UC Riverside, School of Medicine Policies and Procedures Policy Title: Policy For Required Developmental Assessment Plans For All Pre-Clerkship Courses Policy Number: 950-06-001

Responsible Officer:	Senior Associate Dean for Medical Education
Responsible Office:	Office of Medical Education
Origination Date:	07/21/2022
Date of Revision:	07/18/2024
Scope:	Administration, Faculty, Students

### I. Policy Summary

All pre-clerkship Block Courses must provide a *developmental assessment plan* that includes both formative and summative assessments of all medical students.

All assessments must have some elements which are intentionally linked to previous content and previous assessments in the course and are developmentally progressive.

Formative assessments must begin early during a course to enable students to engage with the course content immediately, enable students to measure their learning progress, provide immediate feedback to students on their progress and to enable sufficient time for remediation.

## II. Definitions

Summative assessment is defined as an assessment (e.g., test, quiz, oral exam, OSCE, etc.) with the purpose to confirm that sufficient learning and/or competency has been achieved by the student to meet required quality standards and enables the allocation of a letter or numerical grade or promotion to a new level. These assessments are usually medium or high stakes. Summative assessments of a learner are commonly given at the end of a course. Summative assessments are considered "assessments of learning."

Formative assessment is defined as a series of multiple no stakes (e.g., scored only for student feedback) and/or low stakes assessments provided throughout the duration of a course. Formative assessments are intentionally linked to previous content and assessments and are developmentally progressive. The purpose of formative assessment is to: 1) provide immediate feedback to students on their progress and enable sufficient time for remediation, 2) reinforce content and concepts, 3) promote student self-study habits and inhibit procrastination, and 4) provide course directors and faculty with immediate information about how well the student and class is understanding course concepts or performing a skill. Formative assessments are considered "assessment for learning."

## LCME Element 9.7 Formative Assessment and Feedback

"The medical school's curricular governance committee ensures that each medical student is assessed and provided with formal formative feedback early enough during each required course or clerkship to allow sufficient time for remediation. Formal feedback occurs at least at the midpoint of the course or clerkship. A course or clerkship less than four weeks in length provides alternate means by which medical students can measure their progress in learning." Block Course Structure – UCR SOM Block Courses in the pre-clerkship phase are made up of integrated modules. Each block course has the following five modules: LACE, Clinical Skills, Case-based Learning, Doctoring and Foundational Sciences modules. Block 1 has a 6<sup>th</sup> module known as the Biostatistics module.

- III. Policy Text
  - A. All pre-clerkship block courses must provide a *developmental assessment plan* that includes both formative and summative assessments of all medical students.
    - The Block Course Directors (Foundational Sciences including Anatomy, LACE, Case-based Learning, Doctoring, Clinical Skills, and Biostatistics, etc.), working together in collaboration must furnish to the Pre-clerkship Curriculum Subcommittee (PCCS) and the Office of Medical Education (OME) a document (see Appendix) which lists the types of formative feedback provided to students (as required by the LCME Element 9.7) and a visualized assessment timeline which clearly outlines the developmental assessment program for their course (see example below). Narrative summative assessment is required for every student in every block.



- 2. The block course must contain both *low-stakes* formative assessments (e.g., quizzes) and *high-stakes* summative assessment(s). The course director(s) has the discretion of adding optional *no-stakes* formative assessments for students. NOTE: No-, low-, medium- and high-stakes assessments are defined in the "Policy for Defining the Degree of Stakes of Assessments and Required Student Improvement Plans in Pre-clerkship Courses" Policy Number: 950-06-039.
- 3. LACE 1 and 2, Case-based Learning 1 and 2, Doctoring 1 and 2, Clinical Skills 1 and 2 module and other components of the block course have requisites or assessments that must be successfully completed by the student to pass the block course (see Policy: Grading Scales, Grading Criteria and Grade Reporting, Policy Number: 950-06-012).
- 4. In the <u>foundational sciences modules in all block courses in Year 1 and 2:</u>
  - a) The weighting of the high-stakes final exam is fixed at 75%.
  - b) The weighting of each low-stakes formative quizzes is fixed at 4% irrespective of the length of the block course.
  - c) The low-stakes quizzes cumulatively together should weigh  $\leq$  20% of the total grade.
  - d) Any difference in percentage left over of the total score will be used by the block course / Foundational Sciences module director for other assessments at their discretion with review and approval by the Assessment Team, PCCS and MEC.

Example: A Foundational Sciences module has three "self-assessment quizzes" each counting 4% for a total of 12%. The final exam is worth 75%. The Foundational Sciences module director has 13% left over to use for other assessments in the module (e.g., a midterm, a team-based learning session, polling quiz during an active learning session, case-based assessments, etc.).

