ATTACHMENT B

BLOOM'S TAXONOMY (Bloom, *Taxonomy of Educational Objectives Handbook*, 1956)

Table 1: Example Action Verbs for Each Level of Learning

Category	Example Action Verbs				
Knowledge (Recall and Understanding)	Associate	Describe	Indicate	Recognize	Show
	Compare	Differentiate	List	Repeat	State
	Contrast	Distinguish	Name	Restate	Summarize
	Define	Identify	Paraphrase	Review	Tell
Application	Calculate	Estimate	Measure	Record	Trace
	Demonstrate	Give example	Operate	Set up	Use
	Draw	Illustrate	Perform	Sketch	
	Employ	Locate	Prescribe	Solve	
Problem-Solving (Analyzing, Synthesizing, Evaluating)	Advocate	Conclude	Decide	Formulate	Propose
	Analyze	Construct	Defend	Infer	Rank
	Assess	Create	Derive	Judge	Recommend
	Challenge	Critique	Design	Organize	Select
	Compose	Debate	Evaluate	Plan	Suggest

Table 2: Levels of Thinking/Learning

Category	Dimension	Definition	Example Objectives
Knowledge	Recalling	Rote recall: Know common terms, specific facts, methods, procedures,concepts, principles	• Name the major bones of the leg. • List five causes of joint pain. • Define "deep fascia."
	Compre-hending	Interpolation or interpretation: Understand, estimate future implied consequences, justify methods and procedures	• Explain the autoimmune mechanism. • State the present problem in your own words. • Describe the process of differential diagnosis. • Given x symptoms, compare & contrast y & z approaches to treatment. • Provide example of appropriate use of x treatment.
Application	Applying	Using a concept in a new context: Apply theory, solve problems, construct graphs, demonstrate procedure	• Use chart to calculate appropriate dosage for a 45-pound child. • Apply genetics concept to determine potential outcomes in a pregnant woman with x disease. • Perform a physical exam according to established procedure.
Problem-Solving	Analyzing	Breaking something down and understanding its structure, the relationship between parts, the organizational principles: Recognize unstated assumptions and logical fallacies, distinguish between facts & inferences, determine relevance	• Diagram the mechanism leading to shortness of breath in interstitial lung disease. • Determine which of the patient's symptoms can be explained by the primary diagnosis. • Select lab tests which should be done based on patient symptoms, history, and physical exam. • Relate the patient's symptoms to side effects of the medicine she is taking. • Distinguish between findings which are and are not significant to the presenting problem.
	Synthesizing	Building a structure/pattern from diverse elements: Write well-organized essay, propose research question, develop plan for solving a problem, formu-late a classification scheme	• Rank order hypotheses concerning the cause of the patient's symptoms. • Diagnose the patient's problem. • Construct a flow chart which ties together all elements of patient's findings. • Create a care map for the treatment of a diabetic patient. • Write an article describing a research project.
	Evaluating	Judging the value of ideas, works, solutions, materials: Judge logical consistency, adequacy of data in support of conclusions, value of work by internal & external standards	• Select the most effective treatment from an array of options. • Select the most qualified candidate for a specified position. • Evaluate the reliability and validity of research claims/statistics. • Assess peers' and your own SOAP notes based on established criteria. • Critique research proposal and provide suggestions for improvement.

Table 3: Teaching/Learning Strategies Best Suited for Each Level of Learning

Desired Dimension	Suggested Presentational Strategies
Knowing and comprehending	Presentation, lecture, question-and-answer, small group discussion, development of learning issues, self-awareness exercises/tests, review sessions, teaching others, independent study, web-based instruction
Applying	Hands-on, lab, demonstration, case study, live or video demonstration, simulation, role-playing, action plan, teaching others, direct patient contact, guided practice with feedback, precepting, role-modeling
Analyzing	Question-and-answer, brainstorming, case study, problem-solving, trouble-shooting, role-playing, article discussion
Synthesizing	Case study, writing, concept mapping, theory and model building, teaching others, developing research questions, direct patient contact
Evaluating	Case study, critical review, self and group assessment/reflection, reflective writing, direct patient contact