TABLE 1

Course descriptions and assessment methods.

Course name	Course number	Total enrollment	Student population	Question pool delivery	Open notes
Upper-Level Physiology	BIOL 305, 307	90	Biology majors	SQB	No
General Chemistry I and II	CHEM 101, 102	200–720	STEM majors	GQ	Yes
Introductory Physics II	PHYS 122	260	STEM majors	GQB	Yes

Note. GQ = groups of questions visible, no backtracking between groupings; GQB = groups of questions delivered singly, backtracking within groups; SQB = single question, backtracking allowed.

TABLE 2

Example of instructors' processes for formulating comparable exam questions in pools.

Difficulty level	Description	Estimated time (min.)	Requires calculation
Easy	Simple concept or calculation that does not require much if any application	1	Yes/No
Medium	Application required; similar to many versions seen; calculation not lengthy	2–4	Yes/No
Difficult	Deeper application/analysis required; longer calculation	5+	Yes/No