

Science

Students are required to complete two courses in the physical or biological - sciences. This may be accomplished in two ways: 1) By completing two courses with laboratories in the basic or applied sciences; 2) By completing one approved course in the applications of scientific knowledge, plus one course with a laboratory in the basic or applied sciences. DEFINITIONS AND EXPLANATIONS 1) A laboratory course in the applied physical or biological sciences brings basic knowledge to bear on the solution of practical problems in engineering, medicine, agriculture, forestry, and other fields for which natural science forms the foundation. Normally applied science courses require one of the basic natural sciences (biology, physics, chemistry, geology) as a prerequisite, and carry at least 4 degree

Description	Capstone	Level 3	Level 2	Benchmark
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
Evidence Selecting and using information to investigate a point of view or conclusion	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis.	Information is taken from source(s) without any interpretation/evaluation.
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
Analysis	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Lists evidence, but it is not organized and/or is unrelated to focus.
Conclusions	States a conclusion that is a logical extrapolation from the inquiry findings.	States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.	States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.	States an ambiguous, illogical, or unsupported conclusion from inquiry findings.
Limitations and Implications	Insightfully discusses in detail relevant and supported limitations and implications.	Discusses relevant and supported limitations and implications.	Presents relevant and supported limitations and implications.	Presents limitations and implications, but they are possibly irrelevant and unsupported.