

### 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 Doctor of Medicine (MD) program at the Macon & Joan Brock Virginia Health Sciences Eastern Virginia Medical School at Old Dominion University ("EVMS"). It also details the criteria in each domain for a "Pass" and subsequent promotion to the next course.

#### III. RESPONSIBLE PARTY AND REVIEW CYCLE

The Curriculum Policy Subcommittee will review and update annually with input from the Preclerkship Course Directors Subcommittee and Pre-clerkship Education Subcommittee. Any changes to pre-clerkship grading structure and associated assessments must be reviewed by the Assessment, Learning Outcomes, and Evaluation (ALOE) team and Pre-clinical Education leadership. Final approval will be obtained from the Medical Education Committee 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 12.4 | Student Complaints                   |

#### V. DEFINITIONS

Written exam: Exam with multiple choice questions

**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

### **Pre-clerkship Grading System**

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

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Descriptions of the domains of the pre-clerkship grading system are as follows:

<u>Medical Knowledge</u>: The Medical Knowledge domain may be assessed using written exams. Courses that are eight weeks or less will have a midterm and a final exam. Courses greater than eight weeks may have more exams. Changes in the number of written exams require 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 course director, course co-director, and/or discipline director).
  - Final written exams must include questions assessing cumulative material.
     Course directors are responsible for informing students in advance what percentage of the exam will be cumulative. Courses with more than two written exams may have cumulative questions on each exam after the first 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, Associate Dean for Educational Assessment and Evaluation or Assistant Director for Assessment, course director, and at least one other content expert (e.g., course co-director, discipline director, etc.) or designees).
  - 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.</p>
  - 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:

new % correct score = <u>original % correct score \* original # of exam questions</u>

adjusted # of exam questions

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 If a student receives a new % correct score that exceeds 100%, a 100% will be recorded for that score.

#### Exam retest

- $\circ$  A score of ≥ 71% indicates a passing exam score for the following courses:
  - Brain, Mind and Behavior (BMB)
  - Heart, Lung, and Kidney (HLK)
  - Hormones and Reproductive Health (HRH)
- A score of  $\geq$  68% indicates a passing exam score for the following courses:
  - Foundations of Disease (FOD)
  - Human Structure (HS)
  - Introduction to Organ Systems (IOS)
- If the exam score is less than the specified passing exam score, the student will be offered the opportunity to retest the exam.
- A course 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 course 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 concerning communication with the testing center.
- A student may elect to retest if their exam score is less than the specified passing exam score up to 4 times during the Pre-clerkship Phase.
- o For BMB, HLK, and HRH courses:
  - If the exam retest score is ≥ 71%, then the student's score for that exam will be recorded as 71% in the grade book.
  - If the exam retest score is < 71%, the most recent score will be recorded in the grade book.
- For FOD, HS, and IOS courses:
  - If the exam retest score is ≥ 68%, then the student's score for that exam will be recorded as 68% in the grade book.
  - If the exam retest score is < 68%, the most recent 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.

<u>Clinical Evaluation</u>: The Clinical Evaluation domain encompasses both clinical skills as well as ultrasound skills. Students are expected to attend (or complete required makeup) for all sessions for this domain and complete all required assignments in accordance with the

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Professionalism and Expectations for Professional Behaviors policy. To pass this domain, students must do the following:

- Clinical Skills (CS)
  - Meet programmatic expectations for attendance
  - Demonstrate minimum criteria or higher on all required clinical skills formative assessments
  - Demonstrate a minimum competency or higher on every Clinical Skills
     Assessment that may be scheduled within the course.
    - Students who score below the minimum competency score will receive a pass if they are within 0.5 points of the required benchmark.
    - Students who earn less than a "Pass" on the first attempt of a Clinical Skills Assessment are allowed one retest.
      - This will require retesting each domain of the CSA, regardless of which domains the student passed on the initial attempt.
      - If the student passes the retest, their grade for that assessment will be recorded as the minimum competency score in the grade book.
      - The minimum competency score will be reported for each CSA domain regardless of performance on the first attempt.
    - If the student does not pass the retest, the most recent score will be recorded in the grade book. The student will receive a "Fail" for the Clinical Evaluation domain.
      - The most recent score will be reported for each CSA domain score below a pass.
      - The minimum competency score will be reported for each passing CSA domain score.
    - Students may be required to participate in individualized clinical skills development, prioritizing areas for recommended growth based on student performance on CSA(s) administered in the Pre-clerkship Phase.
- Ultrasound (US)
  - Meet programmatic expectations for attendance
  - Demonstrate a minimum competency on every Ultrasound Assessment that is scheduled in the course.
    - score of ≥ 11/15 (> 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.

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- If the retest score is above the passing threshold, then the student's grade for that assessment will be recorded as 11/15.
- If the student does not meet the minimum competency during the retest session, the most recent score will be recorded in the grade book. The student will receive a "Fail" for this domain.

<u>Professionalism</u>: Professionalism is assessed 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 includes timely completion of required assignments and attendance at required sessions. See Professionalism and Expectations for Professional Behaviors Policy for more details.

<u>MD Phase Requirements</u>: Required phase activities/assessments will be administered in each course. Student performance in these activities will not count towards the domains of Medical Knowledge or Clinical Evaluation. Completion of MD phase requirements is considered an expected professional behavior (see the Professionalism and Expectations for Professional Behaviors Policy for more details).

