Guidelines for Developing a Course in Critical Thinking

General Characteristics

Reasoning, like writing, is a fundamental skill. The ability to analyze an argument and recognize its strengths and weaknesses is a hallmark of an educated person. This ability develops fully through repeated practice in a wide variety of courses throughout a student's academic career. It is more effectively developed, however, when students receive explicit, systematic instruction in critical thinking early in their college experience. For this reason, Critical Thinking courses should be designed primarily, if not exclusively, as 100- and 200-level courses requiring no prerequisites.

Although courses that fulfill the general education requirement for Critical Thinking may be taught in a variety of disciplines under various course numbers, each course must provide general—not narrow or specialized—training in widely applicable reasoning skills. As much as possible, course assignments should demonstrate the cross-disciplinary and ordinary applicability of critical thinking skills. In particular, such a course must:

- provide instruction in identifying and differentiating questions, problems, and arguments
- teach students how to evaluate the appropriateness of various methods of reasoning and verification
- teach students how to identify and assess stated and unstated assumptions, and critically compare different points of view
- introduce techniques for evaluating the quality of evidence and reasoning
- require students to formulate questions and problems, construct and develop cogent arguments, and articulate reasoned judgments

Required Skills-Level in Mathematics

Only those students who have basic skills in determining simple proportions, ratios, and fractions should be allowed to take the Critical Thinking course. Students who need remedial (non-credit) mathematics courses to acquire such skills should not take the course until they have successfully completed those remedial courses.

Core Skills to Be Covered

Specifically, the core content of the Critical Thinking course would include the following skills:

- How to express ideas clearly and precisely, and to identify and clarify vagueness and ambiguity that impedes effective reasoning
- How to identify an argument, i.e., a set of statements in which evidence or reasons are given to support a claim, and to distinguish between arguing for a claim and merely expressing or articulating it
- How to determine if an argument is complete, and to articulate any hidden assumptions made by those arguments that are incomplete
- How to analyze an argument in terms of its structure, and to recognize similar structures and patterns in arguments about completely different subjects
- How to recognize the most common mistaken reasoning patterns (typically referred to as "informal fallacies" in Critical Thinking textbooks), such as ad hominem attacks, and the fallacies of the straw man, red herring, slippery slope, etc.
- How to assess both (a) when reasons, if true, would support a claim, and (b) when evidence or reasons are cogent or credible (that is, how to tell when information is reliable or trustworthy, when to believe or to be skeptical about sources of information, etc.)
- How to distinguish between different basic categories of reasoning (inductive and deductive), and to apply the general rules that determine good reasoning for the various types of arguments within these categories, in a manner useful to a wide range of disciplines and contexts.