

I. POLICY

Pre-clerkship Phase Assessment and Grading

II. PURPOSE

This policy outlines the elements of domain-based grading used in the Pre-clerkship Phase of the MD program. It also details the criteria in each domain for a “Pass” and subsequent promotion to the next module.

III. RESPONSIBLE PARTY AND REVIEW CYCLE

The Curriculum Policy Subcommittee will review and update annually with input from the Module Directors Committee and Pre-Clerkship Curriculum Committee. Any changes to pre-clerkship grading structure and associated assessments must be reviewed by the Director of Assessment and Assistant Vice Dean for Pre-Clinical Education. Final approval will be obtained from the Medical Education Committee (MEC) annually prior to the start of the academic year.

IV. ACCREDITATION REFERENCES

LCME 9.5	Narrative Assessment
LCME 9.6	Setting Standards
LCME 9.7	Formative Feedback
LCME 9.8	Fair and Timely Summative Assessment
SACSCOC 12.3	Student Rights
SACSCOC 12.3	Student Complaints

V. DEFINITION(S)

Written exam: Exam with multiple choice questions

Practical exam: Exam that assesses student demonstration of knowledge in a practical setting (e.g., human anatomy lab)

NBME style: Clinical vignette with at least four, preferably five, answer options, comparable to the style of the National Board of Medical Examiners (NBME)

VI. DESCRIPTION

M1 & M2 Grading System

Students are assessed within each module using a domain-based grading system to include: 1) Medical Knowledge, 2) Clinical Evaluation, and 3) Applied Learning. Using this structure, an overall total score calculation is not used to determine passing a module. Instead, students must meet the minimum requirement established in each domain to pass each module and promote through the pre-clerkship curriculum.

Descriptions of the three domains of the M1 & M2 grading system are as follows:

Medical Knowledge: The Medical Knowledge domain may be assessed using written and practical lab exams. Modules that are eight weeks or less will have a midterm and a final exam. Modules greater than eight weeks may have more exams. Changes in the number of written and lab exams require annual MEC approval.

- Development of exam (pre administration)
 - Written exams will be NBME assessments. If it is not possible to use the NBME Customized Assessment Services, questions should be written in NBME style. If available NBME questions do not adequately address course objectives, up to 15% of the written exam can be faculty-created questions.
 - Written exam questions should be reviewed thoroughly by at least two content experts (typically module director, co-module director, discipline director).
 - Final written exams must include questions assessing the cumulative material. Module directors are responsible for informing students in advance what percentage of the exam will be cumulative. Modules with more than two written exams may have cumulative questions on each exam after the first exam.
 - If a practical exam is administered in the module, the combined performance on the practical and written component will be utilized to calculate an exam score total and determine passing performance. The exam score total will be weighted based on the number of questions allocated to each component of the exam.
- Review of exam (post-administration)
 - This review will be implemented using a committee (Assistant Vice Dean for Pre-Clinical Education or Assistant Dean for Pre-Clinical Education, Director of Assessment, Module Director, and at least one other content expert (e.g., Module Co- Director, discipline director, etc.).
 - Student feedback relating to the exam will be collected and shared with all members of this review committee. Items for which <50% of students answered question correctly and have a discrimination index less than 0.10 will be automatically flagged and reviewed together by the committee, as well as any items flagged by students and faculty. The committee will make a final determination on if an item is classified as “poor performing” and/or “out of scope.” Items classified as such will be removed.
 - If no questions are removed, the NBME-provided % correct score will be used “as is” to calculate final medical knowledge domain score.
 - If the review results in removal of a question due to it being out “out of scope” or “poor performing,” a new % correct score will be calculated using the following formula:
$$\text{New \% correct score} = \frac{\text{\# questions answered correct based on original score}}{\text{adjusted \# of exam questions}}$$

- If a question has missing information needed to answer it correctly (e.g., all answer options are incorrect, image is missing, no lead-in statement), the question will be removed. Students will not receive credit for answering the question. The raw score and total number of questions will be adjusted accordingly.
- If a student receives a New % Correct Score that exceeds 100%, a 100% will be recorded for that score.
- M1 & M2 exam retest
 - An exam score total of 68% or greater indicates a passing exam score. If the exam score total is < 68%, the student will be offered the opportunity to retest the written portion of the exam. Retests will not be offered for practical exams.
 - A module written exam may be retested once following an exam failure subject to constraints described below.
 - Prior to the retest, the student is encouraged to meet with the module director to discuss preparation for the retest, to understand the grade implications of not retesting, and to ensure that the student understands the timeline and their responsibilities regarding communication with the testing center.
 - A student is recommended to retest if their exam score total < 68%. The following number of retests is allowed per semester:
 - M1 Fall semester = 4 retest maximum
 - M1 Spring semester = 2 retest maximum
 - M2 Fall semester = 2 retest maximum
 - M2 Spring semester = 1 retest maximum
 - If the total exam retest score is ≥ 68%, then the student's total score for that exam will be recorded as 68% in the grade book.
 - If the total exam retest score is < 68%, the highest earned total score will be recorded in the grade book.
 - Retests will not be offered for written examinations if the student's final domain grade will not change as a result of the retest score.

