

Middle Tennessee State University  
School of Nursing

Undergraduate Curriculum Success Plan using  
Assessment Technologies Institute, LLC (ATI)

**Overview**

The purpose of this policy is to describe integration of the Assessment Technologies Institute, LLC. (ATI) Comprehensive Assessment and Review Program into the undergraduate curriculum.

The School of Nursing has partnered with ATI to provide curriculum support, standardized assessments, and additional resources to augment opportunities for student success in the undergraduate nursing program and first-time passing performance on the National Council Licensure Exam (NCLEX).

The goal of ATI resource integration throughout the nursing curriculum is to enhance student learning and strengthen content knowledge and mastery. Best practice suggests that outcomes are at the highest level when ATI resources are integrated throughout the curriculum.

**Curriculum Integration**

The SON Undergraduate Curriculum Success Plan is reviewed annually and revised as needed to align with course content. A review of the plan will be communicated to students prior to any ATI assignment, practice or proctored assessments, or remediation activities in the course and included in the orientation for each course administering Content Mastery Series (CMS) Assessments.

A major component of the success plan is the assessment/remediation process. Practice and proctored assessments are administered in specific courses to assess current knowledge, benchmark performance, and reinforce nursing knowledge and confidence. All ATI resources used supplement the didactic and clinical instruction provided by SON faculty. Data derived from the assessment/remediation process is used as both a predictor of NCLEX success and for ongoing program improvement.

**Content Mastery Series**

Content Mastery Series (CMS) assessments provide data regarding a student's mastery of concepts in nine (9) specific content areas:

- Adult Medical-Surgical Nursing
- Fundamentals
- Pharmacology
- Maternal Newborn Nursing
- Pediatric Nursing
- Mental Health Nursing
- Leadership
- Community Health Nursing
- Nutrition

The content-specific assessments measure the student’s level of knowledge and help students identify what they know as well as identify areas requiring remediation or additional learning. Multiple practice and proctored assessments, and individualized remediation activities based on student performance, are included in the CMS as well as medical-surgical exams targeting individual body systems that provide formative evaluation of the content prior to the Capstone Clinical course. A detailed report with analytical data for all students will be provided to course faculty including the date and duration of each assessment taken and all review or remediation activities completed.

Nine Content Mastery Assessments are administered at different points in the program in conjunction with a didactic course. Placement of each assessment is based on the specific content area with some assessments administered at the end of a comparable course and other assessments administered later in the program. The following table depicts placement of the Content Mastery Assessments by course.

**Placement of Content Mastery Assessments**

Course	Assessment
NURS 3030: Health Assessment	Nutrition
NURS 3380: Caring for Clients with Mental Health Alterations	Mental Health Nursing
NURS 3350: Introduction to Nursing Practice	Fundamentals
NURS 3530: Caring for Adult Clients I	Pharmacology
NURS 3550: Caring for the Childbearing Family	Maternal Newborn Nursing
NURS 4330: Caring for Adult Clients II	Adult Medical Surgical
NURS 4370: Caring for Community as Client	Community Health Nursing
NURS 4570: Leadership and Professional Practice	Leadership
NURS 4585: Caring for Children and Teen Clients	Pediatric Nursing

*Scheduling Content Mastery Series (CMS) Assessments*

All CMS assessments are mandatory in the assigned course and require approximately 1 to 2 hours to complete. Assessments may be administered within either the scheduled didactic or corresponding clinical course timeframe. Course faculty will schedule the assessments based on individual course content, however, assessments should be administered 1 to 2 weeks prior to the final exam or when approximately 90% of the course content is complete. All assessments will be administered in the SON computer lab. A faculty scheduling template is available on page 8 of this policy.

