BSOM Assessment System: Assessment Administration

Rationale
Assessment within the MD program at the Brody School of Medicine will occur in the context of programmatic curricular alignment such that the assessments are aligned with institutional and course/clerkship level learning objectives and learning activities. This includes formative and summative assessments, and will utilize written examinations, (MCQ, SAQ, Essay), performance assessments (OSCE and simulation), assignments (reports, projects, self-reflection), and oral examinations among the assessment tools.

Examinations administered at Brody School of Medicine follow the procedures in this document to provide a secure and reliable examination environment, consistent with what is required by the National Board of Medical Examiners. This allows consistent and accurate assessment of student knowledge fund.

Scope
The Standard Operating Procedure applies to all medical learner assessments at BSOM. It outlines the procedures for administering assessments to learners enrolled in BSOM courses and clerkships and contains recommendations to enable the creation of a highly reliable process. The SOP also communicates expectations to key stakeholders for administering assessments and affects students, staff, faculty members, and course/clerkship directors of the Brody School of Medicine who design, create, and administer assessments.

Definitions
ADA: The Americans with Disabilities Act, which prevents discrimination against people with disabilities
Accommodation: A change or adjustment from the normal curriculum or equipment format that allows an individual with a disability to access content or complete tasks to pursue a regular course of study.
BSOM: Brody School of Medicine
ECC: Executive Curriculum Committee
CD: Course or clerkship director
NBME: National Board of Medical Examiners
MCQ: multiple-choice questions, written in the single best answer format used by the NBME
Exam, examination: a high-stakes assessment that contributes greater than or equal to 5% of a course grade.
Quiz: a low stakes MCQ assessment that contributes to 10-20% of the final grade to course in
the foundational phase.

**Assessment Architecture:** a planning document including the key characteristics of an assessment, such as the date, time, duration, type of assessments, identity of courses participating, number of items per course, and total number of items.

**Testing Blueprint:** a planning document used by the course director to ensure the balanced content representation of the MCQs used on an assessment.

**ExamSoft:** the testing platform used for the development and administration of multiple-choice quizzes and examinations at BSOM.

**Secure Review:** a component of ExamSoft allowing learners to review the questions and answers on an assessment either immediately or at a fixed time after completing the assessment.

**Administration of Internally Created Assessments**

Prior to the assessment, the testing administrator routinely checks the testing rooms to ensure that the testing stations are functioning properly.

**Remote Extended Quizzes:**

**Quiz Structure:**

- All foundational science quizzes will be administered using ExamSoft given the following format:
  - Remotely administered over the weekend (outside of scheduled class time between Friday and Monday at 7 AM).
  - All quizzes are timed (90 seconds per question).
  - ExamSoft lockdown browser will be applied.
  - Exam ID will be used for verification of test taker ID.
  - Learners will only receive 1 download per quiz unless technical issues arise.
  - Learners are allowed 1 sheet of blank scratch paper.
  - Secure review will be offered for 10 minutes immediately following quiz attempt.
  - During secure review, learners will only have access to incorrect questions with rationales.
  - Learners must adhere to honor code with the additional following restrictions:
    - All quizzes must be completed independently.
    - Learners must not copy or share quiz content with any learners.
    - Learners are not allowed to take photos/pics/videos.
    - Learners are not allowed to write down quiz questions or share them electronically.
    - Learners are not allowed to discuss the quiz questions with other learners.
  - Quiz grades must not be dropped in the foundational phase.
• Quizzes must be weighted 10-20% of the final grade for courses in the foundational phase of the curriculum.
• Each hour of lecture or laboratory session covered on a quiz should have between 1 and 5 questions.
• For remote extended quizzes, the upload times will be monitored. If a learner fails to upload quiz during the required window for an unexcused reason, the time will be recorded and shared with the Promotion and Review Committee.
• If technical issues arise, learners should review the troubleshooting guide. If the issue persists learners must contact ExamSoft technical support first (1-866-429-8889).
• If ExamSoft has not resolved the issue, OME assessment team will be able to assist on Friday until 5 PM and between 12-3 PM on Saturday and Sunday.
• Laupus library has loaner devices and/or computer labs available if needed.
• iPads/Tablets are not acceptable devices for assessment purposes.
• If a learner is granted an excused absence for a quiz, they must first complete the REDCap survey to notify the Office of Medical Education. All make-up quizzes must be taken during the predetermined make-up session identified on the Block calendar. Quizzes must not be made up during class sessions.
• Quiz flex days will not be offered.