Clinical Evaluation: The Clinical Evaluation domain encompasses both clinical skills as well as ultrasound skills. Both clinical skills and ultrasound skills are graded based on attendance, completion of assignments, and meeting outlined criteria on assessments. In order to pass this domain, students must do the following:

- Clinical Skills (CS)
 - Complete all CS assignments
 - Attend all CS sessions including workshops, small group sessions, practice sessions (or appropriate make up sessions), and clinical reasoning sessions
 - Demonstrate a minimum competency on every Clinical Skills Assessment that may be scheduled within the module.

- Students who score below the minimum competency score will receive a pass, if they are within .5 points of the required benchmark; however, they will be recommended to complete additional practice.
- Students who pass the CSA, but receive < 80% on an individual domain in any Clinical Skills Assessment will be recommended for additional practice.
- Students who earn less than a “Pass” on the first attempt of the Clinical Skills Assessment are allowed one retest.
 - If the student passes the retest, then the student’s grade for that assessment will be recorded as the minimum competency score in the grade book.
 - If they do not pass the retest, the highest earned score will be recorded in the grade book. The student will receive a “Fail” for this domain.
- Ultrasound (US)
 - Complete all US assignments, including pre-lab and post-lab assignments (Sonosim or Blackboard quiz)
 - Attend all US sessions (or appropriate make up sessions)
 - Demonstrate a minimum competency on every Ultrasound Assessment that may be scheduled in the module
 - Score of 11/15 or greater (> 73%) for Ultrasound Objectively Structured Clinical Exams (OSCE)
 - Score of 11/15 or greater (> 73%) for Lab Scanning images
 - Students who earn less than a “Pass” on the first attempt of an individual Ultrasound assessment are expected to return for a retest session where minimum competency on that Ultrasound assessment should be achieved.
 - If the retest score is above the passing threshold, then the student’s grade for that assessment will be recorded as 11/15 (Ultrasound OSCE or Lab Scanning Image).
 - If the student does not meet the minimum competency during the retest session, the highest earned score will be recorded in the grade book. The student will receive a “Fail” for this domain.

Applied Learning: The Applied Learning domain encompasses points earned from individual and team-based assessments. Students earn points based on their first attempt performance, which is graded utilizing a criterion-based rubric or answer key aligned to the learning objectives. Points are not earned based on completion or attendance. Each assessment in this domain must be weighted less than 25% of total points for this domain. Assigned points are based on a whole number; however, a student may receive partial credit based on their performance. Retakes are not allowed for Applied Learning assessments. Feedback for each submission is provided to students/groups of students. These sessions are NOT mandatory; however, students are not eligible to earn points if they miss a session or are tardy by >10 minutes, unless they have approved leave. Students must earn 70% of points from Applied Learning to pass this domain. Module

Directors may update the Applied Learning answer keys as needed. Score adjustments on Applied Learning assignments that require a change to the number of points indicated on the syllabus will be made in consultation with the Director of Assessment (or designee) and Assistant Vice Dean for Pre-Clinical Education (or designee). If removal of 1 or more questions results in an assignment accounting for 25% or more of the Applied Learning domain, these proposed changes would require MEC approval before being considered final. Removal or addition of assignment requires MEC approval.

Professionalism: Professionalism is assessed during the course of the modules through the student's interactions and expectations placed on student's behavior. Lapses in professional behaviors in curricular contexts will be recorded for longitudinal monitoring and, as appropriate, intervention. This monitoring includes attendance to sessions in the domains of Medical Knowledge, Clinical Evaluation, and Formative, as well as mandatory sessions. See the Professionalism and Expectations for Professional Behaviors Policy for more details.

Formative Activities

Required formative activities, including weekly quizzes, will be administered in each module. Practice-based learning and improvement is part of professionalism; student performance on these formative activities will not count towards the domains of Medical Knowledge, Clinical Evaluation, or Applied Learning.

- Completion of weekly quizzes is required in order to assist students in monitoring their progress towards achieving the learning objectives. Formative weekly quizzes are administered throughout each module with the following structure:
 - Quizzes are available Monday mornings via Blackboard and due Sunday at 11:59 p.m.
 - Quizzes are open-book, but closed-peer.
 - Students are allowed multiple attempts.
 - Students are not required to meet a minimum benchmark.
 - Feedback will be given.
- Completion of formative activities is considered an expected professional behavior (see the Professionalism and Expectations for Professional Behaviors Policy for more details).

Make-Up and Missed Assignments

Students with approved personal leave by Student Affairs will be eligible to make up missed points. For planned leave, every effort should be made by the student to complete assignment prior to approved leave.

