using the results of two national tests, which all graduates of the School are required to take annually. The first is the secured version of the Mosby Assesstest, which is a diagnostic readiness and practice test for the professional nursing licensure exam. The second is the National Council Licensure Examination (NCLEX), which is required prior to licensure for practice as a registered nurse.

# Description of Methodology Used to Gather Evidence of Scientific and Quantitative Reasoning Competency

The Mosby Assesstest is administered to students during a 3-week period in April of each academic year. Two-hour blocks of time are used for each of the exam's four parts. The exam is administered in a secured monitored classroom setting with a proctor. The Professional Testing Corporation of New York scores the exams and returns both the individual and group analysis to the School for review prior to distribution to the students. The entire process takes about 3 weeks.

Graduates arrange to take the NCLEX as part of the process of state licensure application. The test is developed and administered by the National Computer Systems – Pearson Company under contract with the National Council of State Boards of Nursing. The test is offered in a computer-adapted format at computer testing centers by appointment and under strict security and supervision. Results of the NCLEX are available to graduates within days. Aggregate data on pass-fail rates are provided quarterly by the state boards of nursing, and the Virginia Board of Nursing provides a breakdown of results for all nursing programs in the Commonwealth of Virginia. Detailed program analysis is available annually from the national testing service for the programs with comparison data on performance related to the aggregate test pool.

### Results for Spring 2004 Assessment of Scientific Reasoning Competency

The 2003 results of the Mosby AssessTest are as follows:

- Of the 265 RN Assess Test questions, the UVA group answered 173 correctly (65%)
- Overall the group scored 1 point higher than the total RN norm group and 2 points higher than the bachelor norm group.

Overall pass-fail rates for the NCLEX:

• The 2003 overall pass-fail rates for 90 first time candidates taking the NCLEX in Virginia was 88.89% (80 pass-10 fail).

#### **Summary:**

Comparison of the NCLEX results with other schools of Nursing in the Commonwealth of Virginia: the state average was 85.15. The UVA pass rate of 88.89% was above the state average and the national average of 87.01

UVA 88.89 State 85.15 National 87.01