## What do we mean when we ask that students "know the content?"

When faculty members talk about goals for students, we often say things like "I want students to know the material," or "I want students to understand what I have covered in class lectures and discussion." When we are able to specify what we mean by "know" or "understand," we clarify for ourselves and for our students our goals for them. Bloom's taxonomy is useful for this effort. He describes six levels of performance:

## **Our Goals for Students:**

- **Knowledge**: Know specific facts, terms, concepts, principles, or theories.
- **Comprehend**: Understand, interpret, compare and contrast, explain.
- **Application**: Apply knowledge to new situations and to problems.
- **Analysis**: Identify the organizational structure of something; identify parts, relationships, and organizing principles.
- **Synthesis**: Create something, integrate ideas into a solution, propose a plan of action, and formulate a new classification scheme.
- **Evaluation**: Judge the quality of something based on its adequacy, value, logic, or use.

## **Clarifying Our Goals:**

Bloom's categories can help faculty members bring greater clarity and precision to our efforts to state outcomes for student learning.

Sample Outcome: Students will *understand* the major theoretical approaches within the discipline.

## By "understand" we may mean:

- Students can list the major theoretical approaches of the discipline (knowledge).
- Students can describe key theories, concepts, and issues for each of the major theoretical approaches (**comprehension**).
- Students can apply theoretical principles to solve real-world problems (application).
- Students can analyze strengths and limitations of each of the major theoretical approaches for understanding specific phenomena (analysis).
- Students can combine theoretical approaches to explain complex phenomena (synthesis).
- Students can select the theoretical approach that is most applicable to a phenomenon and explain why they have selected that perspective (evaluation).

Mary J. Allen, *Assessing Academic Programs in Higher Education* (Bolton, MA: Anker Publishing, 2004, pp. 34-35.

Relevant Verbs					
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
cite define describe identify indicate know label list match memorize name outline recall recognize record relate repeat reproduce select state underline	arrange classify convert describe defend diagram discuss distinguish estimate explain extend generalize give examples infer locate outline paraphrase predict report restate review suggest summarize translate	apply change compute construct demonstrate discover dramatize employ illustrate interpret investigate manipulate modify operate organize practice predict prepare produce schedule shop sketch solve translate use	analyze appraise break down calculate categorize compare contrast criticize debate determine diagram differentiate discriminate distinguish examine experiment identify illustrate infer inspect inventory outline question relate select solve test	arrange assemble categorize collect combine compile compose construct create design devise explain formulate generate manage modify organize perform plan prepare produce propose rearrange reconstruct relate reorganize	appraise assess choose compare conclude contrast criticize decide discriminate estimate evaluate explain grade interpret judge justify measure rate relate revise score select summarize support value

Adapted from Gronlund as cited in *Assessing Academic Programs in Higher Education* by Mary J. Allen (Bolton: Anker Publishing) 2004, p.37.