



WHAT IS COMPETENCY-BASED MEDICAL EDUCATION (CBME)?

CBME is an outcomes-based approach to the design, implementation and evaluation of medical education that uses competencies as the organizing framework.

1. **Competence:** Doing all of the things a professional does consistently while adapting to contextual and situational needs
2. **Domain of competence:** Broad, distinguishable area of competence that, in aggregate, provide a descriptive framework of a profession
3. **Competency:** Observable abilities/behaviors that integrate knowledge, skills and attitudes
4. **Milestone:** Description of an expected developmental pathway for a given competency



HOW IS CBME DIFFERENT FROM A TRADITIONAL CURRICULUM?

	Educational Program	
	Traditional (Structure/Process Based)	Competency Based
Driving Force for Curriculum	Content	Outcome
Goal of Educational Encounter	Acquisition of Knowledge	Application of Knowledge
Assessment	Proxy, removed from context	Authentic, situated in context
Timing of Assessment	Emphasis on Summative	Emphasis on Formative
Evaluation	Norm Referenced	Criterion Referenced
Completion	Fixed Time	Variable Time

Carraccio C, Wolfsthal SD, Englander R, et al. Shifting paradigms: From Flexner to competencies. Acad Med. 2002; 77: 361-367.



WHY ARE GRADUATION COMPETENCIES AND MILESTONES IMPORTANT?

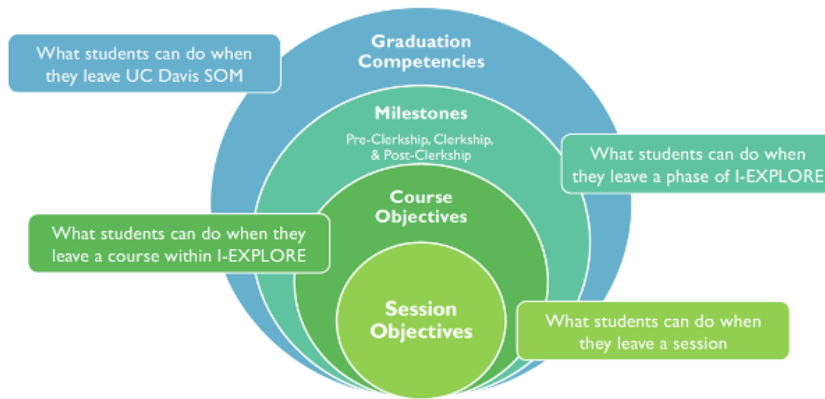
- Graduation competencies are the measurable outcomes for our SOM curriculum. They define what a student should be able to do when they graduate.
- Milestones outline clear developmental goals to assist students in reaching the graduation competencies.
- A curriculum that is aligned with the milestones and competencies ensures that we are graduating students with the knowledge, skills, and attitudes we want for future physicians.



HOW TO USE THE GRADUATION COMPETENCIES

A. Using graduation competencies and milestones to write course objectives

- Graduation competencies and milestones inform what we should be teaching and when.



B. What are learning objectives and why are they important

- A learning objective is a brief statement that describes what students will be expected to learn by the end of a unit of instruction (i.e., school year, course, session, lab, etc.)
- What does a learning objective do?

• At the course level (course objective):

- Determine what content or activities the course should include
- Inform or drive the assessment methods employed in any course
- Integrate skills and knowledge across multiple disciplines and domains
- Can't be accomplished in a single session

• At the session level (session objective):

- Guide the content of a lecture, lab, small group, etc.
- Provides clear guidance to the learner on what they will be expected to know or do following a single session
- Provide building blocks for attainment of course objective

C. How to write a good learning objective

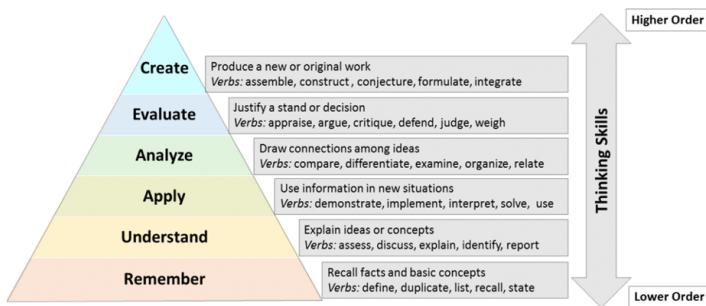
- Learning objectives should address **specific, observable behaviors or skills that are measurable.**
- A good learning objective will include 2 parts:
 - **VERB** aligned with the level of desired mastery (i.e., remember, understand, apply, analyze, etc.)
 - **+ STATEMENT** describing the outcome to be achieved



HOW TO USE THE GRADUATION COMPETENCIES

D. How do I know what level of desired mastery I want the students to have?

- o Bloom's Taxonomy is a helpful tool to identify what level of thinking is appropriate for your objective



- o Checklist for writing a good learning objective:

- Is my objective specific?
- Does my objective contain a verb that reflects the level of expected mastery (see Bloom's Taxonomy to the left)?
- Is my objective measurable/assessable?

<https://www.aamc.org/system/files?file=2019-07/learning-objectives.pdf>

- o Using course objectives to create session objectives
 - Once you have your course objectives, you can determine what you need to teach and how in order to achieve them – sessions!
 - Sessions and session objectives should be derived from your course objectives so the attainment of all the session objectives results in the attainment of your course objectives
- o Assessing our course objectives
 - Assessment lets us know that what we are doing is working
 - Assessments should demonstrate how course objectives have been obtained and be built around the content of your sessions, with clear linkages between session objectives and assessment questions or prompts



RESOURCES IF YOU WANT TO LEARN MORE!

Learning Objective Overview:

<https://www.edglossary.org/learning-objectives/>

AAMC Writing Learning Objectives Handout with a verb list:

<https://www.aamc.org/system/files?file=2019-07/learning-objectives.pdf>

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