*Proctoring Content Mastery Series (CMS) Assessments*

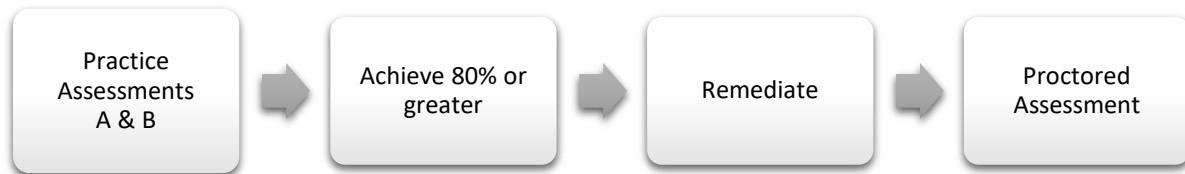
Faculty and staff who are not certified as an ATI proctor may not proctor CMS assessments. The ATI proctor training course can be accessed via the ATI website at [www.atitesting.com](http://www.atitesting.com) and must be updated annually. At least one ATI Certified proctor must be present for the duration of the assessment. Any change in administering the proctored assessments must be approved by the School of Nursing Director or designee. Content Mastery Series Assessments given at an off-campus location must be proctored by ATI Proctorio.

*Practice Assessments*

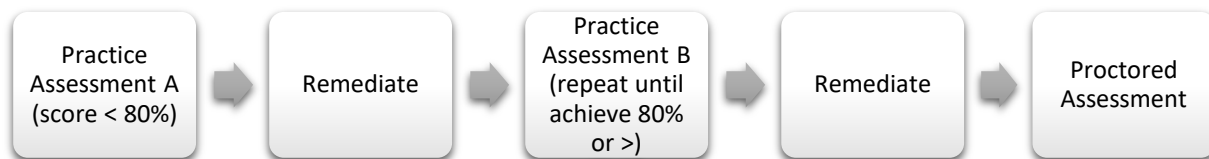
Practice assessments are used as a learning tool to identify strengths, weaknesses, and gaps in knowledge and to help students become familiar with the format and item types on the proctored assessments. Each Content Mastery Series content area contains two practice assessments (A and B) activated by faculty according to the course calendar that may be repeated every 48 hours until closed. Faculty are responsible for setting the practice assessment start and stop dates.

Rationale for the initial practice assessment (A) questions will be set to ‘off’ but will be available for review during the remediation period. Rationale for the second practice assessment (B) will be set to ‘on’ during the assessment. At the conclusion of each practice assessment, a remediation assignment is generated based on the student’s score and specific categorical items missed and all remediation assignments must be completed before the next attempt. Practice assessments are not designed to predict performance on the proctored assessment.

Students must achieve a score of 80% and complete all remediation assignments/activities on the practice assessments (A & B) before they are able to take the proctored assessment.



Students failing to achieve 80% must continue to complete all remediation assignments/activities and repeat practice assessment B until a score of 80% is achieved.



Students may take the standardized proctored assessment once 80% is achieved on the practice assessments and all remediation assignments are complete. Students who do not take the proctored assessment on the scheduled day/time will only have one attempt to achieve a proficiency level 2 and receive course points.

### *Content Mastery Series (CMS) Performance Expectations*

Expectations related to student's performance on the proctored assessments are based on the CMS levels of proficiency derived from ATI's National Standard Setting Study. A successful score on any Content Mastery Series (CMS) assessment equals a proficiency score of Level 2 or greater.

**Content Mastery Series (CMS) Levels of Proficiency**

	<b>Level 3</b>	<b>Level 2</b>	<b>Level 1</b>	<b>Below Level 1</b>
NCLEX-RN Standards	Exceeds	Readily meets	Just meets	Does not meet
Knowledge Demonstrated	High level	Adequate level	Minimum level	Does not demonstrate minimal level
Performance	Exceeds most expectations	Exceeds minimum expectations	Meets the absolute minimum expectations	Does not meet the absolute minimum expectations

