STEP 1
Focus on one concept per item
Concepts should be based on the learning objectives for the course. Construct items that present a clear problem with one solution or next best step.

STEP 2
Construct the stem
Compose a concise, clear question that asks examinees to apply knowledge to a novel scenario. It should match the expectations or outcomes for students in the course.

» Remember & Understand: define, identify, locate, name
» Apply & Analyze: categorize, classify, interpret, predict, solve
» Evaluate & Create: appraise, prioritize, arrange

STEP 3
Avoid common errors
A few examples are:
» Using all of the above and none of the above options
» Including negative phrasing such as “which of the following is not ...“ or “all of the following, except”
» Using jargon and abbreviations unfamiliar to examinees

STEP 4
Construct the correct answer
Accompany it with:
» 1 close-to-correct option
» 1 – 3 more plausible distractors that are mutually exclusive
Options should be homogeneous in structure, length, and form. One option should not cue another as being correct or incorrect.

STEP 5
Examine responses using the software’s psychometric data
After the exam is administered, it’s important to examine how students responded, then use the data to revise and refine future exams.

» Difficulty Index: percentage of students who answered the item correctly
» Discrimination Index: measurement that indicates how well an item differentiates between high- and low-scoring students (higher index indicates students with a higher score are more likely to answer correctly than a student with a lower score)
» Distractor Analysis: tells you how many examinees chose each option

Additional Resource

Excerpt from the THRIVE Collection, created by the Office of Faculty Development, University of Nebraska Medical Center. © 2019

SARAH B. MCBRIEN, PhD
Follow on Twitter: @HSE_SMc