Students with unapproved leave relating to assessment in the domains of Medical Knowledge or Clinical Evaluation will be required to complete the academic activities missed. Students without approved leave for sessions within the domain of Applied Learning may complete the academic activities missed but will not be eligible to make up points.

M1 & M2 Grading Scale

Final module grades will be determined by the percent of earned points. A Pass/Fail grading system is used. A student must pass each domain to receive a final module grade of Pass:

- Pass
 - Medical Knowledge 68% - 100%
 - Clinical Evaluation
 - CSA achieve the benchmark established for the level of the curriculum
 - US OSCE 73% - 100%
 - US Lab Images 73% - 100%
 - Applied Learning 70% - 100%
- Fail
 - Medical Knowledge < 68%
 - Clinical Evaluation
 - CSA do not meet the benchmark established
 - US OSCE < 73%
 - US Lab Images < 73%
 - Applied Learning < 70%

Reporting of Assignments, Exams, and Final Grade

Each graded event score should be updated within 10 days of the event date (unless otherwise indicated in the syllabus) in Blackboard gradebook so students can assess their standing in each domain. Any questions regarding points allotted for a particular assignment must be submitted to the module director in writing within one week of the grade being posted or by the start of the final exam (whichever is sooner). Any challenges to the points earned for a particular assignment should be submitted following the Appeal and Complaint Procedures Policy.

Final grades must be posted to the Student Information System within 6 weeks of the final day of the module. For more information, see the General Assessment Principles Policy.

Student Promotions through M1 & M2 Modules

In order to promote out of a module students must demonstrate minimum proficiency of each of the components of the grading system by achievement of the following:

- Medical Knowledge: average $\geq 68\%$ on summative exams
- Clinical Evaluation:
 - 100% attendance or equivalent makeup;
 - Completion of all clinical skills and ultrasound assignments;
 - Clinical Skills: Pass the CSA;
 - Ultrasound: $\geq 11/15$ (73%) for US OSCE and Lab Scanning Sessions;
- Applied Learning: average $\geq 70\%$ on assignments

Rounding to whole numbers occurs only when determining the final domain grades for Medical Knowledge, Clinical Evaluation, and Applied Learning. Scores will be rounded based on the following decimal: 0.50 and above are rounded to the nearest whole number.

M1 & M2 Remediation Policy

If a student is permitted to remediate a failed module by the Student Progress Committee (SPC), the following remediation plans and timeline will be implemented upon approval by SPC. Once approved, all module failures must be remediated at EVMS. Module failures due to Medical Knowledge and Applied Learning failures will be remediated after the last spring semester module ends. Module failures due to Clinical Evaluation (i.e., Clinical Skills and Ultrasound) will be remediated immediately following the module. The following remediation plans are subject to modification by SPC prior to approval:

- **Medical Knowledge failure:** The student will be required to complete all module quizzes (e.g., weekly quizzes, IRAT, GRAT, small group quiz) and minicases with an average of $\geq 80\%$ via unlimited attempts. Then, the student will be required to take a comprehensive summative written exam (no more than 10-15 questions/week of the module) receiving a grade of $\geq 68\%$ to pass via a single attempt. One week of remediation will be scheduled for every 3 weeks of original module time.
- **Clinical Evaluation failure:** The student will be required to meet with the Clinical Skills or Ultrasound Director and pass academic assessments to ensure competency in the required skills as determined by the respective director. A remediation plan, including timeline, will be individualized based on student performance, prioritizing areas in which the student did not meet the competency.
- **Applied Learning failure:** The student will be required to complete any missed/incomplete competency assignments. A remediation plan, including timeline, will be individualized based on student performance, prioritizing areas in which the student did not meet the competency.

VII. RELATED DOCUMENTS

Appeal and Complaint Procedures Policy
Attendance of Academic Responsibilities Policy
Formative Feedback and Assessment Policy
Narrative Assessment Policy
Professionalism and Expectations for Students' Professional Behavior Policy
Standards for Advancement and Graduation Policy
Student Progress Committee Structure and Function

VIII. HISTORY OF APPROVALS AND UPDATES

The following list documents policy approvals and updates by oversight authority, date, and summary of changes. This policy is housed on the MD Student Handbook webpage.

- On June 17, 2020, the Medical Education Committee approved the update to separate the policy from the MD Student Handbook and to include domain based grading and the related changes.
- On September 18, 2020, the Medical Education Committee approved updates clarifying grading of practical exams and the process of obtaining student feedback on exams.
- On December 3, 2020, the Medical Education Committee approved an update to clarify the timeline and procedures for posting final grades.
- On June 9, 2021, the Medical Education Committee approved removing the Professionalism domain, changing the CSA benchmark to “Pass,” changing the details for the formative weekly quizzes, and updating the remediation plans.