In-Person Assessments:

Day Prior to Assessment:
• All set up typically occurs the day prior to the administration of an assessment. The following are done in advance:
  o Scan the room for any prohibited items.
  o A dry erase notebook and a dry erase pen is placed at each testing station.
  o Earplugs are placed at the proctoring station.

Day of Assessment:
• Testing administrator arrives 45 minutes early to ensure that the rooms are open and seating chart is posted outside the exam rooms 30 minutes before the beginning of the assessment.
• Testing administrator ropes off testing area and places disposable cups at the water fountain.
• Proctors arrive at least 30 minutes before the assessment.
• Proctors ensure the room does not have prohibited items.
• Proctors and testing administrator ensure each station has the appropriate items required for testing: usually noteboards, pens, and ear plugs.
• Throughout this process, the testing rooms in the testing center remain locked until they are opened by a proctor. During this time, proctors remain in the hallway outside.
of 2L-07 and 2L-55 to answer learner questions and ensure learners are not walking through the secured areas prior to the assessment beginning.
  o One proctor checks Pirate IDs and reminds learners about not having any unauthorized items or devices.
  o Another proctor is assists learners with finding their seat locations and assists with any potential log in issues in Examplify.

- All learners are expected to be in their assigned seats no later than the posted seat time in Elentra.
- Check-in for assessments begins 30 minutes before the assessment begins.
- A learner will be considered late if they are not in their assigned seat by the posted seat time in Elentra.
- Learners with testing accommodations follow a schedule matching their accommodation listed in Elentra.
- Learners should proceed to their assigned seat, log on to the testing site, ensure the correct pirate ID is displayed in Examplify and download the assessment.
- Learners having trouble logging on, downloading, or starting an assessment should alert a proctor for assistance.
- After the check in window has closed, proctors walk into their assigned room and make sure all learners have an exam to download. Once all learners have successfully downloaded the exam, the proctor will begin reading the proctor’s pre-assessment instructions, which covers a full list of unauthorized items as well as other housekeeping items such as restroom breaks, exam upload, and a brief description of the assistance proctors can and cannot provide to assessment takers.
- After standardized directions have been read, the assessment password is posted at the front of the classroom at the starting time for the assessment and secure reviews.
- There will be an honor code statement for learners to acknowledge once logged into the computer, prior to beginning all assessments.
- Learners complete the assessment and submit answers when completed. Prior to leaving the testing center, learners should ensure a green completion screen is displayed and log off completely.
- Learners are required to log off their assigned station prior to leaving the testing center.
- All learners completing in-person assessments are expected to be available until 8 pm on their assessment day.

- Secure review for internally created assessments:
  o All learners are expected to be in their assigned seats no later than the posted seat time in Elentra for Secure Reviews. Late arrivals will not be admitted.
  o Occurs immediately after a quiz completion.
  o Occurs within a few days after all learners have completed the examination, at the date and time indicated in Elentra and block calendars.
  o Proctors in each testing room will have a student clarification form for learners to ask for further clarification from the course director.
Learners that are unable to attend secure review, but desired to do so, must attain an approved absence from OSA to schedule a makeup secure review at a later date.

- Makeup secure reviews must be scheduled within two calendar weeks of the initial secure review date.
- Attendance will be documented for each secure review.

