



Academic Regulation | Standard

Medication Dosage Calculation Assessment (MDCA) Requirements

Medication administration is a practice skill all registered nurses are taught and use on a regular basis during their practice careers. One simple mathematical miscalculation in the medication administration process can result in human demise. UBC Okanagan nursing students are required to complete medication dosage calculation assessments (MDCA) prior to all practice courses commencing with the exception of NRS 136. The method of assessment (electronic or hard copy assessments) is to be determined by the Team leaders. Medication dosage calculation proficiency of 95% or greater will be required before the student is to administer medications to a patient in the practice setting.

MDCA Procedure

Nursing students are required to purchase a dosage calculation product (online program or workbook) as assigned at the beginning of the nursing program. Students must complete the assigned modules on dosage calculation for administration of medications to prepare for the assessment. As there are multiple methods to performing calculations, it is recommended that students choose one method and consistently maintain that process through seminar, lab and nursing practice.

Prior to the graded MDCA, students will be given the opportunity to practice MDCA's during seminar and/or lab time. Dedicated time will be set aside for practice and questioning.

Students must be able to show their mathematical calculation for each question and may use a calculator to verify work completed. Only basic calculators are to be used and calculator sharing is not permitted. Please refer to the [Academic Regulation | Standard | Appropriate use of electronic devices](#) for more information. Students must obtain a minimum score of 95% on each MDCA written for the duration of the nursing program.

If a student scores less than 95%, it is considered an unsuccessful grade. Each MDCA with a score achieved less than 95% will be reviewed by a second teacher and the team leader prior to informing the student of the unsuccessful grade.

Guidelines regarding testable content and frequency of practice tests are decided by the leadership of the practice course. The School of Nursing maintains a goal of consistency for all students across all MDCA testable courses.

Remediation and Consequences in Semester III and IV

The student who is unsuccessful in the MDCA (scores less than 95%) in semester III and IV receives one week of remedial practice.

Ratified by the SoN November 2020. To be reviewed November 2023.



After the week of remedial practice, the student writes another MDCA. Students who fail to demonstrate a standing of 95% on the rewrite are placed on a learning contract with required remediation prior to being permitted a second rewrite.

Both the original MDCA score and MDCA rewrite score are recorded on the learning contract.

A student who fails to demonstrate a standing of 95% on the second rewrite will be assigned a failed (F) standing in either NRSG 201 (semester III) or NRSG 202 (semester IV).

Remediation and Consequences in Semester V, VI, and VII

The student who is unsuccessful in the MDCA (scores less than 95%) in semester, V, VI, VII is placed on a learning contract. With required remediation, and receives one week of remedial practice.

The original MDCA score is recorded on the learning contract.

After one week of remedial practice, the student writes another MDCA. A student who fails to demonstrate a standing of 95% on the rewrite will be assigned a failed (F) standing in either NRSG 301 (semester V), NRSG 302 (semester VI), or NRSG 421 (semester VII).