### **Remediation**

Active Learning/Remediation is the process where students review content in any area on an assessment where they failed to demonstrate understanding of the information. It is intended to help the student grasp essential information leading to success in each nursing course and ultimately on the NCLEX. The depth and rigor of remediation is driven by student performance. Higher proficiency scores require fewer remediation activities, although all assessment scores will have some remediation activities assigned. The student must remediate using course textbooks and ATI resources. As proof of remediation efforts, students must submit their ATI assessment performance report, transcript of remediation activities, and all completed Focused Reviews to the designated course Dropbox before they can take the proctored assessment. All remediation is mandatory, regardless of the students' level of proficiency. If the student does not complete the required remediation activities, a grade of Incomplete (I) will be assigned for the course.

### **Remediation Methods**

The purpose of remediation is to provide additional student learning opportunities related to clinical judgement and safe nursing practice. Remediation is required in all courses administering any Content Mastery Series (CMS) Assessment or RN Comprehensive Predictor Assessments. Two methods of remediation are used: Focused Review and Three Critical Percent

*Focused Review*

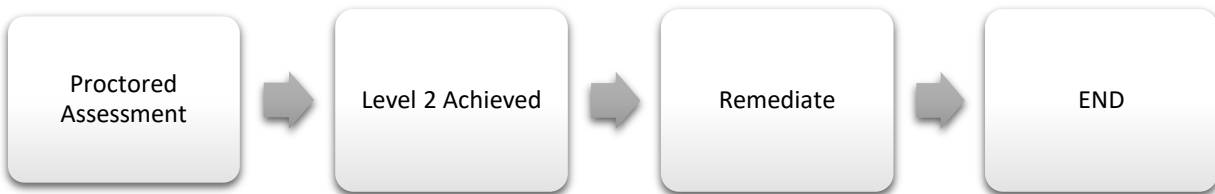
The ATI Focused Review is an individualized learning experience based on student performance on the CMS practice and proctored assessments. At the completion of each assessment, ATI Focused Review automatically assesses a student’s learning gaps and generates an individualized learning experience based upon the topics missed. Focused Review provides content modules in an eBook experience to include text, images, sound, and videos. Each individual student’s performance profile contains a list of required topics for review with a minimum 1-hour Focused Review required based on individual assessment results.

*Three Critical Percent*

From the ATI Assessment Report *Topics to Review*, students review each missed item and follow the links provided to the ATI Focused Review Modules/eBooks. Students should also use their course textbooks, course power point presentations, and class notes to review content. After reviewing missed content, students must identify three key points for each item missed and enter this information on the remediation template. Key points should be based on the type of question missed. For example, if clinical manifestations of restrictive lung disease were missed, the key points should relate to the pathophysiology of that disease. Students may not copy/paste key points from eBooks or other resources. A sample remediation template using the Three Critical Percent is available on page 9 of this policy.

*Post Content Mastery Series (CMS) Proctored Assessment Remediation Process*

Once a student achieves the required level 2 on the proctored assessment all assigned post-assessment remediation activities must also be completed.



Students who do not achieve level 2 proficiency must continue to complete all remediation assignments and may repeat the proctored assessment one time.



### *Repeating a Content Mastery Series (CMS) Proctored Assessment*

The CMS proctored assessment may be repeated one time only. The purpose of repeating the assessment is to determine if there was improvement in a student's performance after completing a review of content and all remediation activities. If the student's score is lower on the second attempt, the highest score will be used to calculate course points.

### *Content Mastery Series (CMS) Grading & Course Credit*

The practice and proctored assessments will constitute five percent (5%) of the TOTAL course grade in the courses assigned to administer CMS assessments. The grading rubric template is available in Desire 2 Learn (D2L) in the ATI Module located within each course to assist in determining the exact number of points based on the CMS Levels of Proficiency. Practice and proctored assessment points will be calculated into the course grade only after the student has achieved the 80% required exam/quiz average. Students who do not achieve the required 80% average will not receive points for the ATI practice or proctored assessments. No additional points will be earned for completing other ATI activities. A sample grading rubric template is provided on page 10 of this policy.