### Administration of NBME Exams:

- **Learners** are expected to be available **until 8 PM** on in-person assessment days.
- **Administration** of the NBME subject exams will follow guidelines described by the NBME.
- **For required NBME exams not contributing towards a course or clerkship grade,** it is recommended that they follow the NBME guidelines for those learners approved for NBME testing accommodations.
- **NBME exams that are required and contribute towards a course or clerkship grade** can follow the accommodations procedure provided by Student Disability Support Services.
- **NBME Testing Irregularities** –
  - **All testing rooms** should be reserved **until 8 PM** on testing day to accommodate learners.
  - **Technical difficulties** will be addressed through instructions in the NBME Chief Proctor’s Manual.
  - **If exam cannot be immediately restarted,** the Testing Administrator will contact the NBME and attempt to restart the exam within 30 minutes.
  - **If unsuccessful,** the Associate Dean of Medical Education, in conjunction with other appropriate parties, will make the decision whether or not to exit the exam with specific keystrokes, found in the proctor’s manual in each testing room, to keep the first exam from being scored.
  - **If the exam is unable to be administered on the scheduled morning,** learners will return at 1pm for exam administration.
  - **In the event** that a major technical difficulty is experienced and is unable to be resolved by the final day of the clerkship, the exam will be administered on the next day of classes. If the technical difficulty occurs at a time that is followed by a significant break (greater than 1 week), every attempt will be made to allow learners the opportunity to take the exam on the Monday of the week of break.

### Responsibilities

There are several key stakeholders involved in the testing process. Listed below are each key stakeholder, along with their expected responsibilities and time frame for completion.

**Associate Dean for Curricular Innovation in Medical Education**
• Makes final decisions regarding any testing irregularities that may require postponement of any assessment.
• Provides back-up to the assessment team as needed.

Assistant Dean of Assessments and Outcomes
• Oversees all day-to-day operations of assessments.
• Communicates with Student Affairs regarding any learner absences and tardies.
• Assists with check-in procedures.
• Provides back-up to the assessment team as needed.

Testing Administrator
• Day of Assessment:
  o Arrives 45 minutes before the start of the assessment. Oversees the preparation of the rooms for the assessment (lighting, noise machines), checks testing rooms and restrooms for any prohibited items, posts seating charts outside of rooms, ropes off secure testing area, distributes noteboards, dry erase pens and ear plugs.
  o Identifies the communication plan between rooms and relays to proctors in each room. The Testing Administrator ensures all proctors can communicate across all rooms during examinations via email, text, or alternative mechanism described at the beginning of each assessment.
  o Provides read aloud instructions for each assessment to proctors along with proctor report template and sign in/out sheet.
  o Responsible for distribution of assessment password to proctors and records start and end times of each assessment.
  o Reviews the download testing log in ExamSoft to identify any problems or absences. Reports any absences to Assistant Dean of Assessments and Outcomes and/or Student Affairs.
  o Monitors all rooms for technical difficulties, irregularities, and other concerns throughout the assessment.
  o At times when there is more than one exam room in use for a given timeframe, the Testing Administrator will serve as the ‘circulating proctor’ observing activity outside of the testing rooms unless needed to respond to testing concerns.
• Post Assessment:
  o Ensures all noteboards and dry erase pens are collected.
  o Verifies all learners have successfully uploaded the assessment. Contacts learners if upload issues arise.
  o Reports all testing irregularities on assessments to the Deans in the Office of Medical Education, Course Directors, ECC and, if appropriate, to the NBME.
  o Maintains files of seating arrangements, testing schedules, proctor
assignments, test irregularities, and learner breaks.

- Reports compliance with test development timeline and any irregularities to the Deans in the Office of Medical Education and ECC.
- Responsible for scheduling all make-up exams in coordination with the Office of Student Affairs.
- Collects assessment adjustment data from Course Directors through the Assessment Performance Report.