- e) All low-stakes quizzes must have some elements which are intentionally linked to previous content and previous assessments in the course.
- f) Timing and spacing of low-stakes quizzes:
  - i. The low-stakes quizzes should be administered in a range of at least 1 week apart but not further than 3 weeks apart.
- g) No quiz scores are dropped in formulating the final grade.
- h) Assignments or assessments for "bonus points" are not allowed as they prevent students from receiving an appropriate counseling intervention by the Office of Academic Success (see Policy for Defining the Degree of Stakes of Assessments and Required Student Improvement Plans in Pre-clerkship Courses" Policy Number: 950-06-039).
- 5. A course must establish a "cumulative assessment" system which follows three educational principles:
  - a. Frequent but spaced testing
  - b. Some repetition of previous content/concepts in each new assessment
  - c. A compensatory assessment rubric:
    - i. A course in which students are assessed in a single domain of competency within a component of the course (e.g., knowledge) should have a compensatory assessment system that enables students to compensate poor performance on one (knowledge) assessment with good performance on other (knowledge) assessments. Having a mixture of low-stakes knowledge quizzes and high-stakes knowledge final exam in the Foundational module are essential features of compensatory assessment system.
    - ii. A course in which students are assessed in multiple domains of competency (e.g., knowledge, clinical skills, laboratory skills) should have a non-compensatory assessment system across competency domains. In such a model, poor performance in one competency domain may not be compensated by adequate or excellent performance in another competency domain. For example, within a block course (where the domains of competence are knowledge, clinical skills and laboratory skills are all assessed) a passing performance on the knowledge quizzes and exam for the foundational module cannot be used to compensate for a failing performance in the LACE (clinical skills) and anatomy (laboratory skills) components during the block course. *All domains in all modules must be passed to pass the block course.*
- 6. The developmental assessment plan must be presented by the Block Directors *if any changes* are made to the Assessment and Evaluation Team for consultation and then preliminarily approved by the PCCS prior to the start of the course each year to prevent final grade calculation errors and to encourage psychometrically-sound approaches (e.g., assessments with large standard deviations add more weight to rubric than intended, etc.). The updated developmental assessment plan must receive final approval by the MEC.
- 7. A summative high-stakes assessment should be offered a few days prior to the end of a course, to allow the course directors and faculty time to provide feedback through review sessions or "just

in time instruction" that enables strengthening of challenging concepts or performance for the entire class.

## B. Collaboration on assessments between course directors each academic year

- 1. Directors of each Block Course which includes the Foundational module, LACE, Case-based Learning, Doctoring, Clinical Skills, Anatomy must meet with the Executive Associate Dean for Preclerkship Medical Education or Associate Dean for Pre-clerkship Medical Education and course coordinators before each academic calendar year is scheduled. During these meetings, directors will:
  - a. Share their upcoming assessment timelines, and modify them, if necessary, to ensure that assessments in each course are timed to reduce competing student study effort within the block course and enable students to commit appropriately to all tasks within the course.
  - b. Discuss opportunities to intentionally link assessments between course components and promote integration of the basic, clinical, population health and behavioral science concepts in medicine.
- C. Students are asked to evaluate the amount, quality, and utility of formative feedback in each preclerkship block course as required by LCME Element 9.7. The de-identified, aggregated data is provided to the Block Directors, Executive Associate Dean for Pre-clerkship Curriculum and the PCCS as part of each annual Block Course Program Evaluation Report.
- IV. Forms/Instructions Appendix A

### V. Related Information

LCME Element 9.7 Formative Assessment and Feedback

"Policy for Defining the Degree of Stakes of Assessments and Required Student Improvement Plans in Pre-clerkship Courses"

# Approvals:

# MEDICAL EDUCATION COMMITTEE (07/18/2024)

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## Appendix A

### Block Course: Types of formative feedback provided and course assessment timeline

**Instructions:** Foundational Course Directors must meet with the directors of LACE, Clinical Skills, Doctoring, Case Based Learning, and others (e.g., Anatomy, etc.) as appropriate to complete this document. The document should be submitted to the Student Assessment Subcommittee, the PCCS and Associate Dean for Pre-clerkship Curriculum for review.

Developmental Assessment Plan BLOCK COURSE:\_\_\_\_\_\_\_\_\_\_ COURSE DIRECTOR(S): \_\_\_\_\_\_\_\_\_ Instructions: Review the associated policies and complete the next two pages.

#### Q1) Course Formative Feedback

 Provide the mechanisms (e.g., quizzes, practice tests, study questions, formative OSCEs) used to provide formative feedback during this block course in the pre-clerkship phase of the curriculum.
 State How Each Type

 Course
 Length of Course
 Type(s) of Formative Feedback
 Timing of Each
 Listed Specifically

Course Name	Length of Course (in Weeks)	Type(s) of Formative Feedback Provided Using Bullet Points	Timing of Each Formative Feedback	Listed Specifically Provides Feedback to Students

#### Policy Number: 950-06-001

Adapted from Courses Lisions Course; the con Medical Education C.7. Data Collection Instrument			

Adapted from Source: Liaison Committee on Medical Education 9.7 Data Collection Instrument

#### Q2) Cumulative Assessment System for Your Course

#### Course Assessment Timeline

• Use the timeline below and color markers to indicate the assessment pattern for your course. NOTE: ALL BLOCK COURSES HAVE LOW STAKES QUIZZES AND A HIGH STAKES (75% of the total grade) FINAL.

• Draw arrows linking the educational concepts between your formative and summative assessments (see the example below).

• Narrative summative assessment must be provided to every student in every block.

• The type of assessment does not need to be indicated here.

Course Component	Course Assessment Timeline
Foundational Module	▶                 <b> </b>
	week 1 2 3 4 5 6 7 8 9 10 11
Doctoring Module	▶
	week 1 2 3 4 5 6 7 8 9 10 11
Clinical Skills Module	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
	week 1 2 3 4 5 6 7 8 9 10 11
LACE Module	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
	week 1 2 <sup>3</sup> 4 5 6 7 8 9 10 11
CBL Module	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
011	week 1 2 <sup>3</sup> 4 5 6 7 8 9 10 11
Other	
	week 1 2 <sup>3</sup> 4 5 6 7 8 9 10 11

Example of Course Assessment Timeline – Source: University of Hertfordshire See next page for example.

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