

Grades & Critical Thinking

adapted from www.criticalthinking.org

Grading standards in Thinking, Teaching, & Learning

The following below defines the outlines of standards for the "grades" of A, B, C, D, and F. These specifications of performance levels must, of course, be placed at two levels: at the department level and at the course level.

The grade of A – The grade of A implies excellence in thinking and performance within the subject and course, along with the development of a range of knowledge acquired through the exercise of thinking skills and abilities. **A-level work is, on the whole, not only clear, precise, and well-reasoned, but insightful as well.** **Mastery of content (objective knowledge) is outstanding and is demonstrated by an ability to use specific, clear examples and illustrations to describe and explain biological processes as they are currently understood.** Basic terms and distinctions are learned at a level which implies not only mastery but true insight into basic concepts and principles. The A-level student has internalized the basic intellectual standards appropriate to the assessment of his/her own work in a subject and demonstrates insight into self-evaluation. The A-level student often raises important questions and issues, analyzes key questions and problems clearly and precisely, recognizes key questionable assumptions, clarifies key concepts effectively, uses language in keeping with professional usage, frequently identifies relevant competing points of view, and demonstrates a commitment to reason carefully from clearly stated premises in the subject, as well as marked sensitivity to important implications and consequences. A-level work displays excellent reasoning and problem-solving within the Biological Sciences and works consistently at a high level of intellectual excellence.

The Grade of B – The grade of B implies sound thinking and performance within the subject and course, along with the development of a range of knowledge acquired through the exercise of thinking skills and abilities. **B-level work is, on the whole, clear, precise, and well-reasoned., but does not have depth of insight.** **Mastery of content (objective knowledge) can be said to be competent and is usually demonstrated by an ability to use at some specific examples and illustrations to describe and explain biological processes as they are currently understood.** Basic terms and distinctions are learned at a level which implies comprehension of basic concepts and principles. The B-level student has internalized some of the basic intellectual standards appropriate to the assessment of his/her own work in a subject and demonstrates competence in self-evaluation. The B-level student often raises questions and issues, analyzes questions and problems clearly and precisely, recognizes some questionable assumptions, clarifies key concepts competently, typically uses language in keeping with professional usage, sometimes identifies relevant competing points of view, and demonstrates the beginnings of a commitment to reason carefully from clearly stated premises in a subject, as well as some sensitivity to important implications and consequences. B-level work displays sound reasoning and problem-solving within the Biological Sciences and works consistently at a competent level of intellectual performance.

The Grade of C – The grade of C implies mixed thinking and performance within the subject and course, along with some development of a range of knowledge acquired through the exercise of thinking skills and abilities. **C-level work is inconsistently clear, precise, and well-reasoned; moreover, it does not display depth of insight or even consistent competence.** Mastery of content (objective knowledge) is incomplete and inconsistent, and is only sometimes demonstrated by an ability to use specific examples and illustrations to describe and explain biological processes as they are currently understood. Basic terms and distinctions are learned at a level which implies the beginnings of, but inconsistent comprehension of, basic concepts and principles. The C-level student has internalized a few of the basic intellectual standards appropriate to the assessment of his/her own work in a subject but demonstrates inconsistency in self-evaluation. The C-level student sometimes raises questions and issues, sometimes analyzes questions and problems clearly and precisely, recognizes some questionable assumptions, clarifies some concepts competently, inconsistently uses language in keeping with educated usage, sometimes identifies relevant competing points of view, but does not demonstrate a clear commitment to reason carefully from clearly stated premises in a subject, nor consistent sensitivity to important implications and consequences. C-level work displays inconsistent reasoning and problem-solving within the Biological Sciences and works, at best, at a competent level of intellectual performance.

The Grade of D – The grade of D implies poor thinking and performance within the subject and course. **On the whole, the student tries to get through the course by means of rote recall, attempting to acquire knowledge by memorization rather than through comprehension and understanding.** Mastery of content (objective knowledge) is poor and usually cannot be demonstrated by use of specific examples and illustrations to describe and explain biological processes as they are currently understood. The student is not developing critical thinking skills and understandings as requisite to understanding course content. D-level work represents thinking that is typically unclear, imprecise, and poorly reasoned. The student is achieving competence only on the lowest order of performance. Basic terms and distinctions are often incorrectly used and reflect a superficial or mistaken comprehension of, basic concepts and principles. The D-level student has not internalized the basic intellectual standards appropriate to the assessment of his/her own work in a subject and does poorly in self-evaluation. The D-level student rarely raises questions and issues, superficially analyzes questions and problems, does not recognize his/her assumptions, only partially clarifies concepts, rarely uses language in keeping with educated usage, rarely identifies relevant competing points of view, and shows no understanding of the importance of a commitment to reason carefully from clearly stated premises in a subject,. The D-level student is insensitive to important implications and consequences. D-level work displays poor reasoning and problem-solving within the Biological Sciences and works, at best, at a low level of intellectual performance.

The Grade of F –The student tries to get through the course by means of rote recall, attempting to acquire knowledge by memorization rather than through comprehension and understanding. The student is not developing critical thinking skills and understandings as requisite to understanding course content. **F-level work represents**

thinking that is regularly unclear, imprecise, and poorly reasoned. Mastery of content (objective knowledge) is very poor and cannot be demonstrated by use of specific examples and illustrations to describe and explain biological processes as they are currently understood. The student is not achieving competence in his/her academic work. Basic terms and distinctions are regularly incorrectly used and reflect a mistaken comprehension of, basic concepts and principles. The F-level student has not internalized the basic intellectual standards appropriate to the assessment of his/her own work in a subject and regularly miss-evaluates his/her own work. The F-level student does not raise questions or issues, does not analyze questions and problems, does not recognize his/her assumptions, does not clarify concept, does not use language in keeping with educated usage, and shows no understanding of the importance of a commitment to reason carefully from clearly stated premises in a subject,. The F-level student is oblivious of important implications and consequences. F-level work displays incompetent reasoning and problem-solving within the Biological Sciences and consistently poor intellectual performance.