**Proctors**

- **Day of Assessment:**
  - Arrives 30 minutes prior to the assessment seat time.
  - Inspects the room for prohibited items and contacts the Test Administrator with any concerns (temperature, lighting, etc.).
  - Ensures the room is set up with all required resources (such as dry erase boards, iPads, and pens) appropriately distributed.
  - **As Learners Arrive:**
    - Proctors must be in the hallway to assist with check-in.
    - Instructs learners entering exam room that only their one card and car keys are allowed in the secure testing area. All other personal belongings should be left in a secure area such as lockers or their personal vehicle.
    - Ensures that learners are reminded of all prohibited items, including smart watches, cell phones, etc.
    - Ensures that all learners’ head and ears are not covered. All headwear is prohibited unless for religious purposes. No personal/unauthorized items are allowed in the secure testing area. Such items include but are not limited to: outerwear (all outerwear will need to be removed and inspected—no blankets will be allowed), hats, food, drinks, purses, briefcases, notebooks, notes, resources, pagers, watches, cell phones, recording devices, and photographic equipment.
    - Learners will be required to push back all sleeves and turn out any pockets prior to entering the secure testing area.
    - Verifies that foam earplugs are available to learners. If headphones are preferred, then these must be provided by the learner and inspected by the proctor prior to use. Headphones with Bluetooth (or any sending/receiving capability) will not be allowed.
    - Food and drink will only be allowed for assessments greater than 4 hours. There will not be a place to store food or drinks in the secure testing areas. If food and drinks are allowed, food must be placed in a clear bag and free of any writing. All drinks must be in a container free of writing. If there is a health reason for food/drinks (such as diabetes) for exams less than 4 hours, OME will make accommodations with appropriate documentation.
use cups will be provided for use at the water fountain outside of the restrooms in the secure testing area.

- Learners are not permitted to access any unauthorized items during exam administration.
- Learners are not allowed to make notes on their dry erase noteboards prior to the official start of the first question. Once the exam begins, learners are permitted to make calculations or notes on the dry erase noteboard provided. In the event a new dry erase noteboard is needed, the learner can raise her/his hand and request to exchange the original dry erase noteboard for a new one.

  o **At the Beginning of the Assessment:**
    - Verifies all learners have downloaded assessment under their correct pirate ID.
    - Reads aloud assessment instructions to learners prior to start of all assessments.
    - Posts assessment password and start time.
    - Records the start and end time on the proctor report.

  o **During the Assessment:**
    - Proctors are not authorized to answer questions from learners regarding assessment content/format/questions.
    - Proctors are responsible for monitoring testing irregularities.
    - Proctors monitor and address distractions during assessments.
    - Proctors maintain a standardized log of learner breaks, records the time of departure and return.
    - Ensures that only one learner is allowed in each restroom (male/female) at a given time.
    - Ensures that learners do not leave the secure testing area at any time during the administration unless accompanied by a proctor.

  o **After the Assessment:**
    - Collects noteboards, dry erase pens, and cleans room.
    - Ensures that all dry erase noteboards are accounted for by seat assignment and returns to the Testing Administrator.
    - Returns completed proctor report and sign in/out sheet to the Testing Administrator.
    - Ensures that all learners have logged off all testing stations.
    - Ensures that testing room doors are closed prior to leaving the testing center.

**Student Affairs**

- For each in-person assessment:
Ensure that a representative from OSA is available, in the testing center, prior to each assessment seat time and 20 minutes after.

Post-Assessment:
- Uploads individual scores and performance profile from NBME into Elentra for learners to review.
- Communicates any failures to learners to facilitate remediation plans.
- Prepares a monthly report of outstanding assessments and coordinates scheduling learners for make-up exams with the Testing Administrator.