MD Phase Expectations: Expected phase activities/assessments will be administered in each course, which are to be attended/completed as a part of professional expectations; student performance on these formative activities will not count towards the domains of Medical Knowledge or Clinical Evaluation. Completion of all MD phase expectations is considered an expected professional behavior (see the Professionalism and Expectations for Professional Behaviors Policy for more details). A student grade will not be withheld if the expectations are not met by the end of the course.

#### Make-Up and Missed Assignments

Every effort should be made by the student to complete assignments prior to approved leave. If the assignment required for a grade is not completed by the communicated deadline, the student will be reported for a professionalism lapse and will be assigned a new deadline. If the assignment required for a grade is not completed by the new communicated deadline, the student will again be reported for a professionalism lapse and will fail the course. Students with an unexcused absence will be submitted for a professionalism lapse (see Professionalism and Expectations for Professional Behaviors Policy for more details) and are required to makeup required academic activities missed to avoid a course failure.

### **Pre-clerkship Grading Scale**

A Pass/Fail grading system is used. A student must pass each domain to receive a final course grade of Pass.

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For the courses of BMB, HLK and HRH, Pass/Fail is determined as follows:

Pass

Medical Knowledge 70.5% - 100%

Clinical Evaluation

CSA achieve the benchmark established for the level of

the curriculum

US Lab Images 73% - 100%

Fail

Medical Knowledge < 70.5%</li>

Clinical Evaluation

CSA do not meet the benchmark established

■ US Lab Images < 73%

For the courses of FOD, HS and IOS, Pass/Fail is determined as follows:

Pass

Medical Knowledge 67.5% - 100%

Clinical Evaluation

CSA achieve the benchmark established for the level of

the curriculum

US Lab Images 73% - 100%

Fail

Medical Knowledge < 67.5%</li>

Clinical Evaluation

CSA do not meet the benchmark established

■ US Lab Images < 73%

### Reporting of Assignments, Exams, and Final Grade

Each graded event score should be updated within ten (10) days of the event date in Blackboard gradebook (unless otherwise indicated in the syllabus) so students can assess their standing in each domain. Any questions regarding points allotted for a particular assignment must be submitted to the course 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 Appeals and Complaints Policy. Final grades must be posted within six (6) weeks of the final day of the course. For more information see General Assessment and Evaluation Principles Policy.

## Student Promotions through Pre-clerkship Phase

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

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- Medical Knowledge:
  - o For the courses of BMB, HLK and HRH: average ≥ 71% on summative exams
  - o For the courses of FOD, HS and IOS: average ≥ 68% on summative exams
- Clinical Evaluation:
  - Meet programmatic expectations for attendance;
  - Completion of all required clinical skills and ultrasound assessments;
  - Clinical Skills: demonstrate competency on the CSA;
  - Ultrasound: ≥ 11/15 (> 73%) for Lab Scanning images;
- Complete MD Phase Requirements

Rounding to whole numbers occurs only when determining the final domain grades for Medical Knowledge and Clinical Evaluation. Scores will be rounded based on the following decimal: 0.50 and above are rounded to the nearest whole number. Individual exam scores may be rounded to the nearest 100<sup>th</sup>.

### **Pre-clerkship Remediation Policy**

If a student is permitted to remediate a failed course by the Student Progress Committee (SPC), the following remediation plans and timeline will be implemented upon approval by SPC. Once approved, all course failures must be remediated at EVMS. Course failures due to Medical Knowledge will be remediated after the last course ends for each academic year. Course failures due to Clinical Evaluation (i.e., Clinical Skills and Ultrasound) will be remediated immediately following the course. Students will be expected to maintain standards for professional behavior as outlined in the Professionalism and Expectations for Students' Professional Behaviors Policy throughout the remediation period.

The following remediation plans are subject to modification by SPC prior to approval:

- Medical Knowledge failure: The student will be required to complete all course quizzes
   (e.g., weekly practice questions, small group quiz, etc.) and minicases with an average of
   ≥ 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
   course) receiving the passing exam score based on the specific course via a single
   attempt. One week of remediation will be scheduled for every three weeks of original
   course time.
- <u>Clinical Evaluation failure</u>: 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 a
  timeline, will be individualized based on student performance, prioritizing areas in which
  the student did not meet the competency.

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• <u>Professionalism failure</u>: The student will be required to complete a remediation plan individualized to the reason for the failure.

Refer to the General Assessment and Evaluation Principles Policy for more information regarding how remediation scores and grades are reported.

#### VII. RELATED DOCUMENTS

Appeal and Complaint Procedures Policy
Attendance of Academic Responsibilities Policy
Formative Feedback and Assessment Policy
General Assessment and Evaluation Principles 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 the removal of the professionalism domain, changing CSA benchmark to "pass", changing the details for the formative weekly quizzes, and updating the remediation plan.
- On February 9, 2022, the Medical Education Committee approved the change to the formula used if an item is removed from an NBME exam.
- On May 11, 2022, the Medical Education Committee approved the removal of Applied Learning as a domain, change in the number of retests across the Pre-clerkship Phase, and change from formative to MD Phase Requirements and MD Phase Expectations, and align the missed assignment process/grading with the Clerkship Phase.
- On April 12, 2023, the Medical Education Committee approved the removal of M1/M2 and module (replaced with pre-clerkship and course) to align with the curriculum redesign, increase passing score for BMB, HLK and HRH MK domain to 71%, remove

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retest language for MD2025, updated language about attendance for the clinical evaluation domain and around late/missing assignments.

• On March 13, 2024, the Medical Education Committee approved to include required participation in individualized clinical skills development opportunities based on CSA performance and professionalism requirement during remediation of a course.

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