### *Comprehensive Assessments*

Comprehensive assessments are used to assess mastery of nursing content and readiness to take the NCLEX. Comprehensive assessments are given as part of the NCLEX review process in the final semester of the program and the use of comprehensive assessments in the nursing program are outlined in the School of Nursing NCLEX Success Plan policy. The comprehensive assessments administered in the Capstone Clinical course are:

- RN Capstone Content Comprehensive Assessments A & B
- RN Comprehensive Predictor Assessment

### *RN Capstone Content Comprehensive Assessments*

The RN Capstone Content Comprehensive Assessments are based on the NCLEX Client Needs categories and the Content Mastery Series (CMS) content areas. The comprehensive assessments (A & B) are given as a pre-assessment/post-assessment metric as a component of the ATI Capstone Content Review in the Capstone Clinical course. Students take Assessment A prior to beginning the capstone content review. Assessment B is taken at the end of the ATI Capstone Content Review prior to beginning the Virtual ATI (VATI) NCLEX Review.

### *RN Comprehensive Predictor Assessment*

The RN Comprehensive Predictor Assessment measures mastery of nursing content, and readiness to take the NCLEX and is administered as part of the Virtual ATI (VATI) NCLEX Review. This 180-item assessment is based on the CMS content areas described previously and Client Need categories with the percentage of items from Client Need categories mirroring the NCLEX test plan.

The RN Comprehensive Predictor Assessment generates individual and cohort data including:

- Adjusted Individual Total Score (% correct)
- Predicted Probability of Passing NCLEX on the First Attempt
- National and Program Means and Percentile Ranks
- Topics to Review per NCLEX Client Need Categories

- Individual Scores (% correct) within an outcome

#### *ATI Pulse Score and National Licensure Success Predictability*

A national licensure predictability score, which predicts statistical likelihood of first-time NCLEX success, is generated for each student by ATI Pulse at the conclusion of each practice and proctored assessment. As a student progresses through the program, their individual Pulse score changes. The higher the score, the greater likelihood of first time NCLEX success. Cohort data at each level is also predicted using ATI Pulse. Faculty can use the cohort data to gain insight into knowledge gaps by level, future performance on assessments and course exams, and potential NCLEX success.

#### *Content Mastery Series Assessment Cohort Data*

After each CMS assessment is completed, faculty will review the cohort summary data with students to help them understand their individual performance in relationship to the cohort and national standards. The cohort data helps the student reflect on individual performance and areas for improvement. At the end of each semester, faculty will share their CMS assessment cohort data with SON faculty. At the end of each academic year, a comprehensive analysis and report will be completed by ATI providing cohort level data on engagement, activities, and the Content Mastery Series (CMS) assessments across the curriculum. Faculty will then use this data to identify potential knowledge gaps, and for ongoing program improvement.

#### **Other ATI Resources**

A variety of other ATI resources are integrated in all nursing courses including videos, tutorials, audio podcasts, and interactive scenarios. Students may utilize these additional resources to supplement faculty instruction and course materials/resources. While there are no course points assigned for utilizing these resources, they can assist the student in understanding major content, and improving clinical judgement and nursing skills.

**Content Mastery Series (CMS) Faculty Scheduling Template**

<b>CMS Assessments Scheduling Template</b>				
<b>Practice Assessments</b>	<b>Open Date</b>	<b>Close Date</b>	<b>Course Calendar</b>	
Practice A (Rationale OFF)				
Practice B (Rationale ON)				
Timeframe: Time limited 48 hours				
<b>Proctored Assessments</b>	<b>Course Calendar</b>	<b>ATI Schedule</b>	<b>Lab Calendar</b>	<b>ATI Proctor</b>
Assessment Name:				
*Initial Attempt:				
Second Attempt: (Required only for proficiency level < 2 on initial attempt)				
<b>Cohort Data</b>				
Cohort Data shared with students:				
Cohort Data shared with faculty:				

\*Initial CMS proctored assessment should be given 1-2 weeks before the final exam or when 90% of course content is complete.