Medical Students (Learners)
- General Procedures:
  - Learners must adhere to the Brody School of Medicine Code of Professional Conduct and the Code of Student Conduct as they are always in effect. Any testing irregularities will be brought to the attention of the Deans of OME and the Associate Dean for Student Affairs and processed accordingly. Any testing irregularity on a NBME exam must be reported to the NBME as outlined in their policy: [http://www.nbme.org/students/Subject-Exams/security.html](http://www.nbme.org/students/Subject-Exams/security.html).
  - Learners are expected to be available until 8 PM on all in-person assessment days.
  - During an assessment, learners are not allowed to communicate with anyone.
  - Learners are not permitted to ask proctors, or other personnel, questions regarding assessment content, format, or other questions.
  - Learners must notify proctors if there are any technical issues.
  - Learners are not allowed to erase any noteboards prior to turning them in to the proctor. If a clean noteboard is needed, learners should raise their hand to signify a proctor.
  - Learners are not allowed to leave the testing room with any notes, noteboards, and/or dry erase pens.
  - Unauthorized personal items are prohibited in the secure testing areas. Such items include but are not limited to hats, hoodies, purses, blankets, briefcases, notebooks, notes, resources, pagers, watches, cell phones, recording devices, and photographic equipment. Foam earplugs are allowed. OME will supply disposable earplugs for learners. If headphones are preferred, these must be provided by the learner and inspected by the proctor prior to use. Headphones with Bluetooth capabilities or other sending/receiving capabilities are not allowed.
  - Outerwear needs to be removed and inspected prior to entry into the secure testing area.
  - No food/drink will be allowed for any assessments less than 4 hours unless there is an approved accommodation for health reasons.
  - Learners are not allowed to access any unauthorized items during breaks.
Learners are required to sign in/out with a proctor prior to taking a break.
Learners must not leave the secure testing area at any time during the assessment unless accompanied by a proctor.
Along with appropriate attire, shoes are expected to be worn in the testing center at all times.
Restrooms in the secure testing area are restricted to only learners actively taking assessments. Only one learner is allowed in each restroom (male/female) at a given time.

- **Day of Assessment:**
  - Be in your assigned seat no later than the posted seat time in Elentra. A learner will be considered late if they are not in their assigned seat by the posted seat time in Elentra.
  - For in-person assessments, if a learner arrives late for an unexcused reason, they will need to acquire a late arrival slip from Student Affairs to obtain permission to be admitted into the testing room. The learner’s name, date, and time of arrival will be recorded. This information will be shared with the Promotion and Review Committee. The late arriving learner will be strategically assigned a new seat upon arrival to mitigate distraction for other learners.
  - The late arriving learner will not be given extra time to complete the assessment and will have to forfeit the time they were late. For example, if a learner arrived 30 minutes late for an assessment that was four hours in length, they would only receive 3.5 hours to complete the exam. The testing administrator will be responsible for monitoring start and stop times for late arriving learners.
  - If a learner is granted an excused absence for an exam, they must first complete the RedCAP survey to notify the Office of Medical Education. All make-up exams must be taken during the predetermined make-up session identified on the Block calendar.
  - Learners must adhere to the instructions provided by the proctors administering the assessment.
  - Learners are responsible for ensuring that they are taking the assessment under their own Pirate ID.
  - Learners must acknowledge the Honor Code prior to starting the assessment.
  - Learners are not allowed to make notes on their noteboard prior to starting their first question. Once learners have started their first question, they are permitted to make calculations or notes only on the noteboard provided. In the event a new noteboard is needed, the learner can raise her/his hand and request to exchange the noteboard for a new one.
  - Learners must ensure that assessment has been successfully uploaded prior to leaving the testing center. Successfully completed assessments will have a green completion screen.
Learners are required to log off their assigned station prior to leaving the testing center.

- Secure Review:
  - Learners can ask for student clarification forms during the secure review for internally created exams only. The purpose of the student clarification form is to identify learners’ critical thinking/processing of questions and answer choices and to help provide clarifications to learners’ misperceptions.
  - Student clarification forms can only be submitted to the proctor during the secure review and not after. This process eliminates the work needed by the Student Representative and avoids placing them between learners and faculty.
  - No references, other than those allowed in the examination room, may be utilized for the purpose of substantiating a clarification.
  - Forms that are illegible may not be considered by the course director.
  - Clarifications will not be accepted under any circumstances once you leave the exam room.
  - All course directors will review item analysis and make determinations for any changes to grade such as dropping questions, accepting multiple answers, wrong answer coded, etc. based on item performance.

Schedule for Review

This procedure is reviewed and approved by the Curriculum Committees, including the Executive Curriculum Committee, Foundational Curriculum Committee, and the Clinical Curriculum Committee every three years.

This procedure is disseminated by the Office of Medical Education to learners and teaching faculty/administration as part of a “student handbook” during orientation each year.

Related Policies

None

Applicable Laws, Regulations & Standards

LCME Standard 9, Element 8, and Standard 3, Element 5.