**SAMPLE Focused Review Remediation Template - Three Critical Percent**

<b>Remediation Template</b>		
<i>Student Name</i>	<i>John Smith</i>	
<i>CMS Assessment</i>	<i>Pediatrics: Practice A</i>	
<b>Content Area</b>	<b>Item Missed</b>	<b>Key Points</b>
Health Promotion of School Age Children	Teaching about Bicycle Safety	<ol style="list-style-type: none"> <li>1. Identify safe areas to ride</li> <li>2. Always wear a helmet</li> <li>3. Ride with flow of traffic</li> </ol>
Health Promotion of Infants	Teaching about Teething	<ol style="list-style-type: none"> <li>1. 6-8 teeth before 1 yr. of age</li> <li>2. First teeth appear between 6 -10 mon. of age</li> <li>3. S/S include drooling, chewing</li> </ol>
Cystic Fibrosis	Nutritional Interventions	<ol style="list-style-type: none"> <li>1. Well balanced diet</li> <li>2. Three meals a day</li> <li>3. Pancreatic enzymes</li> </ol>

**SAMPLE Content Mastery Series Grading Rubric Template**

<b>Content Mastery Series Grading Rubric</b>			
<i>CMS Assessment:</i>	<b>Pharmacology</b>		
<i>Course:</i>	<b>NURS 3170</b>		
<i>Total Course Points:</i>	<b>500</b>		
<i>5% CMS Allocation</i>	<b>25 points</b>		
<b>Practice Assessments: XX Points (10 point allocation)</b>			
<b>Complete Practice Assessment A (5 points)</b> Remediation: - Minimum one-hour focused review on initial attempt - Complete Three Critical Percent template for each item missed.		<b>Complete Practice Assessment B (5 points)</b> Remediation: - Minimum one-hour focused review on initial attempt - Complete Three Critical Percent template for each item missed.	
<i>Total Practice Assessment Points:</i>		<i>XX Points (10 points)</i>	
<b>CMS Initial Assessment Scoring: XX Points (15 point allocation)</b>			
<b>Level 3</b> <b>XX Points (10)</b>	<b>Level 2</b> <b>XX Points (10)</b>	<b>Level 1</b> <b>XX Points (2)</b>	<b>Below Level 1</b> <b>0 Points</b>
<b>Remediation</b> <b>XX Points (5)</b> Minimum one-hour focused review	<b>Remediation</b> <b>XX Points (4)</b> Minimum two-hour focused review	<b>Remediation</b> <b>XX Points (3)</b> Minimum three-hour focused review	<b>Remediation</b> <b>XX Points (2)</b> Minimum four-hour focused review
<i>Total Initial Assessment Points:</i>		<i>XX Points</i>	
<i>Total Initial Remediation Points:</i>		<i>XX Points</i>	
<b>Repeat CMS Assessment</b>			
<i>None</i>	<i>None</i>	<i>Required</i>	<i>Required</i>
<b>Retake Assessment Scoring</b>			
<b>Level 3</b> <b>XX Points (4)</b>	<b>Level 2</b> <b>XX Points (3)</b>	<b>Level 1</b> <b>0 Points</b>	<b>Below Level 1</b> <b>0 Points</b>
<i>Total Points Available: 25 points</i>		<i>Total Points Earned:</i>	

*\*Remediation is required for all levels of proficiency*

*\*\*If a lower score is obtained on the second attempt, the first attempt score will be used to assign points.*

*\*\*\*This template should be used in all courses with CMS assessments. Point allocations in red are based on 25 points which is 5% of the total 500 course points. Each course will be different based on the total number of points, but the CMS point allocation will be 5%.*

Approved 8/25/2023